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EDITORIAL FOREWORD

PROFESSOR H. S. Smith writes as follows about the first phase of the latest season of work at Saqqara:

The first month of the season was spent in preliminary transcription of the 168 demotic and 4 hieratic papyri, which had been found in Sector 7 of the site during the 1971–2 season of excavations under the direction of Dr. G. T. Martin. Professors Smith and Pierce collaborated upon this task, while Mrs. Smith photographed the papyri, and Mr. Tait succeeded in making a number of important joins. Thereafter Professor Pierce worked upon the selection and revision of papyri for a volume of demotic legal instruments and protocols which he has offered to edit for the Society. It is hoped that this volume will include 142 documents, nearly all fragmentary in character. Professor Smith and Mr. Tait worked on the selection and revision of a series of demotic letters and literary documents which they hope to publish jointly; this work will contain approximately 18 literary fragments, 45 letters, and other miscellaneous texts. Mr. Tait also transcribed and worked upon the late hieratic papyri so far found. Towards the end of the season, the whole body of papyri were re-examined and a further 25 joins were made by Mr. Tait. In order to ensure that no small fragments of important documents had been missed Professor Smith and Mr. Tait sorted through all the unrelaxed papyrus found since 1964; many more fragments were relaxed and as a result a number of joins and new registrations made. All this material was transcribed and photographically recorded by Mrs. Smith.

The second phase of the season at Saqqara is thus summarized by Dr. Geoffrey T. Martin.

The work this season has largely been one of clearing and consolidation, with a view to publication. The work of the late Professor W. B. Emery in the Sacred Animal Necropolis has now been completed with the excavation of Sector 7, in the south-west part of our concession. The area of the Animal Necropolis within the present concession has now been worked out. More documents in demotic and Greek have been recovered, and the cemetery of the Christian community located, whose village was built over the remains of the nearby temple of Nectanebo II. Further work has been done in the Archaic and Old-Kingdom necropolis, where certain areas had been opened up by Professor Emery. These have been cleared and recorded for publication. The most important tomb excavated was an enormous mastaba (No. 3050) of the early Third Dynasty, partly cleared in 1971. Other streets of small mastabas east and west of Tomb 3518 have also been worked. The last two weeks of the season have been spent in testing the ground immediately north of that

section of the Old-Kingdom necropolis worked by Mariette and De Morgan, in an area which does not appear to have been touched in modern times.

Excavations at Qasr Ibrîm were directed by Professor J. Martin Plumley, and evidence was produced relating to several periods of occupation—Pharaonic, Meroïtic, X-Group, and Christian. Important finds of papyri were made, and Professor Plumley describes them thus:

Among the most interesting finds of the 1972 season must be reckoned the discovery of four papyrus rolls. These were uncovered in a small area on the West fortifications of the site where an exploratory probe was made towards the end of the excavation. The largest of the rolls is no less than 53.5 cm. in width, but, since when found it was both sealed and tightly rolled, it was not possible to do more than guess at its length. Later the roll was unrolled successfully in the Egyptian Museum, and found to be no less than 2½ metres in length. It contains 69 lines of Arabic written in a large fine hand. This document, a letter of complaint from the Governor of Egypt to the King of Nubia, dated A.D. 758, must be reckoned to be the finest example of its kind yet found. The other three documents were written in Sahidic Coptic in a cursive hand. A preliminary examination of their contents shows that they are closely associated with the Arabic scroll. None, however, is in such good condition as the Arabic scroll, all having been damaged in varying degrees. Certainly these newly-found documents must be reckoned among the largest, if not the largest of their kind ever found. Apart from their size, their contents may be expected to throw new light on a period of Nubian history which is still poorly documented.

Among the structures excavated was one which began as part of a Pharaonic temple complex and ended as a Christian church.

In the death of Mr. John F. Keane the Society has lost a friend and benefactor. Dr. Geoffrey T. Martin contributes the following appreciation:

The death of John Keane has come as a sad blow to many friends in Egypt and abroad. His agility of mind and body, despite two severe motor accidents in recent years, belied his eighty years. He was a much-travelled man of wide interests and reading, but he came to Egypt rather late in his life, and immediately took to its climate, its monuments, and its modern inhabitants. His genial presence, whether at the Semiramis in Cairo or in the Winter Palace at Luxor, was a joy to many friends, of whom the present writer was privileged to be one. He was also a generous and considerate host on many occasions in Egypt and elsewhere. Over the years he built up a magnificent Egyptological library, mainly of historical and archaeological works, which he put to good use. He collaborated with Leslie Greener in the collection of material for a most interesting account of the early Egyptologists, published as The Discovery of Egypt. His last years were spent amassing all the surviving evidence on Pompey's Pillar at Alexandria. He was elected a Member of the Committee of the Egypt Exploration Society in 1965.

We extend our sympathy to John Keane's family, and to Mrs. Margaret Crick, his constant companion and support for many years, whose friendship was shared by his friends in Egypt and at home. The present writer will remember his first meeting with John Keane in Luxor in 1966 as one of his happiest encounters.

Our statement in $\mathcal{J}EA$ 58 concerning the Wellcome Collection needs to be supplemented, and we are grateful to Professor H. S. Smith and Dr. David M. Dixon for the following information:

In 1971 the Wellcome Collection of Egyptian Antiquities, which had been presented to University College London by the Trustees of the late Sir Henry Wellcome was dispersed with the Trustees' consent for the benefit of British Egyptology among the following institutions: (1) City of Liverpool Museums, William Brown Street, Liverpool L3 8EN (Keeper of Archaeology, Dr. D. Slow); (2) University College of Swansea, Singleton Park, Swansea SA2 8PP (Hon. Curator, Dr. K. Bosse-Griffiths); (3) City Museum and Art Gallery, Birmingham B3 3DH (Deputy Keeper of Archaeology, Mr. J. Ruffle); (4) Gulbenkian Museum of Oriental Art, Elvet Hill, Durham (Curator, Mr. P. S. Rawson). Owing to shortage of space at the Wellcome Historical Medical Museum and at the Petrie Collection at University College London, the material sent to Liverpool and Swansea had not been unpacked since its acquisition by Sir Henry Wellcome. It may, therefore, be some time before all of these objects are accessible.

It is good to note that the Egyptian Society of Papyrology has now produced, after a rather long interval, its ninth volume of *Études de Papyrologie* (Cairo, 1971). It is a substantial volume of 228 pages, edited by Dr. Zaki Aly. Our own Society has published a reprint of *Diospolis Parva* and also a second edition of W. R. Dawson's *Who Was Who in Egyptology* (£7.00); it has been revised and brought up to date by Eric P. Uphill. We understand that Mr. Uphill would be glad to receive information about possible omissions or corrections.

Egyptology has suffered a sad loss in the passing of Professor Ahmed Fakhry, who died in Paris at the age of 68 on 7 June 1973. Dr. I. E. S. Edwards contributes the following brief appreciation:

Ahmed Fakhry was undoubtedly one of the leading and most highly respected personalities in the Egyptological world. Apart from his scholarship he possessed human qualities which endeared him to everyone. He was kind and generous, a stimulating companion, and a man of deep understanding. Above all he had a burning enthusiasm for his subject which remained with him even after he had been stricken with a severe heart attack which was soon to prove fatal. His death came when he was returning to Egypt after a very successful tour of America, from coast to coast, delivering lectures on the many important discoveries which he had made in his recent excavations in the oases.

The present writer first met Ahmed Fakhry in 1942 when he was Chief Inspector of Monuments for Upper Egypt. It was a time when the Antiquities Service was working under particular difficulties owing to war conditions and proper supervision of the monuments was hard to maintain. Some damage did occur to Theban tombs, but the steps taken by Fakhry to inspect and protect those which were most in danger did much to bring to an end the activities of the robbers. No one could have dealt with the situation more energetically or more successfully. In 1944 he left the Antiquities Service to become Professor of Ancient History at Cairo University. Teaching and excavation were the two occupations which most appealed to him, and the opportunity to continue field work with his University duties came in 1950 when he was appointed to succeed the late Abdessalam Hussein as Director of Excavations at the Bent Pyramid of Dahshur. His excavation of the Valley Temple with its fine, though badly damaged, reliefs must be counted one of the most important additions to our knowledge of Old Kingdom art and architecture in recent years. An indirect result of this work was his very useful book on the Pyramids published in 1961 by the Chicago University Press.

It is not possible to do justice in a few paragraphs to Fakhry's many important contributions to Egyptology. Still less is it possible to write of his visits to Yemen, where he obtained copies of many unpublished South Arabian inscriptions, or to China where he devoted much time to studying its civilization. He received many academic honours, particularly from American Universities, and he was a Member of the Institut d'Égypte. His friends will grieve with his German wife, to whom he had been happily married for more than twenty-five years, and his son.

EXCAVATIONS IN THE SACRED ANIMAL NECROPOLIS AT NORTH SAQQÂRA, 1971–2: PRELIMINARY REPORT

By GEOFFREY T. MARTIN

THE work at Saqqâra this season was divided into two parts, the first directed by Professor H. S. Smith and the second by the present writer. Camp was opened on October 14, 1971.

Professor Smith worked upon two important literary papyri found in the 1966-7 season, and completed a revision and collation of the texts of the demotic stelae and graffiti dedicated by priests and necropolis masons in the Burial Place of the Mother of Apis. A programme of glassing all the papyri found by the Society at Saggâra was initiated, and largely completed by the end of the season. On October 31 Professor R. Holton Pierce of Bergen University, Norway, joined the expedition, his fare being generously defrayed by the Norwegian Research Council. He worked through the whole collection of demotic papyrus fragments found at the site in previous seasons, transcribing and sorting, in preparation for a volume of legal and administrative texts he will edit for the Society. We wish to express here our gratitude for his valuable collaboration, his work this season resulting in the discovery of several documents dated to the First Persian Period and the Twenty-ninth and Thirtieth Dynasties, which tends to confirm the conclusion that the bulk of this archive belongs to the fifth and fourth centuries B.C. Professor Pierce also identified a number of interesting protocols of cases or pleas heard in the Palace of Pharaoh at Memphis which, though too fragmentary to yield case histories, are of value from the legal point of view. Mr. J. D. Ray (Birmingham University) arrived on November 22 to continue his work on the series of ostraca of the reign of Ptolemy VI Philometor, which concern the career of the scribe Hor and his various prophetic dreams. Professor Smith, Professor Pierce, and Mr. Ray also co-operated in preliminary work on the decipherment of a number of papyri, and the foundation has been laid for several papyrus publications.

Mrs. Smith spent the early weeks of the season in re-equipping the camp and in setting up a new photographic studio. Later she re-photographed certain papyri and stelae. The writer would like to pay tribute to the work done in the expedition house by Professor and Mrs. Smith before our arrival, resulting in a comfortable and well-organized camp for the archaeological team.

On December 10 our skilled Qufti workmen arrived, and four days were spent under the direction of Professor Smith on the cutting of practice trenches, one of which yielded the earliest Mother-of-Apis stela so far known, recording burials in the 37th year of Amasis (533 B.C.) and the 33rd year of Darius I (488 B.C.). On December 15 the excavation team arrived, headed by the present writer, with Miss C. D. Insley, Miss H. C. Ward (surveyor), Mr. D. A. Lowle (Liverpool University), and Mr. M. A. Green (Liverpool University). The Society gratefully acknowledges the services of Dr. H. D. Schneider (Leiden Museum), who acted as principal site supervisor throughout the season, and of Mr. F. G. Van Veen, the Museum photographer, who worked with us for one week at the end of the season, and whose photographs illustrate the present report. Both were seconded to the expedition through the generosity of Professor Adolf Klasens, whose interest in our work, and the friendly co-operation of Dr. W. F. G. J. Stoetzer, the head of the new Dutch Institute in Cairo, are likewise warmly acknowledged by the Society. The Leiden Museum of Antiquities and the Institute also defrayed the fares of our Dutch colleagues, and gave a generous financial subvention to the excavations. Mr. J. R. Baines (Durham University) spent a week with us in January, and worked on a descriptive catalogue of votive bronze objects from the site which he will publish for the Society. The Antiquities Service was again represented by our friend and colleague, Mr. Aly el-Khouly. This season we have again enjoyed the welcome financial support of Museums and of private members of the Society.

The late Professor Emery's work in the Sacred Animal Necropolis from 1964 to 1971 resulted in some spectacular discoveries: galleries containing the mummified remains of sacred ibises, falcons, baboons, and cows were located, together with their associated temples, shrines, and courtyards. Masses of papyrus documents in demotic, Aramaic, and Greek were uncovered, originally forming part of the temple archives, and great quantities of votive objects, including statues of bronze, wood, and stone, the offerings of pious pilgrims over the centuries, were recovered, as well as important groups of cult vessels and furnishings used in the temple ritual. A new field of inquiry into the sacred animal cults of the Late Period and Graeco-Roman Period has been opened up in consequence of these discoveries, for though other sacred animal sites in Egypt are known, they have been only partially dug or published, and Saqqâra is unique in its multiplicity of cult-places and temples, and in the abundance of objects and documents found. The demotic archive from our site is one of the richest found in Egypt for many years, and is of special interest emanating as it does from the northern part of the country, and has initiated, under the direction of Professor Smith, a new phase of research into that script. As a direct result there has emerged a new generation of young English demotists. The Aramaic archive and the Carian texts are likewise of great interest and importance.

The galleries and shrines have now been thoroughly investigated, apart from minor details, and our plan this season has been to explore one other aspect of the site to supplement the work of Professor Emery and to round off our work in this area of the Sacred Animal Necropolis: the administrative and domestic area associated with the shrines. Most of the Animal Necropolis which falls within our present concession had already been worked by Professor Emery, but there remained some untouched ground in the area called Sector 7, between the South Ibis Gallery courtyard and the main Temple terrace (fig. 1 and pl. I). The probability of this area being a temple town had

SECTOR 7

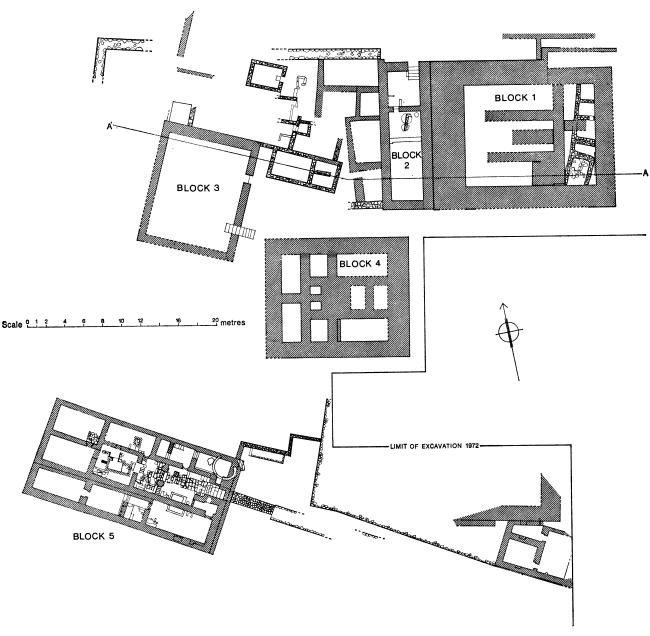


FIG. 1A.

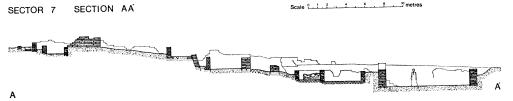


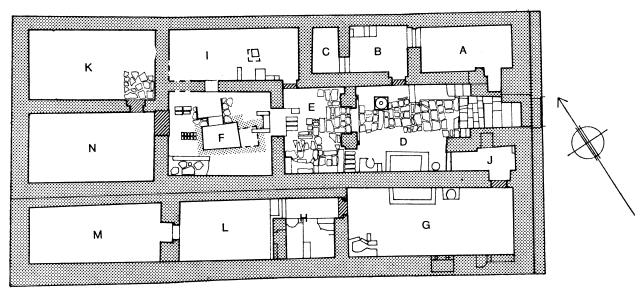
FIG. 1B.

GEOFFREY T. MARTIN

already been noted, and accordingly we opened the excavation here on December 19 in the hope of locating the administrative and domestic quarters. Work continued on the site until February 27.

Our first discovery was a rectangular mud-brick and rough stone building of some interest, 21.0 × 11.0 metres in size, which has been designated Block 5 (figs. 2-3 and

SECTOR 7 Block 5



Scale 0 1 2 4 6 8 10 metres

pls. II–IV). It was completely covered with a deep deposit of wind-blown sand, over which, at its western extremity, was a large mound of soft limestone chippings deposited by the workmen who cut the South Ibis Galleries nearby. Thus we know that our building, the core of which has been identified as a small temple, is earlier than the Ibis galleries (which on documentary evidence at present appear to date from the second century B.C.). Judging by the depth of the sand deposit between the chippings and the remains of the 'temple' walls (1.60 metres), the newly-discovered building may be considerably earlier, but naturally the rate of deposit of wind-blown sand can hardly be measured with great accuracy. Specimens of charcoal and wood from the 'temple', collected for Carbon 14 analysis, should enable us eventually to assign an approximate date.

The 'temple' is entered from a stamped mud courtyard on the east side. There is evidence that the building overlies an earlier structure, the foundations of which were revealed by robbers' pits at the south-east corner and in the interior. Here again Carbon



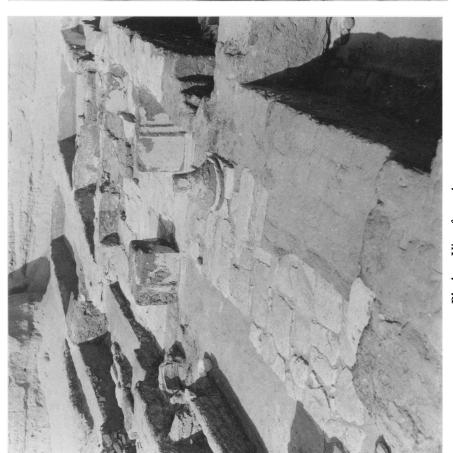
General view of Sector 7 from the south. In the foreground Block 5, in the middle distance Blocks 1 and 4, in the background the main temple terrace NORTH SAQQÂRA, 1971-2

Block 5. View from the east with the courtyard in the foreground

NORTH SAQQÂRA, 1971-2



2. Block 5. View from the west



1. Block 5. View from the east

NORTH SAQQÂRA, 1971–2



 $\scriptstyle I.~~Block~5.~~View~from~the~south-west$



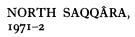
2. Painted limestone offering-table, perhaps of foreign workmanship. Length 54·1 cm.

NORTH SAQQÂRA, 1971-2



1. Detail of pl. IV, 2

2. Detail of pl. IV, 2



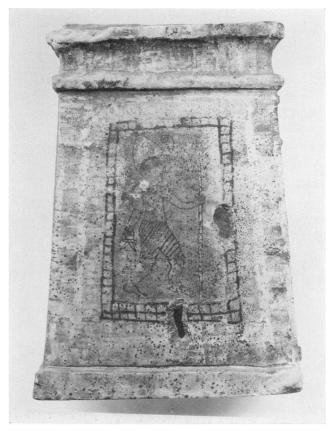




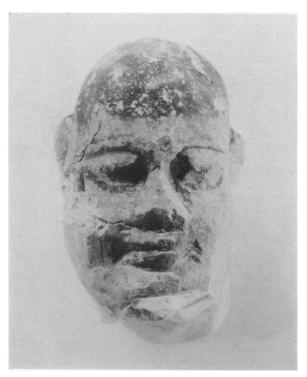
1. Painted limestone shrine, perhaps of foreign workmanship, discovered in the 1970-1 season. Ht. 17.0 cm.



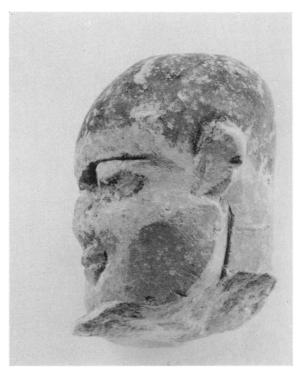
2. The same



3. The same



1. Polychrome limestone head of a foreigner. Ht. 3.9 cm.



2. The same

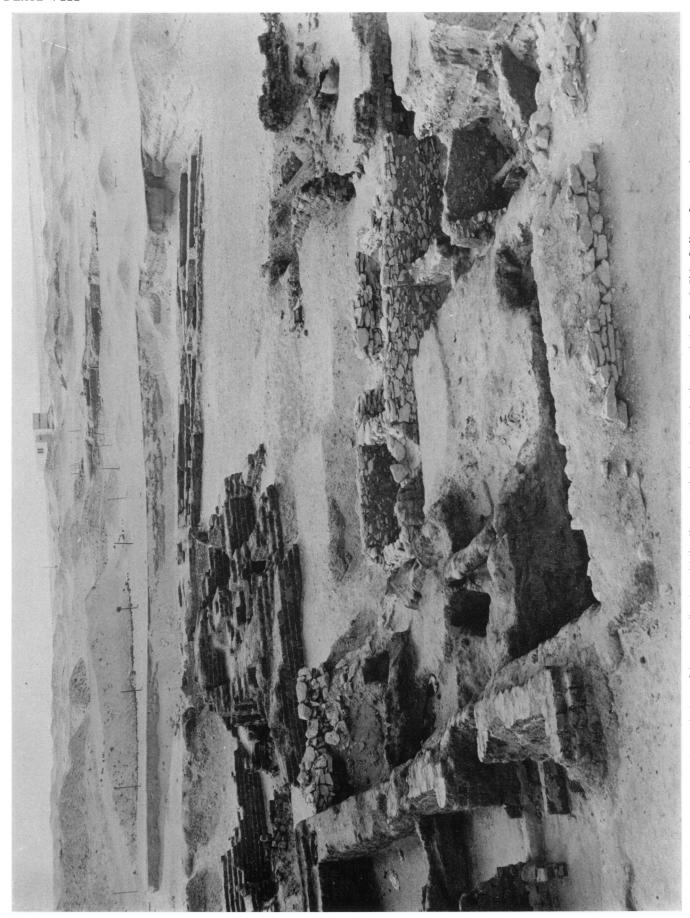


3. Bronze censer, terminal. Length 9.5 cm.



4. Faience shabti. Ht. 12.8 cm.

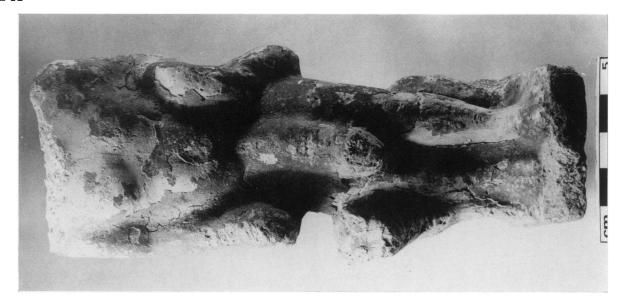
NORTH SAQQÂRA, 1971-2



General view of Sector 7. In the middle distance Block 5, in the background the South Ibis Gallery Courtyard NORTH SAQQÂRA, 1971-2



Phallophorous group in terracotta. Ht. 40·3 cm. NORTH SAQQÂRA, 1971-2





2. Painted plaster statue with a goat behind. Ht. 15:3 cm.

1. Polychrome plaster figure of a reclining male. Length 17.7 cm.

NORTH SAQQÂRA, 1971–2





2. Faience statuette of Sakhmet. Ht. 8.0 cm.

1. Polychrome plaster statue of Harpocrates Ht. 25.7 cm.

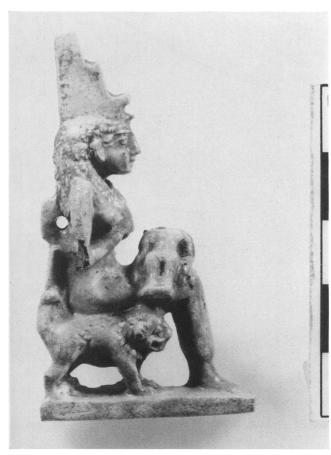
NORTH SAQQÂRA, 1971-2



Cm Cm

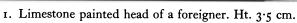
1. Faience statuette of Thoueris. Ht. 10.3 cm.

2. The same



3. Faience amulet of Isis and Harpocrates. Ht. 5.7 cm. NORTH SAQQÂRA, 1971-2







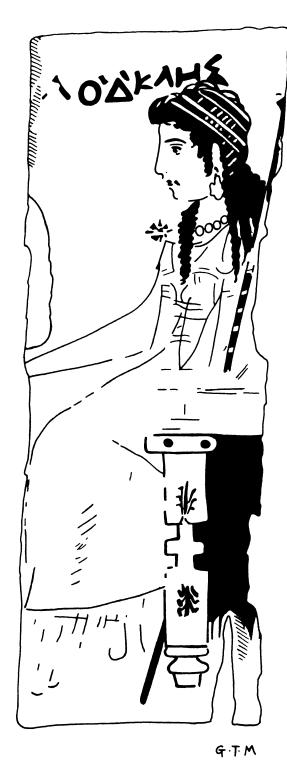
2. The same



3. Limestone painted head of a foreigner. Ht. 1.8 cm. NORTH SAQQÂRA, 1971-2



1. Painted wooden panel with inscription in Greek characters. Ht. 18.5 cm.



2. Facsimile drawing

The South Ibis Courtyard (Block 6) from the west NORTH SAQQÂRA, 1971-2

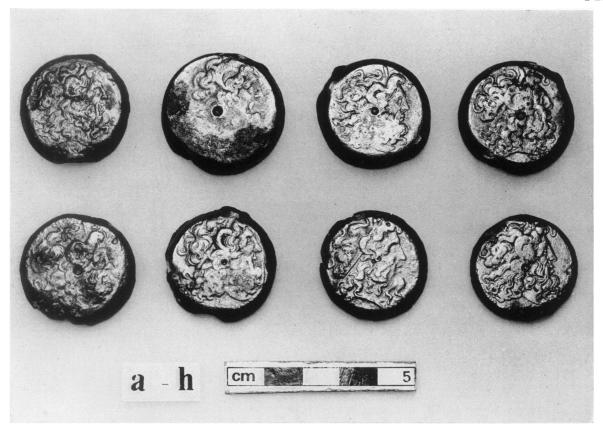


1. Chapel attached to the South Ibis Courtyard



2. Guardian's hut at the entrance to the galleries

NORTH SAQQÂRA, 1971-2



1. One of the three deposits of Ptolemaic bronze coins from the South Ibis Gallery Courtyard

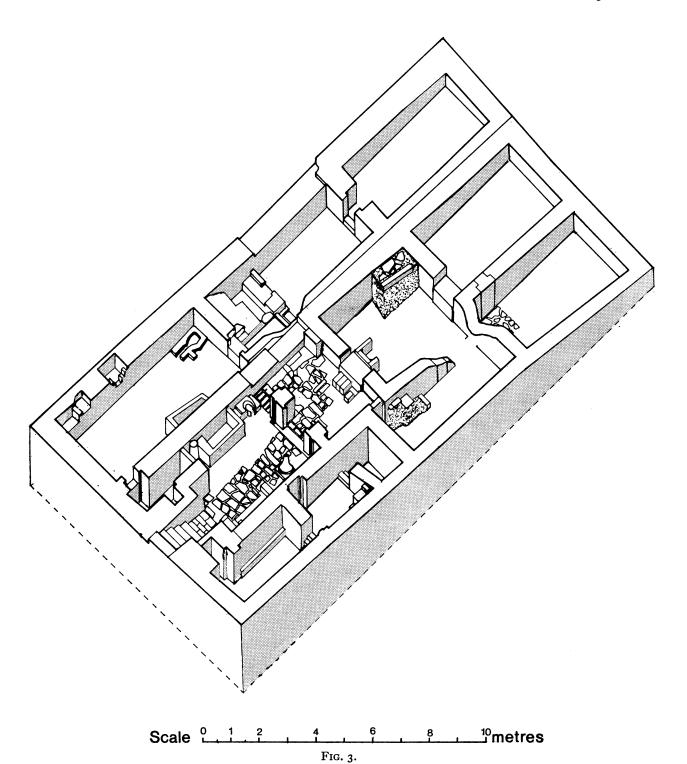


2. The same

NORTH SAQQÂRA, 1971-2

SECTOR 7 Block 5

Axonometric Projection



14 specimens will be vital for the date of the earlier building. On the north side there is a small service entrance. The area identified as the 'temple' proper is surrounded on three sides by a complex of rooms, most of the interior doors of which have been deliberately blocked in antiquity, either to modify the building while it was still in use, or to prevent access to certain areas when it was finally abandoned. There are parallels for this phenomenon in early Christian churches and secular buildings in Nubia and elsewhere. Some of the rooms had been intentionally packed with chippings to form the basis for floors at a higher level. From the sections the process of decay in the building is clear. Some of the floors had deposits of charcoal from fireplaces, but there was otherwise practically no occupation debris. There was no trace of deliberate destruction: evidently after the removal of fittings and equipment the building was abandoned, and the mud-brick and rough stone walls had simply collapsed into the rooms. The process had been gradual, since we noted lenses of clean wind-blown sand in the sections, and resulted eventually in a hard-packed mass, weathered to a level surface over-all by the action of the weather. No traces of roofing materials were found, the timbers having been removed when the building was abandoned.

The most interesting part is the area we have tentatively identified as the pronaos and sanctuary. A mud column originally supporting an offering-stand is in position on the north side, while a limestone box and lid, with minute traces of a substance perhaps used in the ritual, were found alongside. Opposite on the south is a hearth, fuel 'bunker' or storage bin, and a large unfinished limestone vessel with vestigial lugs, probably used for pounding, and covered with the tool-marks of the craftsman. A miniature pylon surviving to a height of 0.54 metres, with ribbed decoration on both sides moulded in mud, gives access to the sanctuary, which apparently had two emplacements for altars or shrines, now robbed away. The southern half of the pylon is free-standing, the space between it and the south wall of the 'pronaos' at this point forming another entrance to the sanctuary. Behind the sanctuary is a room at a lower level, the dado bearing the sadly battered remains of a wall-painting executed in red on gypsum plaster. This room had later been filled with chippings to raise the floor to the level of the sanctuary.

Our immediate impression was that the building did not look particularly Egyptian, and we conjectured that it might be a cult building of one of the foreign ethnic groups, such as the Carians, resident in Memphis. It will be recalled that a large number of stelae bearing Carian inscriptions were found in the excavation of the adjacent Baboon Galleries, which had doubtless originally been placed in position in a cemetery of Carian mercenaries somewhere near our present work. However, no inscriptions, Carian or otherwise, were recovered from the 'temple' to confirm our impression that it might be foreign. We did, however, find a number of objects from the 'temple' and its surrounding rooms, including a limestone offering-table (pls. IV–V), crudely worked but of great interest, painted in a red identical with that on the dado mentioned earlier. It is decorated with Bes and Hathor heads, with a wadjet-eye centrally placed, suspended on a necklace with two large beads. The table, though carved with Egyptian

motifs, does not seem to be the work of an Egyptian craftsman, but rather of a foreign sculptor working under Egyptian influence. A painted limestone naos (pl. VI), found in the previous season, likewise displays maladroit and bizarre, perhaps foreign, workmanship. Also foreign in inspiration is a small limestone painted head from the 'temple' (pl. VII, 1-2). A terminal from the handle of a bronze censer (pl. VII, 3), found in one of the rooms, is however purely Egyptian in form and decoration, and was doubtless part of the 'temple' equipment. The head and torso of a fine shabti of 'Ankh-hor (pl. VII, 4), found at a high level in the south-west corner of the 'temple', is doubtless a stray from the tomb of the owner, though conceivably an *ex-voto* offered in the Animal Necropolis, like the shabtis of private individuals deposited at the Serapeum.

Concurrently with the excavation here we were reclearing an area on the north side of Sector 7, partially opened up by Professor W. B. Emery, in 1970. He had brought to light buildings which are almost certainly connected with the sacred animal cult and with the main temple area immediately to the north-east, though their exact function at present eludes us. The pathway from the south entrance of the main Nectanebo II temple leads towards this area. The buildings (fig. 1 and pl. VIII) include two compact mud-brick platforms (Blocks 1 and 4) with interior walls forming compartments which were originally filled with chippings to form a level surface for the building of shrines or other structures (the site is on a slope), as well as a series of rooms domestic rather than religious in character (Block 2), and a large open courtyard (Block 3). The bricks in all these buildings had been extensively robbed. Beneath Blocks 1 and 2 were the simple stone-built dwelling-houses of the workmen who were employed on the cutting of the galleries and the building of the shrines in the main temple complex. There is evidence of re-use of the north-east corner of Block 1 in the Christian period, after the building had largely been dismantled, doubtless by the Coptic community who built a village over the ruins of the Nectanebo II temple nearby.

The courtyard (Block 3) had been only partially excavated in 1970, and one of our first tasks was to complete the work in this area. Our efforts were rewarded with the discovery of a cache of polychrome terracotta and plaster Hellenistic figures of considerable interest. Such statuettes are still imperfectly understood. They are conventionally labelled 'obscene', but nothing of course could be further from the truth. Few such cult-figures of the Graeco-Roman period have been published, but it is clear that they had an important religious significance. Perhaps the most interesting item in the cache is a phallophorous group in terracotta (pl. IX), with two Bes figures and two robed priests below, supporting a squatting figure of Harpocrates, upon whose left shoulder sits another small figure, possibly female. A parallel, but very much incomplete, figure is in the Berlin Museum.² Other figures in plaster from the cache include a seated figure with the sidelock of youth, representing Harpocrates, a male figure on

¹ JEA 57 (1971), 9.

² W. Weber, *Die ägyptisch- griechischen Terrakotten* (Berlin, 1914), 102, with pl. 13 [139]. For a discussion of the phallic aspect of Bes see B. H. Stricker, 'Bes de danser', *OMRO* 37 (1956), 35-48, and especially fig. 10 which illustrates the Berlin figure.

a rectangular base, reclining on a phallus (pl. X, 1), a standing male figure with an animal, probably a goat, behind (pl. X, 2), and a seated figure, again Harpocrates, with a detachable wooden phallus (pl. XI, 1). Near the group was a fine olive-green faience ex-voto statuette of Sakhmet (pl. XI, 2), with an inscribed dorsal pillar.

On excavating the courtyard on the east side of Block 5 we found a stone-flagged pathway leading east from the doorway of the 'temple' into a deep deposit of sand. We had already observed, in section, thin strata of domestic debris in the north-east corner of the court, so that it was not surprising that on systematic excavation we found ourselves in an area rich in domestic and other refuse of all kinds. It was soon evident, when we located a rough stone retaining wall on the east side of the court parallel with the 'temple' wall, that beyond and above was a terrace, partly composed of chippings thrown out of galleries in the vicinity. We also found the remains of mummified rams or sheep—two horns and a head modelled in linen and painted—so there seemed a possibility of locating galleries and a cult-centre of the Ram of Mendes in the area. The pathway, which ran towards the escarpment, did not however lead to an entrance, but was found to run west-east below the walls of houses, preserved to a considerable height, constructed on the terrace mentioned above. We were able to make test excavations in some of the rooms of the houses before the end of the season. and it is reasonably certain that the administrative or domestic quarters for which we were hoping have been located. The small area so far uncovered is rich in papyrus fragments, particularly demotic, and there is some Greek, including a document written in a round hand, probably early, and a few pieces of Aramaic. Over 230 papyrus fragments found this year have been relaxed in readiness for Professor Smith's team next year. The recovery of more texts in this area will be one of our main objectives next season.

It is clear that the domestic and other refuse noted above had been thrown out of the houses over the edge of the retaining wall, spilling on to the 'temple' courtyard and the street below. With a view to obtaining the maximum amount of information about the day-to-day activities, habits, and diet of our temple administrators, as well as information about the technology of the artifacts they used, all this material was carefully sifted, and numerous specimens, which are now in London, were collected for analysis. As well as papyrus fragments the dumps contained clay seal impressions, coins, plant remains, wine amphorae (many with demotic dockets), some stamped amphorae handles of Greek origin, and broken fragments of all kinds, including glass and faience vessels, of which many hundreds of pieces were found. From this area we also recovered a faience statuette of the goddess Thoueris (pl. XII, 1-2), doubtless an ex-voto from one of the nearby shrines. Water or milk taken in through the mouth passes out through an aperture in the breast. Other objects include a green faience amulet of Isis and

¹ The Mendesian Ram was considered one of the gods of Ḥepnebes, a region of the Saqqâra necropolis which certainly includes the present Sacred Animal Necropolis in the north-west part of the Saqqâra plateau, and the dog burials in the eastern scarp immediately north of the Expedition house. The evidence is included in the formal blessing on the dedicator of a Mother of Apis stela (H5-2646) found in 1969-70, where *Ddt ki* copt is included in the list of deities. I am indebted to Professor H. S. Smith for this information.

Harpocrates, seated on a throne supported by lions (pl. XII, 3), some characteristic Greek terracotta heads, painted limestone heads of foreigners (pl. XIII, 1-3), and a polychrome image of an ibis in terracotta, the head originally separately attached. But perhaps most interesting of all, on the north-western edge of the dump, we found a wooden panel from a box or shrine (pl. XIV), possibly of the fifth to fourth centuries B.C., gessoed and painted with a representation of a seated female figure, with an enigmatic inscription, which may be part of a name, above. This is in Greek characters, the delta having two quite distinct dots above it, an exceedingly unusual if not unique feature.

It will be recalled that the late Professor Emery discovered in 1964 an extensive catacomb containing many thousands of mummified ibis birds, connected with the cult of Thoth. During the next season he located the main entrance to the galleries and cleared a small chapel on the south side of the staircase leading to the doorway of the catacomb, as well as part of a courtyard adjacent on the west side. In the chapel and court were found part of an archive of Greek and demotic ostraca, drawn up by a Sebennyte scribe, Hor. These were concerned with oracles and interpretations of dreams, one mentioning the Seleucid king of Syria, Antiochus IV Epiphanes.

My own feeling was that the Ibis Courtyard was not entirely worked out as regards documents, and one of our duties this season has been to complete the excavation in this area, which is close to the new 'temple' (Block 5) on the south side. After three weeks' unproductive work removing plunderers' dumps of broken ibis sherds and mummies we found ourselves in an area of clean wind-blown sand which in antiquity had buried the entire courtyard. Our hopes were more than realized, because almost immediately we began to uncover numbers of demotic ostraca, some large and in excellent condition, which are part of the same archive of Hor discovered in 1965. The new ostraca provide valuable new information about Hor's activities, and help to confirm or improve readings in some of the texts found earlier. But most interesting of all from the historical point of view we found another text mentioning Antiochus Epiphanes, a contemporary account of the king's invasion of Egypt in 168 B.C. and his subsequent departure. There is scarcely need to emphasize the extreme rarity of contemporary historical source material of this kind. On the ostraca Mr. J. D. Ray writes as follows:

The 1971/2 season at Saqqara has again proved most prolific of demotic ostraca. Excavations in the mud-brick and rough-stone buildings to the north and west of the entrance to the southernmost complex of Ibis Galleries yielded some sixty-four inscribed sherds, of varying degrees of preservation, mainly dedications to the Hawk or Ibis, or to Isis, Mother of the Apis, bearing the names of pilgrims, and in two cases a date. One dedication reads simply 'the boatmen' (no nfw), two bowls are inscribed 'the cups (iptw) of the priests', and one lid bears a text 'to Isis, on the day of supplication'. A further ten sherds bore short inscriptions in Aramaic. In addition to these terse indications, a discovery of major importance attended the clearance of the sand-filled courtyard immediately to the west of the gallery entrance. Thirty-nine ostraca were found discarded in the sand, one, a pot-rim dated to the 34th year of an unnamed Pharaoh, the other thirty-eight part of the 'Archive of Hor'. Previous ostraca, discovered in the winter of 1965/6, had shown how Hor, a priest of Isis in the Sebennyte

nome, had, by his mantic powers, played a notable role in Egypt's affairs during the invasions of Antiochus Epiphanes; how he had then moved south to the sanctuary at Saqqara and attached himself to the cult of the Ibis, and how he finally petitioned Ptolemy Philometor after becoming involved in an administrative scandal. The new ostraca continue the text of the petition: No. 112, a long text with considerable hieratic influence, invokes a series of deities, mostly from the Underworld, to 'come in a dream'; Nos. 114 and 115, in a Memphite hand, relate the benefits of him 'who walks in the way of the Ibis', and describe the interpretations of an oracle. No. 116 records the minutes of a council meeting enquiring into abuses at the Ibis Galleries: six men are punished with imprisonment, and reforms are described. This text, which shows that the reign of Ptolemy V was a period of great unrest in the necropolis, sheds a somewhat tawdry light on the provisions of the Rosetta Stone. In No. 120 a man named Tmpn 'sits on the throne of Pharaoh', and No. 121 records a dream in which a mysterious being appears on a thicket of papyrus. No. 128 is a memorandum, written partly in a Delta hand, partly in a Memphite, whilst in No. 129 Hor is commissioned to dream on behalf of a man named Phentamun, and the author closes with an address to Pharaoh. No. 130 describes the early life of Hor, and the prophecy which sent him to Memphis, and No. 131 is a contemporary account of the invasion of Antiochus Epiphanes, and his subsequent departure. The other texts are largely fragmentary, but in such a context it seems invidious to complain.

Now fully excavated, the South Ibis Courtyard (fig. 4 and pls. XV–XVI) is seen to be impressive, being some 20·0×26·0 metres in size, and approached from the west down a ramp which leads directly to the staircase (which was probably roofed with a barrel vault) giving access to the galleries. A low wall, the remains of which were found built across the ramp, doubtless was intended to screen the entrance from the vulgar gaze. In brushing the floor of the courtyard for photography we found, immediately below the surface (composed of chippings) three deposits of bronze coins (pl. XVII, 1–2) of the reigns of Ptolemy VI Philometor and Ptolemy VII Euergetes II.¹ These are probably foundation deposits, or conceivably re-foundation deposits in view of the administrative scandals in the Ibis Sanctuary noted above, necessitating subsequent reforms. We also excavated in the courtyard small pits containing tree roots, indicating that the shrine, in common with many Egyptian sanctuaries, was planted with a grove of trees (fig. 4 A, A–Y).

We have also established the fact that the South Ibis Courtyard is constructed over an area of small tombs of the Old Kingdom, since we found on clearing below the top step of the stairway to the catacombs this season the rock-cut entrance of such a tomb, with other similar tomb-entrances nearby. None of these bore inscriptions. There are Old Kingdom shafts in the floor of the chapel on the south side of the stairway, and adjacent to these we uncovered a small mud-brick mastaba with cruciform niche and uninscribed offering-table in position.

A generous division of the objects found during 1970-1 and 1971-2 was allocated to the Society by the Egyptian Antiquities Service at the end of the season.

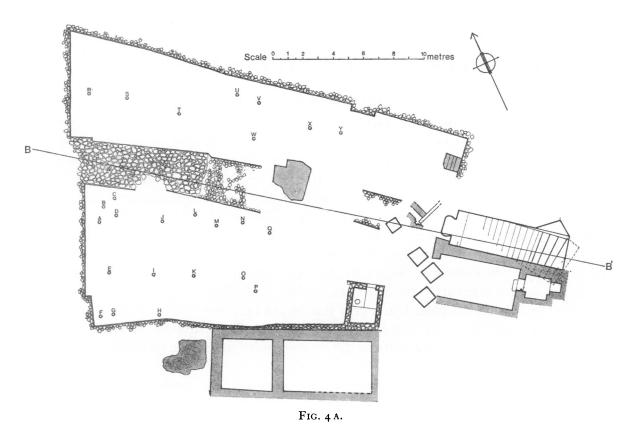
Our main efforts next season will be devoted to finishing the excavation of Sector 7, which, as has been noted above, may prove to be rich in papyri and domestic material. All the evidence seems to show that the Sacred Animal Necropolis in this part of Saqqara is not exhausted. Just to the south-west of our present work and near the road

¹ Mr. M. H. Crawford generously examined photographs of the coins and made identifications.

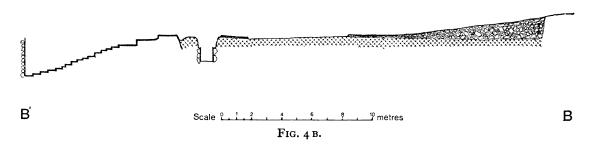
leading from the Serapeum to our site, Professor E. Edel, sondaging in 1971 for the lost Old Kingdom tomb of Weshptah, uncovered a large building of the Late Period,

SECTOR 7 Block 6

South Ibis Courtyard



SECTOR 7 South Ibis Courtyard SECTION B'B



probably administrative in character, some 49.0×35.0 metres in extent, with a flight of steps and entrance on the east side, almost certainly connected with our work. The desert surface nearby and to the west of our concession is strewn with broken animal and bird bones, and the prospects of productive work in the area seem limitless.

¹ I am grateful to Professor Edel for allowing me to quote these measurements.

AN INTERIM REPORT ON THE SECOND SEASON OF WORK AT THE TEMPLE OF OSIRIS, RULER OF ETERNITY, KARNAK¹

By DONALD B. REDFORD

The second season of the combined mission of the Society for the Study of Egyptian Antiquities and the State University of New York at Binghampton to the temple of Osiris, Ruler of Eternity, Karnak, extended from May 21 to July 14, 1971. The staff comprised the following members: D. B. Redford (University of Toronto), director; G. E. Kadish (State University of New York), co-director and epigrapher; G. E. Freeman and C. Howse, surveyors; E. Du Vernet, photographer; F. Stanley and S. L. Katary, recorders; S. Turner, M. Bierbrier, and M. Guay, site supervisors; J. Blue and J. P. Clarke, artists. Besides the photographing and recording of the texts and scenes in the temple, an enterprise begun in the first season, the expedition undertook to clear the area immediately north of the shrine, including the forecourt and a 15-metre strip outside the gate. Our warm thanks are herewith tendered to the Department of Antiquities and the Centre Franco-Égyptien for permission to carry out this operation, and in not a few instances the much-needed assistance in seeing it through to a successful completion.²

The temple of Osiris, Ruler of Eternity, is situated 132 m. north of the eastern gate of the Karnak enclosure, against the inner (western) face of the great enclosure wall (see the plan, fig. 1 D; also fig. 2). It was first brought to light some seventy-two years ago when Legrain's men freed it from the debris of fallen mud-brick, a sloping tumble which can still be traced in the diagonal line of intact masonry which runs from the corner of the façade adjacent to the great wall down to the level of the ground at the north-east corner of the building.³

In its present form the shrine dates no earlier than the Saïte Period, but it had already undergone modification under Shabataka.⁴ The two rooms at the rear constitute the nucleus of the original structure, erected by Osorkon III and Takelot III of the Twentythird Dynasty. The façade of this bipartite shrine was probably at first enclosed by

¹ For the first season, see D. B. Redford, ARCE Newsletter 74 (July, 1970), 25.

² I should especially like to thank Dr. Gamal Mukhtar, Under-Secretary for Culture, and Dr. Gamal Mehrez, the Director-General of Antiquities, as well as Prof. Serge Sauneron, MM. Lauffray and P. Anus of the Centre for their tireless efforts on our behalf. I am also most appreciative of the help given by Inspector Sayed Abdul Hamid in solving countless problems which arose at the site.

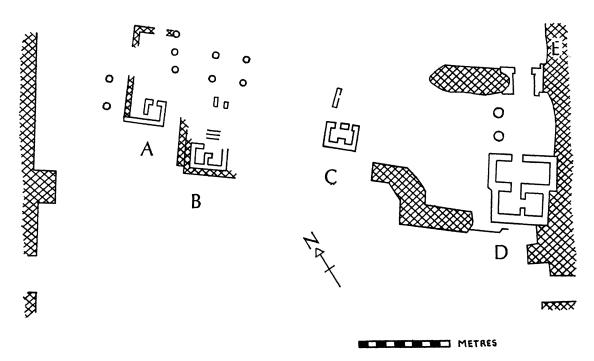
³ For Legrain's report, see RT 22 (1900), 125 ff., 146 ff.

⁴ The Kushite part of the building has already been exhaustively studied by J. Leclant in his *Recherches sur les monuments de la XXV^e Dynastie* (Paris, 1965), 47 ff., where a good bibliography will be found. The present expedition is mainly concerned with the Twenty-third Dynasty building.

a small court of mud-brick, the north wall of which would have run along the line of the present north wall of Shabataka. This, at least, is a plausible interpretation of the

CHAPELS OF THE LATE PERIOD IN NORTH EAST

KARNAK



- A. CHAPEL OF SHEPENWEPET II
- B. "ANEPIGRAPHIC" CHAPEL
- C. CHAPEL OF TAKELOT SON OF NAMLOT
- D. CHAPEL OF OSIRIS HEQA DJET
- E. ENCLOSURE WALL OF NECTANEBO
- ₩ MUD-BRICK
- STONE

Fig. 1.

partly preserved column of text behind the figure of Amenirdis I in the scene of the foundation ceremony: [] gm·n hmt·s m dbt, '[] which Her Majesty found

¹ First room, north wall, west of door; numbered 7 in the second edition of Porter and Moss, *Top. Bibl.* II. Cf. Leclant, op. cit. 53 (32). I am very grateful to Dr. Moss for supplying me with a typescript of the pertinent pages of her manuscript, hereinafter abbreviated 'P-M' followed by locus number.

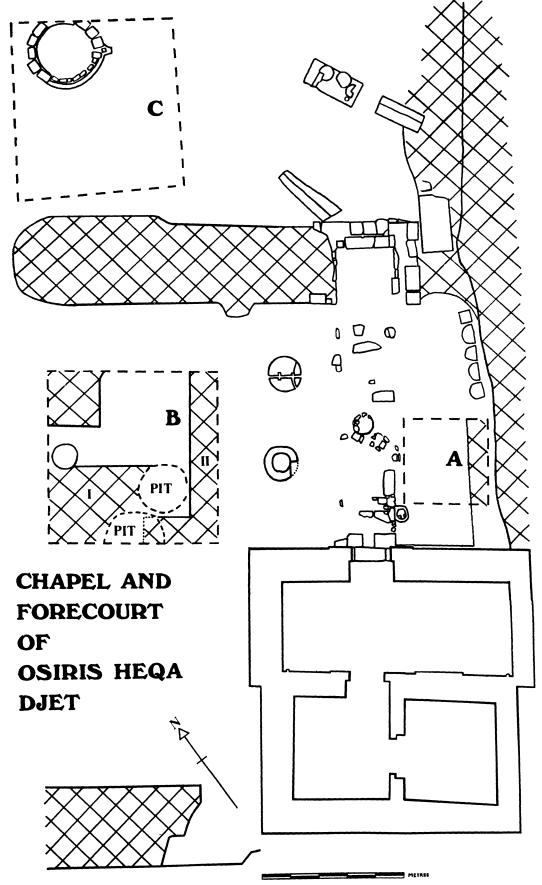


Fig. 2.

in brick.' As the foundation ceremony in question ostensibly refers to the Kushite addition, one can conclude from this text that it was a rebuilding in stone of a structure previously built of brick. In the original plan conceived by Osorkon III the bipartite chapel and mud-brick court were fronted by a second court measuring some 8.60 m. from north to south. This in turn was bounded on the north by a gate set in a temenos wall of brick. Whether this outer court was provided with columns and a roof under the Twenty-third Dynasty is not clear as yet; but at some time subsequent to the Kushite period two columns were introduced on a north-south line just west of the main axis of the building. Only the southern column is standing today, and except for a re-used drum from the Treasury of Shabaka, the surface of the shaft has been left rough. The clearing operation to date has not turned up any definite traces of a parallel line of columns east of the axis; and it may be that the present arrangement postdates the construction of the great enclosure wall of Karnak which, by reducing the width of the shrine's forecourt, made two lines of columns unnecessary. On the other hand, as the pattern of a bi- or tripartite shrine preceded by a forecourt with four columns is known from Kushite-Saïte times, if not earlier,2 it is not inconceivable that a similar arrangement was integral in the Twenty-third Dynasty temple of Osiris, Ruler of Eternity.

Unlike the Kushites, who employed well-cut stone in their addition to the shrine, the builders of Osorkon III made use of worn and inferior materials. The gate for example is made up of very poor irregular blocks taken from some earlier structures. Occasionally the original paint (once blue) of the first decoration shows up on blocks intended to be concealed from view in their re-use. Most of the stone of the gate is friable, ill-fitting sandstone—column drums sliced in half are in evidence!—packed in the interstices with plaster chips of stone and pottery, to make a compact whole. The unevenness of the blocks at the time of their re-use obliged the builders to use plaster liberally to fit them together and to even up the surfaces for sculpture. Many of the texts and scenes are modelled in this plaster, the loss of which, through chipping and peeling, has resulted in unfortunate lacunae, or at best the faintest impression of the glyph in the stone beneath.

But at some points the falling away of the plaster has revealed the original decoration of the block, and this is sufficient to date the unknown structure(s) for which the stone was originally cut.³ The following is a list of such 'palimpsest' blocks which we have been able to identify:

- 1. Lintel of outer gate, right half: upright cartouche on the left side (c. 38×23 cm.), $Wsr-msct-rc\ Mry-Im[n]$. Deeply incised.
- ¹ Leclant, Orientalia 20 (1951), 464. The presence of several drums from this building which I have seen scattered over the area of north-east Karnak attests, not only the early dismantling of this Kushite edifice, but also the continued building activity in the region of the small shrines in Saïte times and later.
- ² Cf. inter alia the Takelot shrine and the 'anepigraphic' chapel immediately west of the temple under discussion; the chapels of Nitocris and Amenirdis I in the Montu enclosure: L.-A. Christophe, Karnak-nord, III, pls. 37, 50.
- ³ Not from which, as the worn quality of the stone suggests that the blocks had lain free for sufficient time to weather, before Osorkon's men got hold of them.

 ⁴ See Legrain, RT 22, 148.

- 2. Lintel of outer gate, left half: name and titles of Amen-Rec incised over a text now filled with white plaster and difficult to identify.
- 3. Left jamb of outer gate, original western face: (covered over with plaster when re-used): nsw-bit Wsr-m3ct-rc Mry-Imn s3 Rc Rc-ms-sw.
- 4. First room, threshold of false door: column of text (c. 9 cm. wide) reading nsw-[bit] nb tswy []-R ϵ .
- 5. Underside of lintel of door II (between first and second rooms): [Wsr]-msct-[rc] Stp·n-rc.
- 6. Second room, north wall, lower scene, on a block in the lower right-hand corner of the scene: $Hr K_i$ nht.
- 7. Second room, south wall, upper right-hand corner: a large hist-sign, upside-down, incised, with traces of other signs above and beneath.

The re-used blocks thus come from a building (or buildings) of Ramesses II and III, but there is no clue in the preserved texts or decoration as to whether it was a temple, or where it stood.

The general purpose of the shrine is not altogether clear. As has been remarked by others,² though the shrine is unequivocally identified as belonging to Osiris,³ the owner is named in it only three times. The roster of divinities, by frequency of occurrence, is as follows: Amen-Rē^c, lord of Karnak (5), Hathor (5), Osiris (3), Isis (3), Thoth (3), ithyphallic Amūn (2), Nephthys (2), Rē^c-Ḥarakhty (2), the Ennead (2), Ptaḥ (1), Horus of Beḥdet (1), Mut (1), Khonsu (1), Shezem (1), Tayet (1), Kheded (1), Ḥ^capy (1), Neïth (1), Sekhet (1), Atum (1), and Shu (1). This is a sizeable list for a small building. One has the distinct impression that the builders were making use of every available space for representations of gods who, in a larger structure, would have each had separate quarters.⁴

The repertoire of scenes used in the decoration is a more reliable indicator of the function of the shrine. Three main themes predominate: (1) the commemoration of the family of the Twenty-third Dynasty; (2) the offering cult; and (3) the sed-festival and other symbols of rejuvenation.

Of the royal family which founded the shrine, the kings Osorkon III and Takelot III occur most frequently in its decoration, and in such balanced association⁵ as to suggest co-regency. It is difficult, moreover, on the basis of accoutrements to establish which one takes precedence over the other. If Osorkon appears twelve times to Takelot's ten, on the façade the latter wears three lion's tails to his partner's two! The two kings

- ¹ Now facing the temenos wall and concealed by debris, until uncovered in July, 1971.
- ² Legrain, ibid. 147.
- ³ Three times in the first room the statement is made that Amenirdis made the monument for her father Osiris, Ruler of Eternity.
- ⁴ The list omits the Sokar boat which is represented in the third room on the upper register of the west wall, north of the door (Porter and Moss, op. cit. 18, upper). On the cult of Sokar at Karnak in the Late Period, see Kees, MIOF 3 (1955), 342 f.
- ⁵ P-M 9 (Osorkon approaching false door →); P-M 10 (Takelot approaching the second door ←); P-M 11, lintel (two kings seated, back to back), P-M 12, upper (Osorkon), lower (Takelot); P-M 17, left jamb (Osorkon), right jamb (Takelot); P-M 19, upper (Osorkon before Osiris); P-M 20, upper (Takelot before ithyphallic god); P-M 22, upper (two kings back to back in the ½d-tree).

share in common a variety of headgear, including the *atef* (fig. 3), the red crown, and the head cloth. The major distinctions appear to be (1) Osorkon's predilection for the white crown (three times), which Takelot wears in no scene at present preserved; (2) the double crown, which occurs but once and then on Osorkon's head (P-M 9, lower); (3) Takelot's exclusive use of the blue crown and the falcon-wig (P-M 21, upper, and 12, lower). This might tip the balance in favour of Osorkon whose son Takelot is usually taken to be.²

A third member of the Twenty-third Dynasty who is even more frequently (fifteen times in the original building), if less prominently, figured in the decoration of the temple, is the Divine Worshipper, Shepenwepet I, daughter of Osorkon. In the Kushite addition she occurs again, but then only to balance her adopted daughter, the then presiding Divine Worshipper, Amenirdis I. Her activities have mainly to do with the offering ceremonial: in P-M 9, upper (pl. XX), she introduces the offerings and plays the sistra before Amūn, Rē^c-Ḥarakhty, and Ptaḥ; in P-M 13 (four times) she proffers offerings in the direction of the door leading into the third room; in P-M 16 she plays the sistra before the Theban triad; in P-M 14, upper, she is the celebrant before a deity not preserved. On the jambs of the second door she is shown twice being suckled by Hathor,³ and twice before Amūn who fixes her head-dress. On the inner jambs of the gate she was likewise shown standing before a deity (once Montu), but these scenes are now almost totally destroyed.

In one respect, then, the temple is peculiarly devoted to the Divine Worshipper, and to her role as principal officiating representative of her father's house at Karnak.⁴ She was suckled by a goddess, crowned and thereby elevated to the status of god's wife by her divine husband; she celebrates the offering cult and propitiates the gods with sistra.

In one scene (P-M 15), most important as a revelation of the self-consciousness of the Twenty-third Dynasty, Shepenwepet stands on the right censing and libating before a large collection of offerings. The three columns of text above her head, the only inscription on this unfortunately mutilated wall, identifies her as 'their daughter, mistress of diadems, ⁵ *Hnm-ib-Imn*, with clean hands holding the sistra, ⁶ beloved of Mut, Shepenwepet, who censes and libates to her fathers ⁷ and her mothers.' The other

¹ But to obtain the required balance on the outer jambs of the gate Takelot, who we assume was shown on the west side, must have worn the white crown in contrast to Osorkon in the red on the east side.

² On the family and history of this obscure dynasty, the writer is preparing a contribution which will be published separately.

³ Nbt Twn Šm^cw hry-ib Wist: see L.-A. Christophe, Les Divinités des colonnes, 36 no. 51, 43 no. 135, 55 no. 286-7; Leclant, Recherches, 299 ff; for Hathor hnwt wett grg Wist, 'the unique mistress, foundress of Thebes', see Legrain, RT 30, 75, Leclant, Montouemhat, 214 l. 16.

⁴ On the usurpation of the king's role by the Divine Worshipper, beginning with Shepenwepet I, see Sander-Hansen, Gottesweib, 28; Leclant, Recherches, 379.

⁵ On the royal overtones of this epithet, see ibid. 375 n. 3.

⁶ On the two sistra in question see C. Desroches-Noblecourt, Le Petit Temple d'Abou Simbel, 45; for Hathor's relationship to the sistrum, see Vandier, RdE 18 (1966), 76; F. Daumas, RdE 22 (1970), 72 f.; for the use of the sistrum in the cultus, Schott, Das schöne Fest vom Wüstentale, 42 f.

⁷ Read $\stackrel{\text{def}}{\stackrel{\text{def}}}{\stackrel{\text{def}}{\stackrel{\text{def}}{\stackrel{\text{def}}{\stackrel{\text{def}}{\stackrel{\text{def}}{\stackrel{\text{def}}{\stackrel{\text{def}}{\stackrel{\text{def}}{\stackrel{\text{def}}}{\stackrel{\text{def}}{\stackrel{\text{def}}}{\stackrel{\text{def}}}{\stackrel{\text{def}}}}{\stackrel{\text{def}}}{\stackrel{\text{def}}}}\stackrel{\text{def}}{\stackrel{\text{def}}}}\stackrel{\text{def$

TAKELOT III
FIRST ROOM,
RIGHT OF
SECOND
DOORWAY

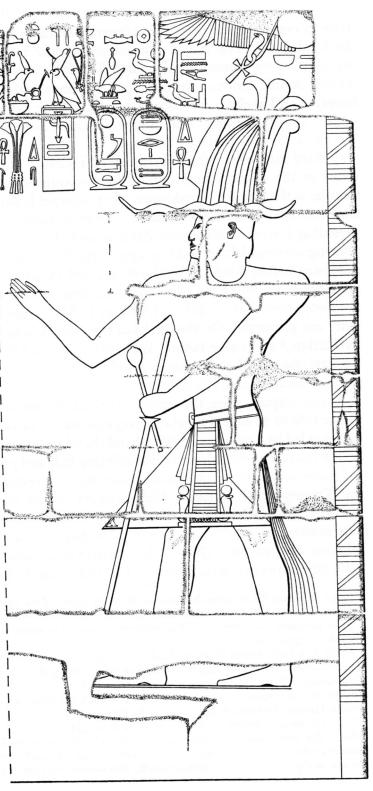


Fig. 3.

figures in the scene, who should thus be identified as the lady's progenitors, include (1) a royal figure with staff and flail standing 80 cm. to the left of Shepenwepet's outstretched vase, on the other side of an array of offerings; (2) a second, royal (?) figure, with staff; (3) the latter's female consort immediately behind him, holding a flail, the couple occupying a space 85 cm. wide on the extreme left and of the scene. Between (1) and (2) a goddess is shown, suckling a young girl on whose head sit two double crowns facing one another, perhaps a unique occurrence in Egyptian iconography. The wall thus divides itself into two vignettes, the one on the left showing what must be Shepenwepet herself, suckled by a goddess (probably Hathor) while her father and mother look on, the one on the right portraying a king (Osorkon III?) behind a high table of offerings. Uniting these two disparate scenes, in her capacity as celebrant of the cultus, is Shepenwepet herself, officiating on the far right.

A fourth scion of the Dynasty, mentioned once by name only, is the enigmatic Amenrud, whose cartouche is painted on the south wall of room 3, between the figures of Hathor and Neïth.³

The painted cartouches of the third room, of which Amenrud's is but one, are an interesting but difficult feature to interpret. Although Legrain's cursory allusions to them⁴ might lead one to conclude that they are hasty, secondary additions to the decoration, they are arranged with a care and a symmetry that tend to discount such a judgement. In five cases they are upright, measure 18 × 9 cm., and stand about 13-15 cm. above the base line. The three which appear in the upper register of the south wall (P-M 21) show a yellow ground, and are enclosed in the space between the goddesses' legs and their staves. The first, in front of Isis, is still discernible as Mry-mwt Sp [], but the second, which Legrain read as Wsr-mxt-re, is today illegible. The third is that of Amenrud, and can still be read with difficulty. On the opposite, north, wall (P-M 19), upper register, two similar cartouches appear, one between Osiris and Isis, and a second between Isis and Nephthys. The former Legrain read 'Osorkon', but today, although the outline of the cartouche is clear, the only hieroglyphs discernible are *nb tswy* beneath the royal name. The second cartouche, not mentioned by Legrain, is likewise very faint and difficult to read; but the title dwit ntr which stands above it ensures the presence of Shepenwepet's name. In the lower register of the north wall two vertical cartouches have been painted in blank columns above the heads of the offering bearers. Legrain noted one of these (the eastern of the two), and read].5 The traces we saw, however, did not seem to suit this readit as Mry-Imn Imn ing; and as the other cartouche seems to incorporate a s. Ist, one wonders whether we are dealing with the nomen and praenomen of one of the major kings of the shrine.

¹ Legrain, op. cit. 131.

² Her mother, queen Krmt (mentioned in the second room, on the east wall), is known to have been of common descent: cf. Legrain, ASAE 7 (1907), 43 ff.

³ For bibliography, see Gauthier, *Livre des rois*, IV, 392, and for further references to Amenrud see Leclant, *Recherches*, 268 n. 2.

⁴ Even so, the fact that the cartouches are everywhere insertions in available space, suggests that the decoration was complete when it was decided to put them in.

⁵ Op. cit. 134.

The shrine of Osiris, Ruler of Eternity, thus takes on the aspect of a family chapel in which the kingship and solidarity of the family are reaffirmed. It stands almost at the beginning of a series of Osirian chapels in which the Divine Worshippers, Shepenwepet's successors in office, figure prominently.¹ There is a striking continuum in general design and theme between the present shrine and those later shrines of Divine Worshippers in the Montu enclosure (Amenirdis I and Nitocris): a false door adorns the wall of the first chamber,² the ubiquitous line of Nile-figures approach,³ the second room is devoted to the offering cult,⁴ and lines of figures (royalty among them) approach Osiris standing on his pedestal.⁵ But there is an important shift in emphasis: while in the chapels beginning with Amenirdis I the Divine Worshipper figures as a queen in her own right, at the expense of the contemporary king, in the original shrine of Osiris, Ruler of Eternity, the reigning monarchs still take precedence over Amūn's consort.

The offering cult occupies a prominent place in the decoration of the temple, especially in the second room where scenes of offering occur on every wall. An enormous array of edibles is offered by the king (Osorkon) in the upper scene on the façade, above the false door (P-M 9) (pl. XXI). In the inner chamber the general theme of presenting gifts to the divine denizens of the place is conveyed by the lines of gods, genii, and others bearing offerings in the lower registers of the north and south walls.

The theme of the jubilee and other symbols of rejuvenation run through the decoration. The lintel was decorated with a double scene, now badly preserved, which showed a traditional Ruderlauf and Vasenlauf, with Upper and Lower Egyptian Meryet and Upper and Lower Egyptian Wepwawet and Khons standards in evidence.⁶ The lintel of the second door (leading into room 2) depicts two kings seated on a dais, back to back, over an elongated and stylized sm3 sign. Squatting Niles on both sides of the dais support heraldic plants on which Nekhbet and Wedjoyet perch; while at the extreme right and left Thoth and Horus of Behdet stand offering life, stability, and prosperity, and holding tall rnpt-signs sprouting from three superimposed sed-kiosks. Beneath, on the jambs of the door, Shepenwepet is suckled by Hathor and crowned by Amūn.⁷ In texts in the inner room Amūn declares, as he writes upon the leaf of the išd-tree in which the two kings crouch: 'I write for thee (Osorkon) very many sedfestivals, thou having appeared upon the Horus-throne of the living, upon the august išd which is in Karnak'; and Thoth avers, 'Thine august father Amen-Rē', lord of the Thrones of the Two Lands, writes for thee the great kingship of Rec...' Shu states: 'I have set (?) thy rank (sch) as king of Upper and Lower Egypt, I have given thee my testament, thou being justified in the Mansion of the Prince before Horus, Lord of

¹ On the proliferation of Osiris chapels in north Karnak, see Barguet, Le Temple d'Amon-rê, 14 f.; Leclant, Recherches, 216 ff.

² Christophe, Karnak-Nord, III, 25 (Amenirdis I).

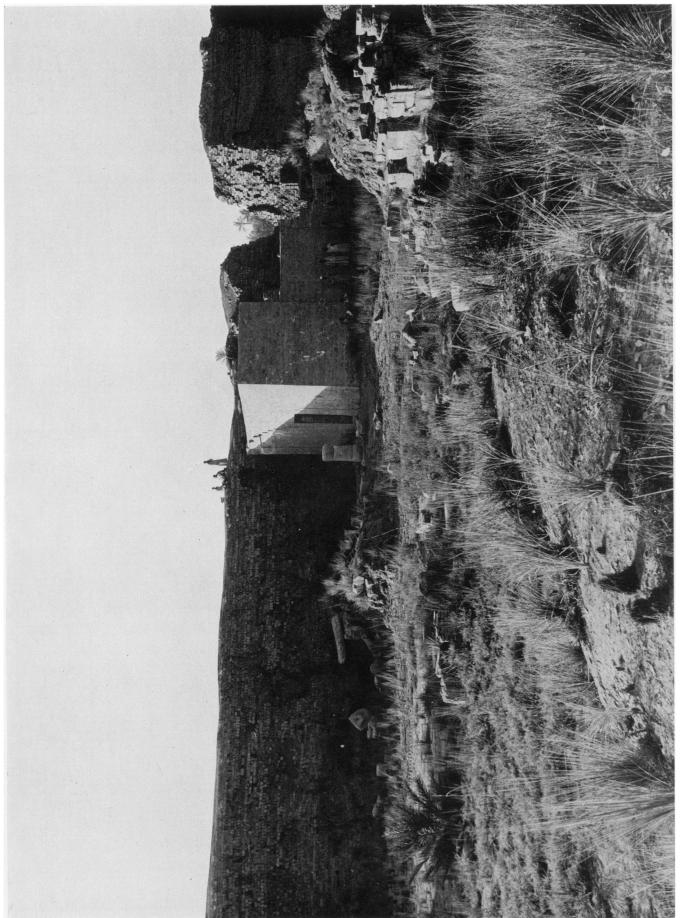
³ Ibid. 20 ff., 36 f., 42 f.

⁴ Loc. cit.

⁵ Ibid. 43 ff. On this pedestal, see Desroches-Noblecourt, op. cit., 37; on the connection between the shape and the goddess Mict, see W. Westendorf, ZÄS 97 (1971), 143 ff.

⁶ Apparently much better preserved when Legrain unearthed it: op. cit. 148. On the ceremonial dance of the king at the sed-festival, see Kees, Der Opfertanz des ägyptischen Königs (Munich, 1912), 135 ff.; for the standards, ibid. 251 f.; idem, ZÄS 52 (1914), 66 f. (for the confusion in later times between Ruderlauf, Vasenlauf and the sed-dance).

⁷ On suckling as symbolic of rejuvenation, see Barguet, BIFAO 52 (1953), 109 n. 1, also 111 n. 3.



The Temple of Osiris, Ruler of Eternity, from the west

TEMPLE OF OSIRIS, KARNAK



King Takelot III, south jamb of door leading to the third (innermost) room TEMPLE OF OSIRIS, KARNAK



Shepenwepet I propitiating Re'-Ḥarakhty; south wall of first room, upper scene, left

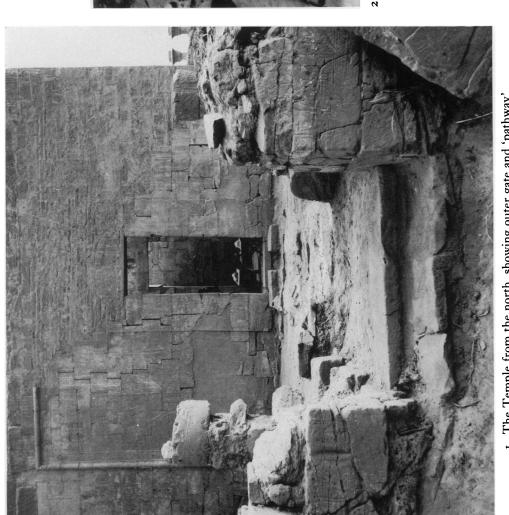
TEMPLE OF OSIRIS, KARNAK



Osorkon III officiating before the offering-table; south wall of first room, upper scene, right



2. Square I.A. The trowel rests on the original inner (western) edge of the Nectanebo temenos wall



1. The Temple from the north, showing outer gate and 'pathway'

TEMPLE OF OSIRIS, KARNAK

the Patricians (p r t).' That the theme of bestowing kingship, and renewing it in the context of the sed-festival, should occur in a shrine devoted to Osiris is no surprise during the Late Period. Names and epithets attest the Osiris cult's patronage of the sed, and on a late coffin the god is even depicted celebrating a jubilee himself.2

The clearing operation this year had as its objectives (a) the establishing of the line of the inner (western) face of the great temenos wall; (b) the determining of the periods of occupation underlying the level of the standing temple; and (c) the investigation of the terrain immediately before (i.e. north of) the temple gate.

Initially the powdery topsoil, averaging 10-15 cm. deep, was removed over the entire extent of the forecourt, as far west as a line running south from the westernmost extremity of the temenos wall of the temple. It is on this topsoil that the blocks which lie scattered in the forecourt stand, and it is a moot point whether their present disposition is Legrain's work (though I suspect it is). As one would expect, pottery from the topsoil showed a grand mixture of late Pharaonic, Roman, and even modern forms. Beneath topsoil a hard-packed mud surface (c. 3-5 cm. thick) came to light, first encountered on the east side of the forecourt, but later found to run up to the great temenos wall. Associated with this surface was a white plaster basin, or storage bin, 58 cm. in diameter from north to south and 46 cm. from east to west, located 88 cm. north of the eastern jamb of the temple door. To the east of this basin were large irregular patches of black and pink soils, suggesting burning and perhaps domestic occupation. On its west side the edge of the basin was set in under, but clearly of the same date as, a north-south strip of irregular pebbles, stones, and slabs which we have come to call the 'pathway' (see pl. XXII, 1). At its southern end the 'pathway' is exactly the same width as the door of the temple, and runs north on a slight decline to the gate set in the temenos wall of the shrine, where presumably it was of the same width (although here we have not yet completely exposed it). The builders of the pathway chose any material at hand, small blocks or large³ (most of them already squared), and even mud-bricks set individually among the stones. At one point, c. 4 m. north of the door, a large circular patch (75 cm. in diameter) of powdery orange occurs, while further to the north rectangular patches of white, yellow, and red appear. Presumably these are the remains of badly decomposed limestone and sandstone.

The date of the hard-packed mud surface, the basin, and the pathway was fortunately not difficult to ascertain. The pottery immediately overlying the pathway, especially at the north end inside the gate, was plentiful, and abounded in Roman cooking-pot forms. At a point 3.60 m. north of the temple façade, and c. 70 cm. west of the western edge of the pathway, at the level of the hard surface, was found an Alexandrian tetradrachm of first- or early second-century date.4

D 141

¹ Cf. 111, occupant of the Nitocris chapel in the Montu enclosure: Christophe, op. cit. III, 43 ff.; also the personal name : Leclant, Recherches, 287; idem, Montuemhat, 265.

2 G. Möller, ZÄS 39 (1901), 71 ff.

³ The largest is c. 1 m. in length.

⁴ The coin is of a low-grade metal and is very worn. The following notes are due to the kindness of Mrs. Neda Leipin, curator of the Greek and Roman Dept., the Royal Ontario Museum, and Miss Alison Haile, assistant curator. Diameter 2.7-2.5 cm., thickness at rim 0.5 cm.; Greek provincial tetradrachm, billon. The

The clearing of the eastern side of the forecourt continued in a square (field designation I A), 3×3 m., its southern side being 1.50 m. north of the temple façade and stretching from the eastern edge of the pathway to the great temenos wall. The original western face of the latter was encountered c. 1.60 m. west of the present face, the great mass of brick thus lost having constituted the majority of the debris with which the temple and its court were encumbered before the turn of the century. To the west of the original face, at a depth varying from 23 to 28 cm. below the hard mud surface mentioned above, was a second surface made up of mud-bricks laid in two rows of stretchers (at right angles to the temenos) and one of headers. This brick surface constituted a kind of ledge, c. 1 m. wide, against the inner face of the temenos (see pl. XXII, 2). Upon it, lying at the odd angle at which they had fallen, were two inscribed blocks, one of sandstone carved with the head of a H-py-figure, the other of limestone with part of the praenomen of Akhenaten. Between the mud-brick surface and the pathway was a rectangular bin composed of bricks set on edge, which occupied the angle of a westward turning of the mud-brick surface.

It is possible that this surface, or ledge, of bricks and the bin with which it is associated, are of the same date as the great temenos wall of Nectanebo. Not only do the bricks of the surface run up to, but not under, the temenos wall, but they are of the same dimensions ($c.36 \times 18 \times 12$ cm.) and consistency as those found in the wall. Thus we can be fairly sure that we have a surface dated to the second quarter of the fourth century B.C.

The clearing of the western side of the forecourt (west of the standing column) continued in a square 6×6 m. (field designation I B: see plan, fig. 2), its southern side being flush with the façade of the temple, and its south-east corner located one metre to the west of the north-west corner of the temple. The plan published by Legrain² shows a turning south of the small temenos wall of our shrine to enclose the court on the west; and although Legrain's plan is inaccurate in its scale, it probably does reflect the presence of such a north-south wall, however denuded it was at the beginning of this century. Prior to our clearing the surface here showed not a trace of this wall, but we had no sooner begun the work than not one, but a complex of mud-brick walls appeared. The most substantial and easily discernible (wall II) runs north-south along the line of the eastern side of I B, its western face and approximately 90 cm. of its unknown total width appearing clearly in the square. The average dimensions of the bricks of which it is composed are c. $38 \times 19 \times 12$ cm. At the end of the season we had not yet reached the bottom of wall II which descends for nine courses at least to a depth of over 1.20 m. There is a possibility, however, that the upper two-thirds of what we have exposed represents a rebuilding of an earlier wall destroyed by fire.

To the west of this wall, and occupying the south-west and north-west corners of the square, were two rectangular masses of brick, the preserved tops of which extended

obverse shows a cuirassed laureate bust on the right with an indiscernible date below the neck, possibly the head of Zeus wearing the modius (which might militate in favour of a slightly earlier date). Reverse: standing female figure holding staff.

I On the compelling reasons for attributing the temenos to this king, see Barguet, Temple d'Amon-rê, 29 and n. 2.

2 RT 22, 146.

to the present surface of the ground. Wall I in the south-west corner was c. 2.70 m. north-south, and c. 3.00 m. east-west. In spite of the fact that two later pits had been sunk between wall I and wall II, destroying whatever had stood in the intervening space, it seems fairly certain that they did not touch. At the north-east corner of the preserved mass of wall I a sort of tongue wall of at least the thickness of two headers extends east towards wall II; but how far it extended is unknown because it was destroyed by one of the pits. The average brick size in wall I is $37 \times 18 \times 11$ cm.

Into the north-west corner of the square protrudes a rectangular area of brick, 2 m. north-south, 1.80 m. east-west, which we at first mistook for, and called, the 'platform'. In actual fact it is simply the south-west corner of a thick wall, with a preserved depth of at least four, and possibly five, courses, whose western face lies beyond the limit of the area cleared. The two topmost courses were made up of bricks with sherds in them, that the lower courses contained a purer type of brick, relatively free from this kind of contaminant. Moreover, occasional burnt bricks were seen to occur in the underlying courses. The average dimensions of the bricks of the 'platform' was 32×16×9 cm. Between wall II and the 'platform' the surface of the ground was covered with a layer of mud-bricks, only one course deep. Whether this represents a paving of a passage between two walls, or the bottom course of a very thick wall whose outer sides (II and the 'platform') were sunk to a greater depth, I cannot tell at present. A third possibility is that wall II had been denuded and that the 'platform' replaced it on the west; the entire court, including the top of wall II, would then have been covered with a paving of brick. This seems less likely, as it would have entailed a widening of the court of the shrine; and the two columns, thus isolated in the centre of a very broad space, could scarcely have been able to function alone as supports for the long roofing timbers which would have been required.

Between wall I and the 'platform' there is a passage in which is set a large storage jar, 82 cm. in diameter. A brick emplacement had been set under it, with the bricks arranged to form a slightly concave surface to receive the rounded bottom of the vessel.

Wall I had been built upon an irregular ground surface, so that the bricks of its lowest course described a noticeably wavy line in section. This uneven stratum was found to be streaked with substantial lines of blackish, burnt material, and was filled with whole vessels and many fragments. In some cases it appeared that vessels had been strewn upside-down over the surface in an effort to provide the wall with a more secure footing. Among these fragments may be mentioned (a) a large piece of a bowl(?) in mottled granite, (b) a rim-fragment of orange ware, painted brick-red, on the exterior face of which a Hathor head had been modelled in relief, and (c) a large, shallow bowl of coarse, orange ware, c. 50 cm. in diameter, turned upside-down beneath the storage jar.

¹ Rather a common occurrence. The bricks of our wall II, of the Osirian temenos wall and adjacent walls to the west, as well as the Nectanebo temenos (fig. 1 E), are full of sherds, some quite large. This fact could be a boon to those desirous of setting up a ceramic chronology. At a given period sherds that would find their way into the brick clay would be predominantly from the period immediately preceding the striking of the bricks, and would not constitute a haphazard cross-section reaching back through many centuries.

The burnt stratum lies above a stratum of rich brown earth, which in turn overlies another, and darker, layer of burnt material. This second burnt stratum extends over a north-south wall (V), and declines gently over mud-brick fall from the same wall. Wall V runs north some 2.55 m. from the south side of I B. Upon entry into the square it is 1.50 m. wide, but after c. 48 cm. it narrows sharply to 90 cm. in width. Its exact relationship to wall II must await next season's work, as we were able to clear only the top of wall V by the close of the present season. But enough has been exposed to indicate the presence of a narrow, east-west wall, running eastwards from the eastern face of wall V towards wall II.

In conclusion it may be said that, although square I B is by far the most complicated area cleared, it seems more than likely that in wall II we have discovered the original western temenos wall of the Twenty-third Dynasty shrine. Confirmation of this, as well as the ascertaining of how far south this wall runs, had to await our 1972 season.

In connection with the walls, both newly discovered and long known, in the environs of Osiris, Ruler of Eternity, the following observations are pertinent to the present report. The shrines which at present stand in the north-east corner of the Karnak enclosure of Nectanebo's time¹ are orientated towards the north (plan, fig. 1), a fact which suggests that the main access to them was not from the axis of the Temple of Amūn, nor from the west where the massive temenos wall, which proceeds north from the rear chambers of the eastern temple of Ramesses II, effectively blocks egress. Today access from the south to these buildings is possible across terrain that is perfectly flat and shows no trace of an enclosure wall. Yet evidence of such a wall is not lacking. Proceeding west from the south-west corner of the temple of Osiris, Ruler of Eternity, runs a thick wall which at one time must have enclosed that shrine on the south. Because of the modern cutting of an aperture at the south-west corner of the shrine, and also perhaps because of Legrain's restoration work, this enclosure wall has been reduced to four courses immediately behind (i.e. south of) the temple. Nevertheless it would seem actually to underly the rear wall of the temple, unless Legrain's masonry deceives the eye. If it actually does run under the original Twenty-third Dynasty structure, two conclusions are possible: (a) the wall was already standing when the Twenty-third Dynasty temple was built, and was cut back partly to receive the south wall of the new structure, or (b) the mud-brick wall and the temple were erected at the same time. The average brick size in the wall is 30 × 15.5 × 10.5 cm.² At present the wall is hard to trace farther to the west. Just to the south of the southeast corner of the Takelot shrine (fig. 1 c) someone has crudely hacked down the wall which is denuded to the present ground level. That it did, however, at one time extend along the southern side of the Takelot shrine, at least as far as the 'anepigraphic'

¹ Viz. (from east to west) the temple of Osiris, Ruler of Eternity, the shrine of the High-priest Takelot son of Namlot, the 'anepigraphic' shrine, and the Osireion built by Shepenwepet II. The latter two, be it noted, stand on noticeably higher ground than the former. For bibliography, Barguet, *Temple d'Amon-rê*, 15.

² At one point, c. 3-4 m. west of the south-west corner of the temple, the south face of this wall shows a section in which the bricks measure $34 \times 16 \times 7$ cm. (i.e. long and flat). Could this represent a later 'skin', applied to the outer (southern) face?

chapel (fig. 1 B), is suggested by the fact that a 'skin wall' with bricks $30 \times 15 \times 10$ cm. runs along the rear (southern) side of this latter building, flush with its south stone wall. Bricks of this size also extend along the eastern side of the shrine, and apparently along the western side also. But on the west side there is an outer 'skin' of bricks $38 \times 18 \times 12$ cm., possibly originally more than one metre thick, outside of (i.e. west of) the bricks $30 \times 15 \times 10$ cm.

How far to the west the wall with bricks of the latter size continued is unclear. The average dimensions of bricks in the wall encasing the Shepenwepet shrine is $32 \times 17.5 \times 9$ cm., which would seem to eliminate it from consideration. Nevertheless it is a distinct possibility that the mud-brick enclosure wall which at present comes into view first to the south of Osiris, Ruler of Eternity, originally extended as far west as the massive north-south temenos¹ which at present shuts off the main Karnak temple from the north-east corner of the enclosure of Nectanebo's time.

Underlying and enveloping the Takelot shrine on the south side is a mass of sundried mud-brick beneath the burnt brick² of the construction. The dimensions of these bricks, upon which the shrine appears to be built, are $38 \times 18 \times 12$ cm., or approximately the same size as those belonging to our wall II.

The clearing of the area north of the temenos wall was confined this year to a square (III C), 6×6 m., lying west of the main axis of the building. This was because the area immediately before the gate is at present encumbered with many blocks (including the lintel of the gate, one of the jambs, and several column drums); and the present expedition lacked the wherewithal to move them. We anticipated that in the 1972 campaign these blocks would be shifted, at least temporarily, and the area satisfactorily cleared.

Square C (fig. 2) fortunately did not confront us with the complex stratigraphic problems of I B. Below the top layers a thin cobbled surface was cleared, on which, in the northern half of the trench at least, stood one or two courses of very poor mudbrick. This may represent some ephemeral domestic occupation outside the sacred precinct, although we could not be sure at the time that this was not merely mud-brick fall from some larger structure outside the area of clearance. The cobbled surface was best preserved in the south-west corner, close to the present western end of the temenos; but this proved to be simply the top of a pit, 75 cm. deep, and filled with gravelly rubble.

At a depth of c. 35 cm. beneath the cobbled surface was a second surface of beaten earth, but whether beaten through intent or simply with the passage of many feet over an extended period, we could not tell. In many places the stratum between the two surfaces showed poor mud-brick, apparently *in situ*, but of insufficient preservation to establish ground plans. In the north-west corner of the square at this level stood a circular installation of eleven rough-hewn limestone blocks (the largest being c. 35 ×

¹ Average brick size c. $38 \times 21 \times 18$ cm.

² On the early use of burnt bricks in Egypt, as evidenced by this shrine, see Chevrier, ASAE 51, 549 ff. We also found burnt bricks used in the paving of the second room of the Osiris temple, and additional examples used in the footing of our 'well' in square III C.

40 cm.), mounted upon two rows of bricks set in concentric circles 9 cm. apart. The interior diameter of the structure was 2 m. (east-west), its external 2.75 m. The dimensions of the bricks were $25 \times 14 \times 11$ cm., and in both rows they were arranged in stretchers, except on the north where four bricks were laid as headers on their narrowest sides. Of the two circles of brick the inner one was of burnt brick throughout, the colour being bright red for the most part, interspersed with the occasional jet-black specimen.

The purpose of this crude structure is in doubt. When first detected it was called a well, a conclusion which seemed at the time to be supported by the rich, moist mud which was found inside to a depth of 35 cm. Yet the brick substructure was subsequently found to descend to the depth of only two courses; and these had been set upon a mound made up of dry rubble, mixed with pottery which seems to rest upon a hard-packed yellow surface. The suggestion has been made that the circle was intended for the planting of a tree; but no roots were found in the vicinity, and at the present time there seems to be no way of confirming this.

The stone circle and the surfaces associated with it proved to be part of the result of a process of levelling up the area outside the temenos of Osiris, Ruler of Eternity, after the destruction of a substantial east—west wall which runs along the same line as the present temenos, but slightly further to the north. Little can as yet be said about this wall, since it was encountered only three days before the close of operations; but enough was cleared to reveal a circular storage bin (?) of mud-brick, built c. 15 cm. north of the wall on the west side of the square. Although no easily datable inscribed material has come to light in III C, I think it is safe to say that we are still within the Libyan period in the tip lines which run over this wall and slope down to the north.

The objectives we have set ourselves for the projected third season at the temple of Osiris, Ruler of Eternity, are as follows: (1) to continue the clearance of the forecourt by extending I A, and if possible to obtain a good section east—west from the Nectanebo temenos to square I B; (2) to ascertain the relationship between the mud-brick surface of I A and the present façade of the shrine; (3) to ascertain the relationship between walls II and V in square I B, and between wall II and the present wall of the shrine. This latter desideratum will require the clearing of a new area directly south of I B; (4) to carry on work in III C until water is reached; (5) to clear a similar area due east of III C, directly in front of the gate of the temple.

TOMB 100: THE DECORATED TOMB AT HIERAKONPOLIS CONFIRMED

By JOAN CROWFOOT PAYNE

THE famous Decorated Tomb of Hierakonpolis was discovered and excavated by F. W. Green in 1898–9; it was published as a unique tomb, the walls painted in the style of predynastic decorated pottery, plundered, but datable by its remaining contents to S.D. 63.^I In subsequent years, the tomb has been the subject of discussion, for, in the light of increased knowledge, it became clear that the tomb group as published was not homogeneous, and was inconsistent with its identification as a closed group. This difficulty was largely resolved some ten years ago, when objects belonging to the tomb group were identified in the collection of the Ashmolean Museum. The group as reconstructed was found to be typical of well-known tomb groups of the Gerzean period.²

The reconstruction of the tomb group was primarily based on the identification of the number of the tomb, 100, found on a flint lance-head published by Green as part of the contents of the Painted Tomb. Other objects with this tomb number, some also with sub-numbers agreeing generally, but not always, with Green's published list of contents, made up the reconstituted group.

The Green papers, preserved by his family and recently presented to the Faculty of Oriental Studies in Cambridge,³ include original excavation records of the Painted Tomb, and photographs taken during the excavations (see pls. XXIII–XXV). The records begin with the drawing of the plan published by Green,⁴ headed '100—Decorated Libyan Tomb'. The margins of the plan show larger, and therefore more accurate, sketches of some of the objects, and below there are notes of details such as contents and condition. In addition to the excavation records, a manuscript register of pottery types in a series of about 150 predynastic graves has recently been found,⁵ and there is no doubt that the graves listed are those of the small predynastic cemetery at Hierakonpolis. Tomb 100 is included; here the pottery register follows the Ashmolean group precisely, with only a few minor variations in typing, such as are to be expected, and with three additional pots.

The following list gives the reconstructed group as it now stands; it includes further information obtained from Green's excavation notes and photographs, and from his manuscript pottery register. The numbering follows that used by Green in his publication of

¹ Quibell and Green, Hierakonpolis, 11, 20-23, 54, pls. 64, 6, 9; 67.

² Case and Payne, 'Tomb 100: the Decorated Tomb at Hierakonpolis', JEA 48 (1962), 5-18.

³ Catalogued as 'Green MSS. 205.2'.

⁴ Quibell and Green, op cit. pl. 67.

⁵ Found by Mr. Barry Kemp, in Green's copy of Naqada and Ballas; catalogued as 'Green MSS. 329'.

the tomb. Pottery and stone vessels, unless stated otherwise, are typed according to Petrie's Naqada and Ballas.

- A. Objects published by Green, Hierakonpolis, pl. LXVII
- 1. Miniature stone vase, form 66 (*Prehistoric Egypt*). Veined limestone. (Ash. Mus. E. 3117.)

Green's published list: H 52. Shown in plan without handles, but in larger sketch in margin with handles, and certainly intended for this vase; its profile is, however, sufficiently altered to make Green's typing as H 52 explicable.

- 2. Stone vase, form H 27. Probably volcanic ash. (Ash. Mus. E. 2786.)

 Green's published list: H 27. Confirmed by accurate sketch in margin, described as 'diorite'.
- 3. Bowl, P 23 C (*Diospolis Parva*). Buff ware, dark red polish inside and over rim, outside decorated with large red circle, and possible traces of other decoration; restored from sherds. (Ash. Mus. 1961.371.)

Green's published list: D. 8. Drawn both in plan and in margin as D 8 b or d, marked 'decorated'. In notes 'under 3 earth slightly discoloured reddish pink probably from decoration of pot which has been destroyed only remaining in places'. Shown in foreground of photograph (pl. XXIII); from its size in comparison with other vessels in the photograph, probably the larger D 8 d. There is thus no doubt that a D 8, probably D 8 d, was found in the tomb. It is, however, not listed in Green's manuscript pottery register; instead, this gives 'frags. as L 16, red wash in, O in brown outside'. Our sherds, restored as P 23 C (Diospolis Parva) were therefore also found in the tomb.

4. Missing; possibly represented by no. 29 below.

Green's published list: Shell. Large shells drawn in plan and in margin. In notes 'shells level with wavy handles of jars 5, 2 mouth to inside, 2 lower ones mouth to wall'.

- 5. Missing.
 - Green's published list: W 41. In notes 'inside white calcareous powder with small bivalve, pieces of limestone'. Photograph (pl. XXIII) shows this vessel and the following no. 6, both clearly W pots; the size of these pots in comparison with the known distance between the end of the partition and the side wall confirms the typing of both as the larger W 14-19, instead of the smaller W 41.
- 6. Sherds, W 14-19, with handles type A-B. Pinkish-buff ware. (Ash. Mus. 1961.372.) Green's published list: W 41. In notes 'the tomb has been evidently open on the N side up to the partition for a long time as that side of the pots is quite weathered through by sand blast process'. This description exactly fits the condition of the remaining sherds.
- 7. Forked lance-head fragment, brown flint. V-shaped end. (Ash. Mus. 1959.141.)
 Green's published list: Flint lance. In notes 'under the flint which is broken and near the wavy handle pot no. 5 small fragment of bone and white ash'.
- 8. Pot, R 81. Coarse brown ware with chaff. (Ash. Mus. E.2928.)

Green's published list: R 81. Three vessels marked 8 in plan, with sketch of R 81 in margin. In notes 'fragments of bones, remains of funeral feast (?) between 8 a and 8 b. 8 b empty only desert

¹ Quibell and Green, op. cit., pl. 67.



THE DECORATED TOMB AT HIERAKONPOLIS



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THE DECORATED TOMB AT HIERAKONPOLIS

sand in it. 8 c potmark I towards angle of walls, inside fragment of shell but may have fallen in. 8 a wheelmade, remains of yellow ochre on surface, pot was painted all over yellow, at bottom some bones of some small bird'. The only remaining R 81 must be Green's 8 b, with neither potmark nor yellow wash; it shows traces of hand-turning inside the mouth, and Green presumably interpreted these marks as signs of the use of the wheel.¹

9. Pot, P 40 a. Red ware, polished red. (Ash. Mus. 1959.451.)

Green's published list: P 40. Accurate sketch in margin. In notes 'sand and few small fragments of charcoal and a little Nile mud at bottom, bits of bone under it in contact. This row of pots 8 and 9 stand about 0·1 m. above brick floor on loam and at angle under 8 b a shaqf of coarse ware.'

10. Missing.

Green's published list: R 94. In notes 'rough face distorted in making, sand inside'.

11. Bowl, R 23 b. Coarse brown ware with chaff, restored from sherds. (Ash. Mus. 1961.373.)

Green's published list: R 24. Accurate sketch in margin. In notes 'rough face, wheel made, face down'. The present bowl has clear marks of hand-turning below the rim outside.

12. Pot, P 95 b. Red ware, polished red. (Ash. Mus. 1959.452.)

Green's published list: R 94. Sketch in margin shows pot as P 95 b, marked 'p. red'. In notes 'empty'.

13. Bowl, P 11 b. Red ware, polished red. (Ash. Mus. E.2957.)

Green's published list: R 1. A sketch in the margin shows a small shallow bowl. In notes 'empty, mouth up'.

14. Missing.

Green's published list: R 1 e (*Hierakonpolis*, pl. LXIX). Accurate sketch of this type in margin. No notes.

15. Pot, P 95 a. Brown ware, polished red. (Ash. Mus. E.2949.)

Green's published list: R 94. Drawn on plan as P 95 a. In notes 'filled with sand'.

16. Bowl, R 1 e (*Hierakonpolis*, pl. LXIX). Coarse brown ware with chaff. (Ash. Mus. E.2960.)

Omitted on Green's published list.

17. Pot, B 42 b. Black-topped, red-brown ware polished red. (Ash. Mus. 1959.453.)
Green's published list: B 42. In notes 'black top, sand, small pellet of clay, fragment of bivalve'.

18. Pot, R 94. Coarse red-brown ware with chaff. (Ash. Mus. 1959.454.) Green's published list: R 94. No notes.

- B. Objects additional to those published by Green
- 19. Sherd, P 40. Red ware, polished. (Ash. Mus. 1961.374.)

¹ Lucas, Ancient Egyptian Materials and Industries, 368-9, and references, particularly Reisner, Kerma, IV-V, 323-4.

- 20. Sherd, P 24 G (*Prehistoric Egypt Corpus*). Red-brown ware, polished. (Ash. Mus. 1961.375.)
- 21. Sherd, P 24? (Prehistoric Egypt Corpus). Red-brown ware, polished. (Ash. Mus. 1961.376.)
- 22. Sherds, W 14-19, handle A-B. Light brown ware. (Ash. Mus. 1961.377.)
- 23. Sherd, W 14–19, handle H. Drab ware. (Ash. Mus. 1961.378.)
- 24. Sherd, W (?). Buff ware. (Ash. Mus. 1961.379.)
- 25. Sherd, W (?). Light red ware. (Ash. Mus. 1961.380.)
- 26. Sherd, R 81. Coarse red-brown ware with chaff. (Ash. Mus. 1961.381.)
- 27. Sherd, R 81. Coarse brown ware with chaff. (Ash. Mus. 1961.382.)
- 28 (?). Two flints, a blade, and a core-revival flake, both small. (Museum of Archaeology and Ethnology, Cambridge, Z15390 a, b.)¹
- 29 (?). Fourteen shells, thirteen specimens of *Unio willcocksi* R. B. Newton, and one *Etheria* species, perhaps *elliptica* Lamarck.² (Museum of Archaeology and Ethnology, Cambridge, Z15390 c-p.)
- C. Additional objects from Green's manuscript pottery register
- 30. P 16? (sequence date 33-58, 72).
- 31. P 43 (sequence date 38-55).
- 32. R 58? (sequence date 46).

The addition of these three pots, and of the D 8 d (?) of Green's published group, does not affect the sequence date of 48-53 suggested for the Ashmolean group.³

Taken together, all the new sources of information confirm that the objects making up the Ashmolean group are indeed the original contents of the Painted Tomb, all that plunderers left of the contents of a most important tomb of the Gerzean period.

Many of the graves on Green's pottery register had been sequence dated, and the dates can, of course, readily be checked. The cemetery is small, but the sequence dates are not closely grouped; they are evenly distributed through the whole of the Gerzean period; no grave need date from before 37, none after 63. This pattern of distribution, which closely follows that noted in the T cemetery at Naqada,³ supports Kaiser's suggestion that the graves surrounding the Painted Tomb formed a royal cemetery.⁴

I would like to thank Professor Plumley and Mr. Barry Kemp, of the Faculty of Oriental Studies in Cambridge, for making it possible for me to publish this article. The fact that both the manuscript pottery register and the Ashmolean group include

¹ Numbers 28 and 29, flints and shells, were identified by Mr. Barry Kemp in material from Hierakonpolis and other Egyptian sites at the Museum of Archaeology and Ethnology, Cambridge. They are individually marked '100', in exactly the same way as most of the Ashmolean specimens from this tomb.

² Very kindly identified by Mr. H. P. Powell, of University Museum, Oxford.

³ Case and Payne, op. cit. 11.

⁴ W. Kaiser, 'Zur vorgeschichtlichen Bedeutung von Hierakonpolis', MDAIK 16 (1958), 189-91.

a number of objects which were nowhere mentioned in the excavation records suggests a point which perhaps should be remembered when interpreting early records. When, by good fortune, the records of even a careful, accurate worker have been preserved, they may not necessarily contain all that was found in a given context; to expect otherwise is perhaps to interpret them in the light of our own conventions.

PHOTOGRAPHS OF THE DECORATED TOMB AT HIERAKONPOLIS

By BARRY J. KEMP

In the summer of 1966 the Library of Egyptology in the Faculty of Oriental Studies of the University of Cambridge had the good fortune to acquire the papers of the late F. W. Green. These had remained at the family's house in Great Shelford, Cambridgeshire, but with the sale of the house imminent Major F. C. Green contacted Professor J. Martin Plumley for his opinion on his father's papers. Professor Plumley subsequently visited the house to examine them, and informed Major Green of their interest and importance. On hearing this Major Green agreed to present them all to the Library of Egyptology. As a result of this magnanimous gesture they are now preserved here, and a preliminary catalogue has been made.

F. W. Green travelled extensively in Egypt and the Sudan, mostly in the first decade of this century, and many of the documents are well-kept pocket books containing notes, sketches, and copies of inscriptions. Others contain notes made during numerous visits to museums. But the principal body of manuscripts consists of field notes and plans of the excavations which he carried out in 1899 at Hierakonpolis on behalf of the Egyptian Research Account. It can be seen from them that the published account, *Hierakonpolis*, II, does less than full justice to the field record. Compared with the records of some of his contemporaries, Green's notes are remarkably extensive, kept with a praiseworthy neatness, and replete with sketches which reflect the time he spent with the Egyptian Geological Survey as topographer and surveyor.

The discovery of these records has come at an opportune moment. Mrs. Joan Payne at the Ashmolean Museum, Oxford, and Mrs. Barbara Adams at the Petrie Collection, University College, London, have both done a great deal of work on the material from Hierakonpolis in these collections. At the same time it has been found that the collections at Cambridge contain considerably more material from the excavations than had been suspected. It is already becoming evident that Green's manuscripts contain a great deal of information which will enable many of the objects in these collections to be related quite specifically to the circumstances of their discovery, and which will, it is hoped, lead to a much better appreciation of the stratigraphy and lay-out of this remarkable place.

In addition to the manuscript material is a large number of photographic negatives. Although these have not yet been catalogued it has proved possible to isolate a small group from the Hierakonpolis excavations. They were taken on a quarter-plate film pack with nitrate base, and in each case have shrunk considerably and curled up tightly. In extreme cases they have come to resemble slender black cigarettes, their brittle

condition making unrolling a difficult matter. Fortunately it was possible to obtain the services of someone with the resources and skill to deal with them, in the person of Mr. L. P. Morley, photographer to the Faculty of Archaeology at Cambridge. It is entirely due to his care and patience that it has proved possible to rescue a set of prints whose quality, in view of the age and condition of the negatives, is quite remarkable.

The three which have been chosen for this article represent the famous painted tomb in the course of excavation. The field notes referred to are part of Green MSS. 205.2.

Photograph 1 (pl. XXIII)

Looking west-north-west, with excavation still in progress. In *Hierakonpolis*, II, p. 20, Green reports that the tomb had been recently robbed, and in this photograph a clear distinction can be seen between the loose soft sand recently blown in which still fills the further chamber, and the small section of much firmer, consolidated material which joins the partition wall to the south-west wall opposite and must represent an ancient filling. The remains of objects 1-7 can be seen in front of this. The tomb walls are still thickly encrusted with compacted dust, but one of the painted boats can be discerned on the left edge of the picture. On the partition wall the painting of the procession of figures, of which two were preserved, is clearly visible, with the dark, blue-black dado beneath.

Photograph 2 (pl. XXIV)

Looking south-east, the clearance having now been taken further. All that remains unexcavated is the small section of old compacted filling. In an angle between this and the partition wall a number of pots, group 8-13, are still standing or lying. In the field notes (p. 210 n. 6) Green makes the following observation: 'The tomb has been evidently open on the N side up to the partition for a long time as that side of the pots is quite weathered through by sand blast process.' The chamber to the rear seems to be empty, as the published plan suggests. Compacted dust can be seen still adhering to the painted wall on the right, but the wall to the rear of the picture has been cleaned, and the white coating above a dark dado can be seen to be blank. The wall on the left seems to have a deep scar running from the top down to the partition wall. This might at first sight be taken to indicate that the partition wall was originally built to the full height of the tomb. More likely, however, is that it represents the fact that for anyone digging in the tomb, once the partition wall had been exposed, this would be the easiest point to climb in and out, something which would easily bring about damage of this nature.

Photograph 3 (pl. XXV)

Looking south-east, but from further away than photograph 2. This is the direction of local south. thus the line of the cultivation would be on the left, with the main painted wall facing it, and beyond would be the shallow wadi on the edge of which the tomb was situated. The scale can easily be judged on the painted wall on the right, and two boats are now visible. This picture cannot, however, mark the final stage of excavation. Green's published section and note in Hierakonpolis, II, pl. LXVII and p. 20, make it clear that on a limited scale at least the filling behind the tomb walls. between them and the sides of the pit in which the tomb was built, was removed. This must have necessitated the removal of part of the surrounding dumps, an operation which might be expected to have uncovered any remains of a superstructure. There is probably some positive significance, therefore, in the fact that neither in the published report nor in the field notes is there a mention of anything of this nature.

The field notes also explain a slight discrepancy in the description of the tomb's decoration published on p. 21 of *Hierakonpolis*, 11. At the beginning of section 53 the two larger painted figures from a procession are ascribed to wall E, which on the plan (pl. lxvii) is the end face of the partition wall. At the end of section 53, however, these figures are said to have been on wall F, which is the south-eastern face of the wall. The notes show that the walls were re-lettered for publication, but the initial summary of decoration at the beginning of section 53, largely copied from the field notes, was not properly corrected. If we keep to the lettering of the published plan, the beginning of section 53 should be corrected as follows: E should be read as F, F as G, and G as H. In the field notes (p. 214) the end face of the partition wall is referred to as E₁, and the accompanying entry reads: 'dado & red line, white ground signs of decoration in red'. On a separate sketch plan of the partition wall (dated 14.5.99) the following note is given for this same end face: 'more men? probably', referring, of course, to a continuation of the procession of figures on wall F. This same plan also indicates the white painted ground continuing for about a metre on wall D from the end face.

Concerning the original roofing of the tomb the field notes are slightly more explicit. Initially, in the description of the main painted wall (AA) Green wrote (p. 214): 'signs of arched roof but whether arch or corbel uncertain. Height of room from the brick floor to spring of vault 1.40.' This opinion he later altered, for on another (unnumbered) page comes the note: 'There has been no vaulting. There was a wooden roof.' More notes and a sketch on this page then describe how the remains of yellow ochre were found carried over the end of the slightly projecting brickwork at the top of the wall which had first been thought of as the base of the vaulting. Since the main decorated wall on the south-west (AA) seems to have been the only one painted in this colour, it is probably to this wall that he is referring. The photographs do in fact suggest a slight overhang at the top of this wall towards the south corner of the tomb.

Finally, amongst the manuscripts are two sketch maps (Green MSS. 5 and 23) which locate the position of the painted tomb by means of triangulation exactly at the point given on the map published in *Hierakonpolis*, II, pl. lxxiii a.

The wall paintings of tomb 100 remain a unique survival from predynastic Egypt. This is no longer true, however, of the tomb's general layout and construction. The publication of Baumgartel's Supplement to Petrie's Naqada excavation has drawn attention to the fact that Petrie's surviving field notebooks contain details on the construction of some of the Naqada tombs which did not find their way into the excavation report. These show that Hierakonpolis tomb 100, far from being unique in design, in fact belonged to a class of brick-lined predynastic tombs which at Naqada were grouped in cemetery T, suspected for some time to have been a royal cemetery. In Naqada and Ballas Petrie interpreted one of them, T 15, as an Old Kingdom tomb re-used by his 'New Race' people in the First Intermediate Period. This doubtless explains why details of other similar tombs at Naqada were played down or omitted.

¹ E. J. Baumgartel, *Petrie's Nagada Excavation*. A Supplement (London, 1970).

² So H. Case and J. C. Payne in *JEA* 48 (1962), 11 and 15.

Fig. 1 is a map of cemetery T, re-drawn from Naqada and Ballas, pl. lxxxvi. A number of fairly minor additions and corrections have been added from Petrie's field

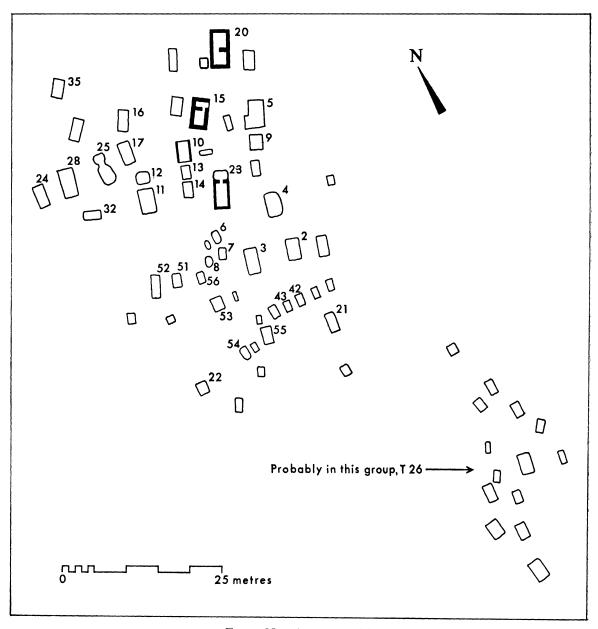


Fig. 1. Naqada cemetery T.

notebooks, for which I am grateful to Professor H. S. Smith and the staff of the Department of Egyptology, University College, London. Fig. 2 is an attempt to compare the size and design of these brick-lined tombs. All are drawn, as far as possible, to the same scale. 'Local' north is more or less towards the top of the page. The following notes relate to fig. 2.

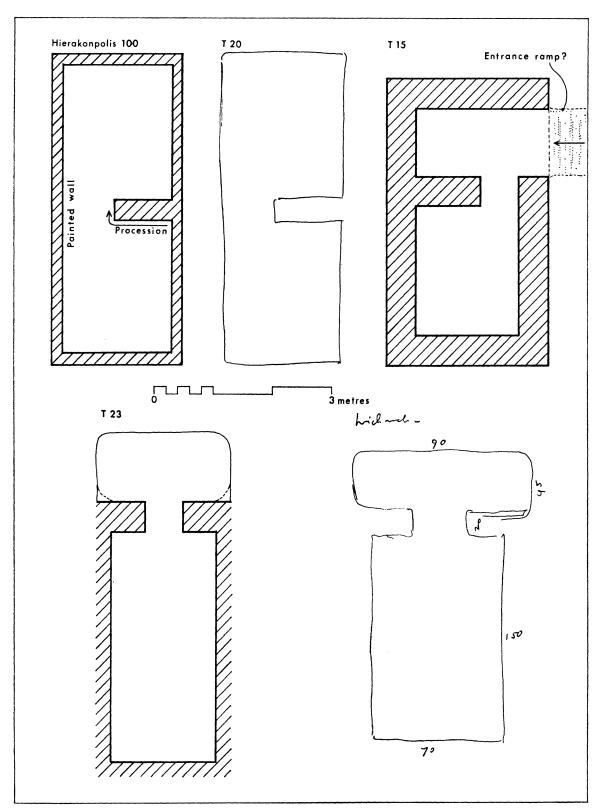


Fig. 2. Predynastic brick tombs at Hierakonpolis and Naqada.

PHOTOGRAPHS OF THE DECORATED TOMB, HIERAKONPOLIS 41

T 20. A tracing from the field notebook. There is no mention of the words 'brick' or 'wall', nor is a wall thickness indicated. However, the partition wall in the centre of the east side is an unmistakable indication that we are dealing with a brick-lined tomb, almost identical in plan to Hierakonpolis tomb 100. No dimensions are given, but Petrie's cemetery plan suggests a size very close to that of tomb 100, about 5 by 2 metres.

T 15. A photograph of Petrie's original drawing is reproduced on the frontispiece of Baumgartel's Supplement. It is here re-drawn, using Petrie's measurements. The width of the interconnecting doorway has to be estimated, and was here assumed to be about 60 cm., which fits Petrie's sketch plan and is not particularly narrow by ancient standards. The design seems to be more advanced than that of T 20, in that it allows for access from outside. In front of the gap in the brickwork in the north-east corner Petrie drew an arrow pointing in, and in an accompanying note referred to a 'door'. One should probably interpret this as a sloping descent cut from the desert surface down to the floor level of the tomb at this point. The depth of the tomb is given as 60 in. (compared to 55 in. of Hierakonpolis tomb 100). In the notes on T 15 in Naqada and Ballas, 24, Petrie wrote: 'In the pit a vaulted brick chamber has been built, with door at E. end of N. side, opening into a smaller space, which was doubtless the well of access.' The introduction of the term 'vaulted' could well have been a presumption by Petrie, and a very reasonable one in view of his interpretation that T 15 was a re-used Old Kingdom tomb. The field notebook makes no reference to vaulting, and the absence of a reference to the external 'door' only adds to the feeling that this statement should not be taken as anything but a hasty and impressionistic note.

T 23. On the right in fig. 2 is a tracing from the field notebook. Beside it is an interpretation, using Petrie's measurements. At the top of the page in the field notebook Petrie has written a cryptic note, of which an attempt at reproduction has been made here. I would read it as 'brick arch in'. This, and the shape of the plan, suggest a single brick chamber built in a pit, dug to be longer than the chamber so as to leave a well of access in front of the door. The thickness of the walls beside the doorway, at 20 in., is close to that of T 15, 22 in., and the very fact that Petrie measured it suggests that it was more than just a more regular version of T 25 (for which see the frontispiece of Baumgartel's Supplement). If one envisages, however, the same thickness all the way round, one has then to choose between a narrowing of the original pit in front of the door, or an error in Petrie's measurements since only 20 in. is given as the difference in width between well of access and interior of chamber. For this reason the thickness of walls has not been definitely indicated. No depth is given. The note 'brick arch in', if correctly read, presumably refers to the doorway. Its width can only be guessed at, but can scarcely, to judge from the plan, have been more than a metre. In the reconstruction of figure 2, as with T 15, a width of some 60 cm. has been assumed, which would be appropriate if the tomb were no deeper than T 15, thus about 60 in. (1.53 m.). A rough brick arch over a door of this size should not conjure up anything spectacular in the way of building technique. Nor need it imply that the chamber was vaulted.

At least one other tomb in cemetery T had seen the use of mud brick. This is T 10. The brickwork was confined to a pair of walls lining the long sides, doubtless to provide firmer support for the roofing timbers. The field notebook gives the dimensions (in inches) as '120 \times 78 less 12 ins. bricks', with a depth of 50 in.

It will have been noticed that in the case both of Hierakonpolis tomb 100 and these Naqada tombs the subject of brick vaulting has arisen, firmly denied by F. W. Green, though remaining ambiguous in Petrie's work. The question is not so much whether it might be considered feasible for the Egyptians of this period to have erected brick

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vaults—this is something which one hopes will become clear from future fieldwork on early town sites—as to whether one regards it as appropriate for tomb chambers. All that we really have to guide us is the fact that the builders of large brick tombs of the First Dynasty, including the royal tombs on the Umm el-Qa'âb at Abydos, chose to employ flat roofs supported on timber beams, the same method as that probably used in the case of Hierakonpolis tomb 100. It should also be noted that in historic times, when vaulted brick burial chambers were built in pits, Abydos providing many instances, the vaulting commenced its curve more or less at floor level so that its highest point would remain below ground level. If the Naqada tombs were found with their walls standing upright, or with a slight batter—and Petrie's notebooks certainly leave this impression—then the vaulting would have projected above ground level.

In either case, a projecting vault or a wooden roof at ground level, some form of superstructure must have been necessary, just for protection. The plan of cemetery T, however, also shows from the closeness of the tombs that superstructures cannot have been of any great size. Here again a good parallel is provided by the Umm el-Qa'âb at Abydos, where similarly the available space is too limited for anything very large to be envisaged, and where, in fact, for most tombs no trace of a superstructure remained at all. Only in the case of the tomb of King Djet did enough survive to show that it had been surrounded at ground level by a plain brick wall, probably to retain a low mound of sand and gravel. This is the most helpful clue available for the above-ground appearance of these predynastic brick tombs.

The little that has survived from the brick tombs of cemetery T to find a place in Baumgartel's Supplement suggests a Naqada II date. The inadequacy of the data makes it quite pointless, however, to attempt to determine whether they are earlier or later than Hierakonpolis tomb 100. From their design and distribution in the cemetery one might place them in the early-to-late order T 20, T 15, T 23. On the other hand, on the grounds that the earliest of the identifiable royal tombs on the Umm el-Qa'ab, B 10, B 15, and B 19, were single brick chambers without external access, the sequence could well be reversed, and represent the abandonment of a practice which made the tombs more vulnerable. But this type of argument can hardly be pressed. Yet on the grounds of design Hierakonpolis tomb 100 is certainly far closer to T 20 than to the others, being virtually identical in both lay-out and size.

From the very reasonable suggestion that Hierakonpolis tomb 100 and its relatives in Naqada cemetery T should be recognized as the burial places of predynastic kings, it seems no less reasonable to proceed further and to suggest that these were some of the kings of the prehistoric dynasties of which some recollection survived into historic times, prefacing the more detailed king lists and annals, and which have been so carefully analysed by W. Kaiser.³ The tombs themselves provide a welcome antecedent to the development of the royal tomb in dynastic times, with the larger single-chamber

¹ G. A. Reisner, The Development of the Egyptian Tomb down to the Accession of Cheops (Cambridge-Harvard, 1936), end plan.

² W. M. F. Petrie, The Royal Tombs of the First Dynasty, 1, 8-9, pls. 61-4; also B. J. Kemp in JEA 52 (1966), 18 n. 8.

³ W. Kaiser in ZÄS 86 (1961), 39-61; ZÄS 91 (1964), 86-125.

PHOTOGRAPHS OF THE DECORATED TOMB, HIERAKONPOLIS 43

tombs on the Umm el-Qa'âb, B 10, B 15, and B 19, intermediate between them and the more elaborate structures of the First-Dynasty kings. Perhaps, also, it is not too fanciful to see in the burials in the large First-Dynasty tombs at Naqada, aristocratic descendants of the ousted prehistoric dynasty which had once originated and perhaps ruled from there.

¹ For the existence of at least one neighbour to the 'royal tomb' at Naqada see B. J. Kemp in *Antiquity* 41 (1967), 24-5, note.

from contemporary statues, nor is the attitude, which is evidently to be interpreted as a gesture of invocation.

The last consideration does not exclude the possibility that a statue is represented, since representations of statuary might on occasion have included attitudes that are not attested by surviving examples in stone, metal, or wood.¹ But the criss-crossed pattern on the rectangle beneath the figure almost certainly represents reed-work, and this is entirely inappropriate for the base of a statue, which was almost always painted black, the colour of earth;² the same rule is followed in the one case where—most exceptionally—the block on which a statue is seated shows a reed-work pattern.³

If the base of a statue is excluded, the object in question can only be interpreted as a box. At least one actual box dating to the Old Kingdom imitates reed-work,⁴ and the reliefs of at least one Giza tomb chapel show representations of boxes that are almost identical to the one under consideration (fig. 2).⁵ Although the comparable boxes are carried by women, boxes showing less detail are sometimes carried on the heads⁶ or shoulders of men⁷ in other cases.

If the figure is not carried by the larger offering bearer below it, it must belong to the inscription which names the bearer. The rather disproportionate size presents no objection if compared with the surrounding inscriptions, which show a considerable amount of variation in scale. The crux of the matter, then, is the explanation of following the title hm-ks 'funerary priest'. I believe the solution is as simple as it is surprising. The first two signs clearly refer to the god Rc, and it is almost equally certain that the entire group represents the name Ny-Rc. Theophoric names of this pattern almost always show a terminal l, and l and l in fact written l in another Old Kingdom inscription. Thus l replaces l in the present case.

- ¹ E.g. R. Macramallah, *Le Masṭaba d'Idout*, pl. 9: a standing woman who holds a lotus to her face. But the lotus was probably introduced because the figure originally represented a man who held a staff.
- ² A total of 33 out of 43 Old Kingdom examples in L. Borchardt's *Statuen und Statuetten*, 1. Most of the exceptions are grey, or a mixture of red and black, imitating granite.
 - ³ A.-M. Abu Bakr, Excavations at Giza 1949-1950, pl. 20.

Kingdom (ibid. 11, 294, 16, 19, 24).

- 4 Turin Suppl. 15709, E. Scamuzzi, Egyptian Art in the Egyptian Museum of Turin, pl. 11.
- ⁵ S. Hassan, *Gîza*, II, 119, fig. 128, and fig. 137, foll. p. 122. Fig. 2 shows a detail of the latter. Also the det. of *fii* 'carry', *LD* II, 22(d).

 ⁶ Abu Bakr, ibid. 52, fig. 38; 114, fig. 95c; Cairo Cat. 1384.
 - ⁷ Hassan, Gîza, v, 266, fig. 122; vi, Part 3, 113, fig. 97. M. Murray, Seven Memphite Tomb Chapels, pl. 15.
- 8 A. Mariette, Les Mastabas de l'Ancien Empire, 180; ASAE 10 (1910), 119-21, the latter the hypocoristicon of a Ny-mict-Rc. Cf. \(\begin{align*} \begin{ali

Although the group \(\frac{1}{2} \) is a well-known Old Kingdom writing of the prosthetic i, \(i \) the phonetic use of \(\frac{1}{2} \) alone, \(^2 \) and elsewhere than at the beginning of a word, is totally unexpected at so early a date. Cryptographic writings are not entirely unknown from this period, however, \(^3 \) and the scribes of Giza seem to have had a predilection for graphic devices of a sportive nature. \(^4 \)

Just possibly a similar explanation must be applied to the name in Moussa and Altenmüller, Tomb of Nefer and Ka-Hay, p. 38 and pl. 36,5 but this more probably represents S-n-Ḥtḥr (cf. Ranke, Personennamen, I, 427, 24), with honorific transposition of the indirect genitive,6 and corresponds to an example such as (loc. cit., no. 25), in which n retains its normal position. It must be admitted that the few other Old Kingdom names of this pattern all show the normal sequence of s-n and write or for the name accompanies a representation, and no redundant determinative of this sort is attested among the many other names that occur in the same Fifth-Dynasty tomb chapel.

It should be added that a transposition of the indirect genitive cannot very well be applied to the name considered earlier. The terminal sign would then have to be interpreted as a child or youth, and there does not seem to be any Old Kingdom parallel for a name expressing a filial relationship to a god.⁸

- ¹ See Edel, Altäg. Gr. § 449 and cf. G. Lefebvre, Gr. (2e éd.) § 232.
- ² Note that the interjection [] (Edel, ibid. § 860) is normally written with both signs in the Old Kingdom; although] may occur thereafter (Lefebvre, ibid., § 576), it is still uncommon in the Middle Kingdom.
- ³ Cairo Cat. 1696, from Abusir, Borchardt, *Denkmäler des Alten Reiches*, II, 140; discussed by E. Drioton in *Mélanges Maspero*, I, 697-704.
 - As pointed out in a forthcoming study: Orientation of Hieroglyphic Inscriptions, §§ 21, 25-7.
- 5 For the occasional replacement of by by see Edel, Altäg. Gr. 8860, citing Schäfer, Atlas, III, pl. 15; also J. Sainte Fare Garnot, L'Appel aux vivants, 89, and Fischer, Dendera, 79 n. 340.
 - ⁶ JARCE 3 (1964), 123-4.
- ⁷ Ranke, Personennamen, I, 427, 23; Junker, Gîza, VI, 117; Gîza, XI, 238 and 240; and A, Cairo Cat. 1462, quoted without terminal sign by Ranke, op. cit. I, 280, 6. The same is true of a few slightly later examples.
- ⁸ Ranke sees such a relationship in names of another pattern, rdi(w)- $n\cdot i$ -NN (Personennamen, II, 234), but these simply mean that the child so named is a gift from Heaven; cf. Junker, Giza, IX, 98.

AMARNA CROWNS AND WIGS

UNPUBLISHED PIECES FROM STATUES AND INLAYS IN THE PETRIE COLLECTION AT UNIVERSITY COLLEGE, LONDON

By JULIA SAMSON

ENOUGH evidence remains from Amarna of the multi-coloured composite statues, and the composite inlaid figures and reliefs, to show their workmanship and suggest their realism, although being mainly if not entirely royal the portraits have suffered a destruction far greater than that of time. None has been found with anything approaching a fully assembled figure and too few remaining fragments have been compared or published to enable reconstructions, but they yield valuable information.

Pieces from composite statues and statuettes

The range in size of these multi-coloured statues can be judged from the contrast between such pieces in this Collection as the life-sized ankle and heel in red jasper*1 and the large diorite wig on pl. XXVIII, with the small faience wig at (b) on pl. XXIX, 1, perhaps from a statuette of one of the younger members of the Amarna royal family.

Jasper was used on some of the statues for the face and possibly also the exposed parts of the body. There are in the Collection dark red jasper fragments from Amarna of a mouth and chin, and of part of a highly polished cheek,2 which suggest a parallel with the lower part of the yellow jasper face in the Metropolitan Museum thought to be Queen Ty.3 But while this shows the traditional use on statues of a paler colour for the woman's skin, at Amarna, the inlays of princesses were of dark glass like those of Tut'ankhamun and his Queen on his furniture, and it is very likely that the colouring of Akhenaten and Nefertiti was the same on their statues, where their crowns were so untraditionally similar. The composite statues were assembled and decorated in varying ways. The small unfinished head of Nefertiti in the Collection,*4 like a number of the heads from the studio of Tuthmosis, has a tenon in the centre of the head on which to fix a separate tall crown. The wig at (b) on pl. XXIX, I has part of a rectangle prepared for such a tenon. On a half life-sized stone bust*5 there is a deep rectangular mortise in the centre of the neck, for the addition of a whole royal head with the tenon carved from the neck as on some of the Cairo and Berlin examples. On the bust, streamers are incised between the shoulders at the back as though falling from a

NB: In this article an asterisk with a number relates to the publication of the object in Amarna, City of Akhenaten and Nefertiti (Key pieces in the Petrie Collection), by the author, London, 1972.

crown, as they do from Nefertiti's tall crown on the famous Berlin head,¹ in addition to the vertical streamer on the back of the crown itself (M. on pl. XXVI).

Some of the Amarna heads carved in the round are prepared for a crown or wig by a straight line across the top of the head; others have the brow-band shaped, quite often with a curve carved out in front of the ear for the flap of a crown. In the Ashmolean Museum there is an ear 8 cm. long from a statue, with a small broken part of the curve of the face in front of it and a squared surface behind and above it, as though from a larger-than-life statue prepared for a wig.²

It is noticeable in a number of the crowns described below that the inner concavity is not only shaped in accordance with the crown, but roughly smoothed as well, often with lines scored which would have helped to fix it on a rounded head, however cursorily it was finished. The crowns were also secured with pegs in a hole or holes and/or by using a fixative.

Composite inlays

Few of the inlays in the multi-coloured reliefs of royal figures with their features, regalia, and surroundings separately added, have been found in place. But there is evidence of their ornate variety and their size, ranging from the small blue glass crown at (d) on pl. XXVI to fragments of crowns from life-sized statues in this and other collections.

In the Ashmolean there is a large piece of a granite inlay from a 'blue' crown; it is covered with carved discs, and has part of the ridge of the crown running into the flap.³ In front it has a recess carved for the inlay of a coiled uraeus, with two channels cut from it (still with cement in them), one where the body of the snake reached towards its projecting head in front, the other for its extended form to stretch up the crown. The position of the recess, and its proportion in relation to other crowns with this decoration, suggest this example was some 28 cm. high, from a life-sized inlay. The piece could, of course, be part of a Queen's crown in view of the variations in the Amarna period, when the uraeus in this position is worn by Queens on their cap-crowns, viz. Nefertiti on her famous standing statuette in Berlin;⁴ the Queen with the young king leaning on his staff on the Berlin relief,⁵ and on the head of the queen facing the head of a king on the Brooklyn relief.⁶ On the last cap-crown there is a ridge running into the flap as on a blue crown, but it is not covered with discs: 'Ankhesenamūn's cap-crown is, however, on the sides of Tut'ankhamūn's golden shrine.⁷ If the Ashmolean piece is part of a Queen's crown it could be from a larger-than-life sized inlay.

An inlay in this Collection on a smaller scale is of a royal profile which was being prepared for the addition of a crown and features;*8 it resembles in style, but not in

¹ Berlin 21.300. I am gratefully indebted to Mr. Cyril Aldred and Professor John R. Harris for this reference.

² Ashmolean 1924.94. I wish to thank Mr. R. W. Hamilton for his kind permission to publish objects from the Ashmolean and Mrs. Joan Payne for her great help.

³ Ashmolean 1932.1137.

⁴ Berlin 21.263. 5 Berlin 15.000. 6 Brooklyn 16.48.

H. Carter, Tut-ankh-Amen, 1, 137. British Museum Catalogue, Treasures of Tutankhamun (London, 1972),
 25; C. Desroches-Noblecourt, Tutankhamen (London, 1967), pls. 7-9.
 *8 p. 67.

detail, those found by Woolley at Maru Aten. He writes of walls covered with reliefs and inscriptions enriched with inlays of coloured stone and faience and that 'only a few fragments of this work survive, but from the inner shrine we secured the beautiful inlay heads of the king and queen'. I On the larger of these the head is cut straight across the brow for a head-dress and the ear is carved in a way that brings to mind the ear in the Ashmolean noted above. The other inlay from Maru Aten, now in the Ashmolean, has the ear cut away like another from the site on which the wig remains.² There are a number of variations in other Collections.

Clearly not only coloured head-dresses and features were added to inlaid figures. In the Broad Hall of the central palace Pendlebury found a sandstone relief of a princess with the robe as well as the hair hollowed for an inlay.3 At Maru Aten Woolley also found two pieces of a large relief, on one of which the queen offers to the Aten. Her libation vase is hollowed for its inlay and her head is prepared for a wig, to be inset and fit behind her ear. Following her the princess with a sistrum has her head carved for an inlaid wig to cover her ear and end in a point at her neck.⁴ The other part of this relief, now in the Ashmolean,5 shows the king censing the Aten and on his head is a hollow distinctly shaped for an inlay of the blue crown, of which there is a perfect little stone inlay in the Ashmolean.6 The sun's disc in the relief is also hollowed for an inlay and there are many examples in the Petrie Collection of faience discs ranging in size from 1.5 cm. in diameter to fragments from examples as large as those mentioned by Petrie as being 8 inches across. Such large supplementary inlays as these must surely come from scenes surrounding life-sized figures. Many such inlays as well as the head-dresses described below are shaped to remain above the wall surface, like the lower part of a face in the Collection.*7 The realism of these finely carved naturalistic figures in bas-relief, with their features, regalia, and surroundings inlaid in glass, glazes, stone, and metal must have been extraordinarily impressive, even awe-inspiring representations of the Aten and his earthly counterparts, the King and Queen.

Of small delicate inlays from caskets and royal furniture there are, in the Collection, pieces like the small, once dark-red, glass head of a princess, now decayed to grey, which is shaped for a wig to be added;*8 and the portrait of two childlike princesses in moulded red glass who were possibly part of a family group.*9 The smallest inlaid blue crown described below is also glass. There is also in the Collection the dark red faience inlay of a life-sized thumb and part of three fingers from a figure;*10 other faience hands are also red, two small flat ones apparently from Aten rays, and one small rounded one probably from a figure.*11

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1 City of Akhenaten, I, 121.
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² Ibid., pl. 35(1); Ashmolean 1922.95.

³ City of Akhenaten, III, pl. 67 (11), no. 149; (although this figure described as a princess holds a sistrum, the ray from the Aten holds an cankh to her face which, it appears, was the sole prerogative of the king and 4 Ibid. 1, pl. 34 (1). queen to receive direct from the god). 6 Ashmolean 1925.566.

⁵ Ibid., pl. 34 (2); Ashmolean 1922.141.

^{*7} p. 66.

^{*8} Pl. 45 (ii).

^{*9} p. 74; pl. 5.

^{*10} Pl. 6.

^{*11} Pl. 6; p. 69.

Unpublished Amarna head-dresses

The head-dresses described below are all from Amarna inlays and statues, except for the earlier example of a blue crown at (n) on pl. XXVI. They, and other fragments in the Collection, suggest that all the faience head-dresses were blue. The colour of the glaze is unreliable because of surface deterioration, but some of all the types of head-dresses, although green-blue or even green on the top surfaces, have the remains of a purple-blue colour on inner surfaces and protected edges suggesting an original over-all lapis lazuli blue colouring. The position of a smeared mustard colour inside a number of pieces suggests an adhesive of that colour or one that has changed to it.

The fragments show changes from traditional ways. Nefertiti's crowns, like the one she wears on a limestone head in the Cairo Museum (Entry no. 34546; cf. Engelbach, ASAE 38 [1938], 95–107 with pls. 17 f.), are covered in the discs usual on the hprs or blue crown. The recognition of this development is vital for the identification of small fragments from Amarna which are covered with discs. Pieces with the flap of a crown from in front of the ear, but without the fold or ridge running into it, are almost certainly pieces of Nefertiti's crown. The reverse supposition is not so clear-cut, because although the fold can always be associated with the blue crown, it is also shown, as noted above, on the cap-crown of a queen from this period on the Brooklyn relief of two royal heads, although it is a softer line there, without a sharp ridge.

The blue crown, apparently introduced early in the Eighteenth Dynasty as a war crown, perhaps of leather with protective metal discs, was a favourite head-dress with the peace-loving Akhenaten at Amarna, where its construction was probably lighter and easier to wear on informal occasions. He is constantly pictured wearing a high, rather bonnet-like version of it, in contrast to the wider, winged effect of those used earlier in the dynasty. It is as much part of his image as the new tall crown is of Nefertiti's. Crowns were a part of the divinity of kings and in this reign clearly also of the Queen. The variations probably had symbolic significance. Discs represented the god and were much worn. There are faience discs in the Collection from Amarna with holes around them for sewing on garments and possibly crowns; such circles can be seen on the strip across 'Ankhesenamūn's sidelocks as shown on the golden shrine² and they also cover the sash Tut'ankhamūn wears on the back of his golden throne.3

The unusual fragment at (c) on pl. XXIX, r is difficult to interpret, decorated both with discs and with the ringlets of a wig. Professor J. R. Harris has pointed out to me that Nefertiti's crown was also sometimes decorated with stylized ringlets⁴ (see fig. 5); and on one of Akhenaten's colossi from Karnak he wears the *Nemes* head-dress with the lappets shown as curls instead of stripes, which is copied on Tutankhamūn's outer gilded coffin. 6

On the Berlin altarpiece⁷ with the King and Queen playing with three small daughters, Nefertiti wears a highly decorated fillet on her crown with numerous royal

¹ Brooklyn 16.48. See also Berlin 1978; W. Kaiser, Ägyptisches Museum (1967), no. 756.

² H. Carter, Tut-ankh-Amen, II (London, 1927), pl. 1; and C. Desroches-Noblecourt, Tutankhamen (London, 1967), pl. 9.

³ H. Carter, op. cit., I (1923), pl. 2, and Desroches-Noblecourt, op. cit., pl. 6.

⁴ L. Borchardt, Porträts der Königin Nofret-ete (Leipzig, 1923), fig. 33.

⁵ Cairo 49.129.

⁶ H. Carter, Tut-ankh-Amen, II pl. 67.

uraei around it and Akhenaten has introduced a whole row of uraei around his blue crown. Cyril Aldred¹ has pointed out that in this group it is the Queen who sits on the throne, the King being on an ordinary stool.

A comparative study of fragments of wigs and regalia from statues and inlays, now in different collections, would undoubtedly add to the knowledge of this extraordinary period. The sartorial flexibility seems endless. The sharing by Akhenaten and Nefertiti of royal symbols at Amarna may supplement knowledge accruing from the scenes being sorted at Karnak from the Aten temple, and the history of the period may be built up by the archaeological method of studying all the objects.

Description of Plates

Plate XXVI

Plate XXVI consists of fragments of blue crowns, and Nefertiti's tall crowns covered with similar concentric circles or discs. All are from statues or inlays at Amarna except for the earlier example of the blue crown from a statuette at (n) and (o) which is included for comparison. It has not been published, but is named by Petrie in some unpublished notes on faience where he puts it under the heading 'Amenophis II–III'.

In the top row, (a-d) are all inlays.

On the right-angled piece of a tile at (a) the surface is now a pale blue, but the glazed back and part of the edge is a deeper purple-blue of which faint traces also remain in the discs with which the tile is covered. It is thicker than the average Amarna tile and the top is convex, rising from the corner where it is 1.9 cm. deep to the centre which thickens to 2.2 cm. The cap-like covering of glazed discs changes from 0.5 cm. at the side to 0.3 cm. where the tile rises, possibly from the glaze running down the slope to the left edge. This shaping of the thick tile with the covering of discs suggests it was part of a large, inlaid blue crown or one of Nefertiti's crowns similarly decorated, which projected from the surface of the wall. In the Ashmolean there is a small, shaped corner-piece of a tile covered with discs which is also 2 cm. thick and has a similar surface glaze of pale blue, with the back glaze a deeper purple.²

H. 3.5 cm. W. 4 cm. (UC 23228)

The crown from an inlay at (b) is clearly Nefertiti's favourite tall Amarna shape, covered with discs. The inlay is nearly perfect. It is slightly chipped along the top and back and along the brow line where part of the flap and ear curve are lost. A grey-blue glaze covers the front and the smooth, finely finished back and sides. The piece varies in thickness across the top from 0.5 cm. at the sides to 1 cm. in the centre which is raised to show above the wall surface. At the back, on the top left corner is an unglazed but smoothed recess rising to a ridge, probably for helping to in-fit the piece, which is particularly finely made.

H. 3.5 cm. W. 4 cm. (UC 24271)

The blue crown at (c) is typical of the Amarna 'bonnet-like' shape, with the raised rib running into the flap and the hollowed semicircle behind it for the ear. The over-all glaze is a faded greyish blue except on the sharp point of the ridge and on the back where it has retained more blue. The piece is well made, with a smooth back. It is broken from the turn at the top of the 'bonnet' to within a centimetre of the straight back edge. The fold and ridge would have remained above the wall surface.

H. 3.2 cm. W. 2.6 cm. Thickness at base 0.5 cm. (UC 1558)

¹ Akhenaten (London, 1968), 131. ² Ashmolean TA/30/608 (1931/511).

The small, perfectly made blue crown at (d) is of lapis lazuli blue glass. It has decayed on all surfaces to a pure grey, but behind the curve for the ear the base is broken clean across and reveals a square of the deep blue glass surrounded on the four sides by the decayed grey surface. Delicately made discs cover the surface of the crown, perhaps incised on the viscid glass. They are recessed in the centre except for one which has a pin-hole, possibly from an air bubble. The perfection of this small glass piece suggests it came from palace furniture.

H. 1.2 cm. W. 1 cm. (UC 1251)

The glaze on the convex piece of a crown from a statuette at (e) retains a navy blue colour and a gloss. The discs covering it have holes in the centre. The glaze covers the outside edge of the base, but the inner flat edge of it is covered with a gritty substance. Dark glaze also runs up inside the lower part of the concavity, which is otherwise 'rubbed' with a white substance. The centre is smoothed in an upwards shape from the edge and scored as the insides of many of the crowns from statues and statuettes. Although it is thinner, the shape, line, and scale of this piece closely resemble those of the back of the blue crown at (n).

Diameter inside 2 cm. outside 3 cm. H. 3.6 cm. (UC 23230)

The glaze on the convex part of a crown at (f) is a faded grey-green, with green around some of the discs that cover it and a brown discoloration in others. The top and both sides are broken. The wide base, 2 cm. across, is unglazed, and it has one disc stamped on it as though to try out the shape. The inside concavity is unglazed, shaped upward, and scored for fixing; it is not centred. The outside curve is accentuated towards the right where it begins to broaden as it rises, like the back of Nefertiti's crowns. The effect is of the flatter model that she wears in the Louvre pair statue with the King. There is in the Collection a smaller fragment which also suggests a crown of Nefertiti's shape. (UC 23231.) It has a similarly wide horizontal base, also of 2 cm. and the discs are covered by a pale lilac glaze. It is also part of a curve which broadens as it rises.

H. 3 cm. Outer diameter 3.5 cm. (UC 23220)

The pieces at (g) and (h) are both flaps from the sides of crowns.

The fragment at (g) is covered with a dark, navy blue glaze with a high gloss. This is smudged up the inner surface where it is paler blue to green, an unusual reversal of the faded exterior and deep colour inside. The surface is covered with discs and the ridge of the blue crown runs into the flap; behind it is the upward curve for the ear. The inner surface is barely high enough to show whether it was concave, but the piece suggests a crown from a statuette rather than an inlay.

H. 4.4 cm. W. 2 cm. (UC 24268)

All that remains at (h) is the flap of a crown with the raised curve behind it for the ear. The dark blue glaze retains a gloss on the surface which is covered with discs. The glaze turns into the centre where is a gritty substance.

H. 2·3 cm. W. 2·5 cm. (UC 23232)

The crown at (i) is from a statuette and, as no ridge runs into the flap, it was apparently Nefertiti's. The surface decorated with discs is a faded matt blue-green with brownish composition wearing through in places. The top and both sides are broken, but the base is finished though unglazed. The crown is from the right side of a statuette with the flap and the curve for the ear behind it and the brow line on the right. It has a continuous horizontal curve and it broadens and thickens as it rises. The inside is unglazed, slightly concave, and scored for fixing.

H. 4 cm. Thickness at top break 1.5 cm. Thickness of base 0.5 cm. Inside diameter 4 cm. (UC 24270)

¹ J. Vandier, La Statuaire égyptienne: Manuel d'archéologie, III, pl. 111 (1); Louvre E.15593.

On the large piece of crown at (j) the glaze has faded to a pale green and remains only on the surface decorated by discs. All edges are broken. The inside is roughly shaped in the manner of the other pieces of crown from statues with a scored concavity. The size and thickness of the piece, the large discs and the thick glaze, 0.3 cm. in places, suggests this is part of a crown from a large, perhaps life-sized statue. Whereas formerly the discs would have been taken to indicate a blue crown, present evidence shows this could also have been a crown from a large statue of Nefertiti.

H. 7 cm. W. 11 cm. Thickness 4.2 cm. at the point. Inside diameter 7 cm. (UC 23224)

The glaze on the small fragment at (k) has faded to a dull matt green. The downward slope from the ridge of the blue crown can be seen and the beginning of the fold towards the back of the head. The roughly prepared inside surface continues upwards following the line of the fold. There are smears of gold leaf inside and out which have presumably rubbed off from another object.

H. 5.5 cm. W. 3 cm. (UC 23208)

The shape at (1) is arresting. Although it is covered by discs, the width of the flat surface prevents its being classed as a blue crown, and points to it being the top and part of the side of Nefertiti's tall crown. The inner concavity bears this out. The roughly shaped surface under the flat top is parallel to it and slightly curved as though to rest on the top of the head of the statue, while a downward curve inside follows the line of the side at right angles to the top. The diameter of the outside curve is 7 cm. and it would continue to a round of some 13 cm. The top and side surfaces are glazed; the glaze is matt and has blue patches, but is mostly discoloured to a rust red-brown and pale greenish-blue. All edges are broken.

W. flat surface 7 cm. Depth of side 3 cm. (UC 24272)

A smaller fragment in the Collection, also with two sides at right angles, is covered with large discs. If one surface is taken as horizontal, the down-turned side is shaped inwards, and could also be the side of Nefertiti's crown. The glaze has faded to a pale green-blue.

W. 3 cm. (UC 23219)

At (M) the incised decoration over the discs resembles the vertical streamer at the back of Nefertiti's tall crown on the famous painted limestone head in Berlin.¹ This piece is therefore likely to be another fragment from a crown of Nefertiti's covered in discs. The petals at the broad end of the decoration, surmounted apparently by alternate broad and narrow rectangles, are as though hollowed for inlays or to represent them. The painted stripes up the sides of the streamer on the Berlin crown are shown on the faience example as recessed squares, and a row of these divides the rectangles from the petals. Except for this horizontal row of squares, the design is that of Tut'ankhamūn's apron found between his thighs on the mummy.² The rectangular pattern is also used on the fillets of crowns, but fillets do not end in the row of petals like the design on this, the Berlin crown, and on Tut'ankhamūn's apron.

The fragment consists of two pieces with a vertical join near the centre. The top edge and sides of the piece are broken and the faience is chipped on the bottom edge. The glazed surface is now a pale blue and almost matt. It stops around the bottom rim but faint colouring has spread over the edge of the thick base, the rest of which is covered with a gritty substance. The base is wide (2 cm.), and it slopes gradually upwards as it turns in to the concave centre which is unglazed, rounded, and horizontally scored.

H. 4.5 cm. Inside diameter 5.5 cm. Outside diameter 8 cm. (UC 24274)

¹ Berlin 21.300.

² H. Carter, Tut-ankh-Amen, 11, pls. 30 and 83(b).

As noted above, the blue crown shown at (n) and (o) is not from Amarna. In some unpublished notes by Petrie on 'Ancient Egyptian Glazing', where he lists many specific pieces chronologically, this crown comes in the section headed 'From Amenhotep II–III'; he describes it as 'indigo blue war helmet in the round 2.6 [inches], from a statuette'. It has the accentuated wing-like folds leading to a sharp ridge, and the lower, more rounded top of the earlier Eighteenth-Dynasty type, rather than Akhenaten's more bonnet-like and taller blue crown. The fold leading from the point of the ridge to the shaped back is convex as though bulging from a sharp edge or the support (wire?). The cavity for the head of the statue is an upright rectangle with a flat, squared top, and the front left open for the face. It is a noticeably well-prepared shape with finished surfaces, in contrast to the roughly rounded and scored concavities inside most Amarna crowns from statues and statuettes. The glaze has retained the deep blue colour with a gloss, but has worn green around parts of the ridge and the bottom back line. The glaze turns into the edge of the cavity and is smudged a greenblue above it. The edge round the opening for the face is broken; the flap at the bottom of the ridge is broken from the left side but remains on the right.

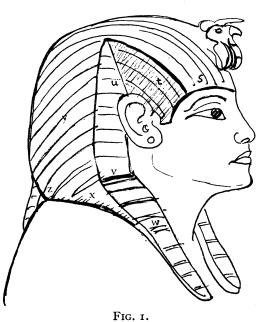
H. 6.3 cm. W. 7 cm. H. of inner cavity 3 cm. W. of squared top of cavity 2 cm. Thickness of the base at the back 0.7 cm. (UC 20531)

There are in the Collection twenty other fragments of crowns with discs, from statues at Amarna. As noted above, on several of these fragments of crowns, as on some of the *Nemes* fragments and the wigs, where the blue has faded and decomposed on the outer surface, it has retained more of its apparently original deep blue colour on more protected inner surfaces and edges.

Nemes head-dresses from statues

(The unbracketed letters s-z refer to fig. 1)

Plate XXVII



The ten pieces of the *Nemes* crown in faience on pl. XXVII are from Amarna statues and although there are six more pieces in the Collection none is an inlay. This may simply be negative evidence; or possibly the stiff projecting flap of the *Nemes* was not so manageable for inlays as the lower ridge of Akhenaten's version of the blue crown, Nefertiti's tall crown, or their wigs, of which only the curves rose above the wall surface and gave the effect of bas-relief.

At (a) the upward stripes rising from a slightly concave rim are from the brow on the right side of a statue. The front stripes swing towards the right as at s on fig. 1, as do those at right angles as at t. The glaze is a faded matt green on the outside but, like other examples, on the innermost corner of the thick base it remains a purple blue. Inside, and parallel to the front, a rough, circular shape continues upwards to rise over the top of the head. The angle and arc of the stripes, although nearer the brow than at (b), suggest this is from a smaller crown.

H. 3 cm. Front W. 5.6 cm. Inner diameter 3.5 cm. Depth of base 3.5 cm. (UC 23430)

At (b) the corner piece of the crown is from the left brow of a statue. The glaze is a green-blue but retains some gloss. The upright stripes are from higher above the brow than at (a) and rise in a steeper curve over the head; they swing outwards. Around the corner made by the ridge they swerve to the left as they would on the left side of the head as at t on fig. 1 to meet the projecting flap. Inside, the unglazed composition is rounded and scored probably for a life-sized statue. H. 5 cm. W. of side 4 cm. (UC 23421)

Both (c) and (d) have the horizontal stripes suggesting the projecting flap of the *Nemes* headdress from the left of a statue, and both have a rounded turn at the bottom corner which folds under the ridge. It is as though the cloth of a real crown was pressed into a ridge and the fullness at the bottom was a pocket of material as it turned the corner. A third fragment in the Collection has a larger version of this shape, bulging where the material would pouch at the corner unless mitred by pleats, but the fragment at (f) is without it. Behind both (c) and (d) are the oblique downward sloping lines from the left of the head towards the centre back. These suggest they come from near the corner where the back meets v and x on fig. 1.

At (c) the glaze has a faded green matt surface discoloured on the corner to the brownish red of cuprous oxide glass.

H. 4.2 cm. W. 5 cm. (UC 23423)

At (d) the glaze is mostly a matt bright purple worn to green in places. There is a suggestion on this piece that the stripes might have been alternately blue and green, but this is probably the pattern of the discoloration. Over the whole range of these pieces the blue fading to green predominates, with a purplish blue, probably of the original colour, remaining deep inside some fragments.

H. 3 cm. W. 3·3 cm. (UC 43425)

This colour change is particularly noticeable at (e) where glazed surfaces remain on three sides. The piece comes from above the ear on the right side of a statue as at u; the front and back stripes are a turquoise blue-green, but the inner concavity for the area around the head (right of the picture, pl. XXVII) is a purple-blue.

H. 5 cm. W. 3.5 cm. Diameter across inner curve 3 cm. Diameter down inner curve 4.5 cm. (UC 23420)

At (f) the piece is from the right side of a statue; the sharp ridge of the projecting flap has stripes as at v on fig. 1, and the oblique stripes y, on the left. It has the smoothly shaped corner underneath, see x. Some back stripes are straight, even running slightly upwards as they do from the edge of large Nemes crowns before they turn down towards the pigtail, as can be seen on Tutcankhamūn's golden mask. Blue-green glaze is overall, except that on the back there are patches of deep blue. The break in the lowest front stripe is the hole usually bored in this place for pegging the Nemes head-dresses; in faience it would be difficult if not impossible to mould the flap and the lappet in one piece and these holes are invariably placed at v on fig. 1.

H. 6.7 cm. (UC 23418)

At (g), the base of the flap of a *Nemes* crown as at v, fig. 1, is from a large statue. The horizontal stripes are more distinctly raised and recessed than on some other fragments. The oblique stripes on the back y, meet the smooth base x, which narrows towards the missing point. The glaze remains a deep lapis lazuli blue with a gloss. On the bottom front stripe the peg hole is in the usual position. H. 6 cm. W. 5.8 cm. Depth across the left break 3.6 cm. (UC 23417)

The smaller fragment at (h) shows the break through the peg hole which is over 1 cm. deep. The smooth base is broken. The glaze has faded to a mottled sage green with a yellowing surface. H. 2.8 cm. W. 3.8 cm. (UC 23424)

The pieces at (i) and (j) are both from the back of a *Nemes* crown from the left of a statue, with obliquely descending stripes narrowing as they near the missing pigtail.

The glaze on (i) is a dark green with some gloss left. The base is broken off before the smooth, rounded shoulder piece, but on the inner surface part of the curve of the cavity for the head remains. H. 4.3 cm. W. 5 cm. (UC 23427)

In contrast to the high glaze remaining on (i), the piece at (j) has faded to a pale matt and mottled green. The oblique slope of the stripes is steep as they near the missing pigtail. The smooth rounded shoulder piece remains on this fragment and continues half way up the inside surface to meet the rough concavity for around the head.

H. 6 cm. W. 3.5 cm. (UC 23422)

Plates XXVIII-XXIX

WIGS

For the purpose of describing wigs on pls. XXVIII-XXIX, the term Nubian style of curls is restricted to the thick stubby ringlets shown in alternate rows, in the same pattern as the usual interstices between bricks. The term Nubian wig is confined to the short cap-like wig covered in such ringlets, as worn by Nubians. It is confusing if this name is used to describe the more sophisticated wigs with overlapping layers framing the face, as worn by Tut'ankhamūn on the back of his golden throne; and inexact when used for wigs with flat, straight, parallel strips of hair falling from the top of the head to the overlapping layers, as on pl. XXVIII.

Plate XXVIII

The diorite carving in the round on pl. XXVIII is very nearly half a wig from a life-sized statue. It is broken, on the front edge behind the position of the uraeus, at the top of the head, and on the back edge to the fifth layer from the point. Such a wig in the Amarna period could have been worn by royal or non-royal men or women, but the six overlapping layers around the face are rare: these wigs worn by the royal family and courtiers often have five, four, or three layers, while those worn by grooms and such attendants are usually less ornate with one, two, or three.

On this example the straight strip-curls falling from the centre of the head do not end in a fringe as on the inlay at (g) on pl. XXIX, 2, but are shown with thick ends, like the thicker, shorter curls of the six successive layers.

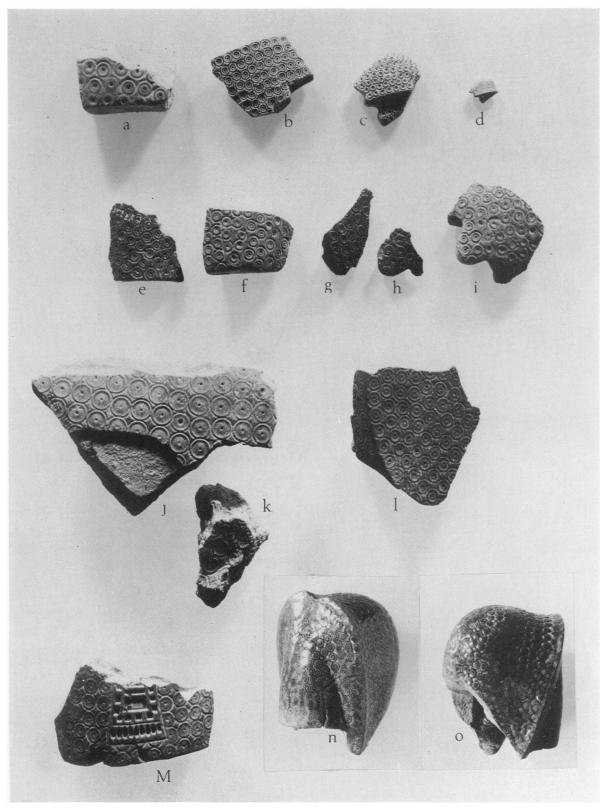
Inside the wig is concave and near the top it swerves inwards sharply to cover the top of the head. This deeper concavity has the remains of red colouring, presumably from an adhesive. The curve flattens out towards the bottom, until just above the bottom edge when it begins to turn outwards to meet the front point; there is no colouring below the beginning of the outward turn.

The curls in the overlapping layers shorten over the brow and lengthen towards the tip, their length varying in different positions. The surface follows the inside curve at the top from a line above the edge of the brow line. The circumference of the top surface on the back edge is 18 cm.; the inner diameter horizontally from the lower point on the brow is 12 cm.

H. 25.5 cm. W. 13.5 cm. (UC 076)

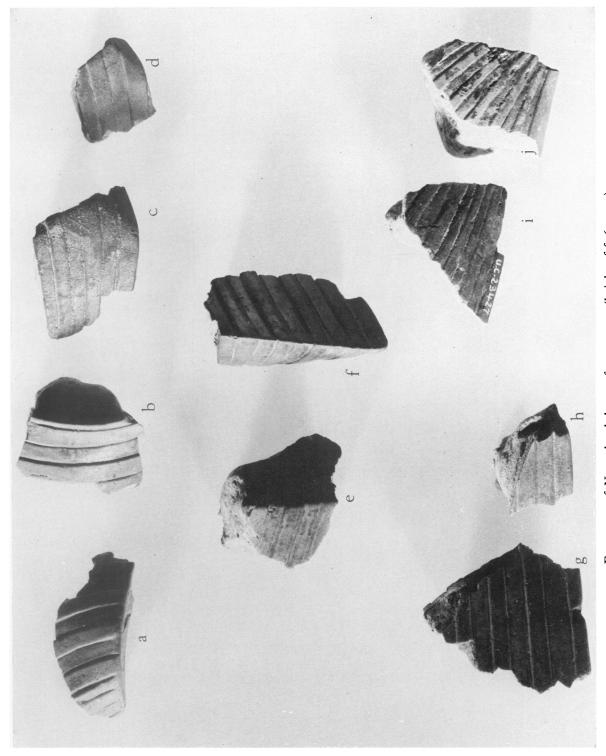
Plate XXIX, 1

The three faience fragments (a-c) are covered by Nubian style curls in alternate rows; on (b) only a few are actually rounded.

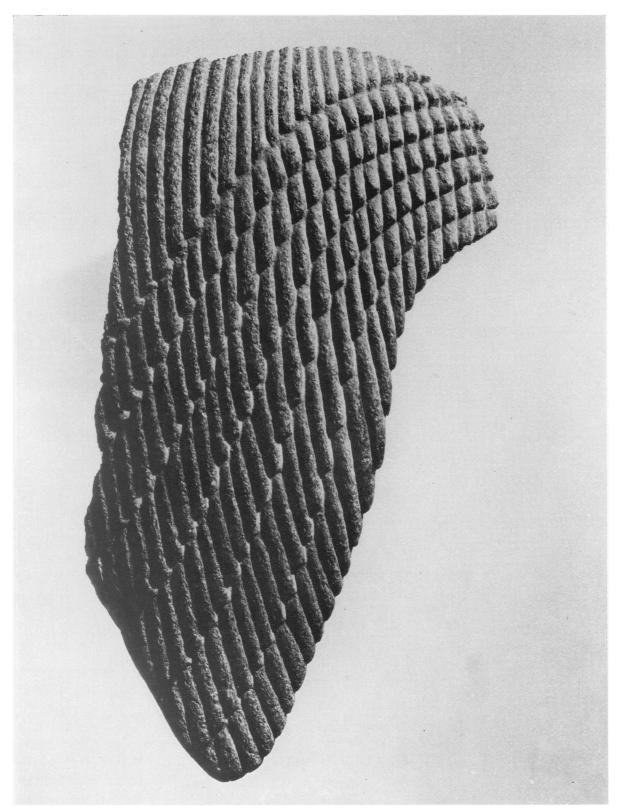


Fragments of 'blue' crowns and Nefertiti's crowns covered in disks (width of j, 11 cm.)

AMARNA CROWNS AND WIGS

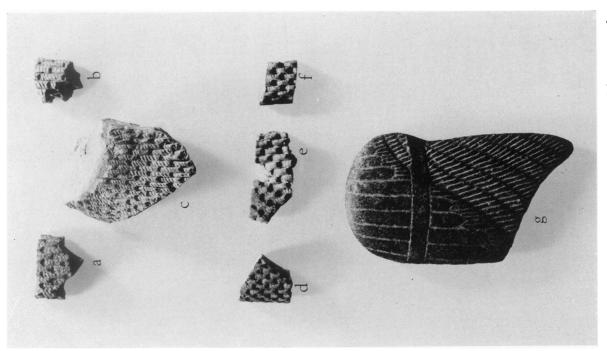


Fragments of Nemes head-dresses from statues (height of f, 6-7 cm.)
AMARNA CROWNS AND WIGS

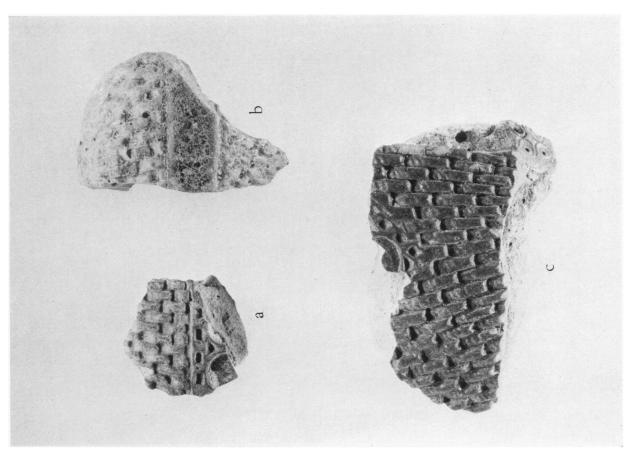


Stone wig from life-sized statue (height, 25.5 cm.)

AMARNA CROWNS AND WIGS



2. Inlays: a stone wig (height, 11.5 cm.) and fragments of faience wigs



1. Nubian curls on pieces of wigs and a crown (width of c, 6.5 cm.)

At (a) the glaze has faded to a pale matt green with some red discoloration on the left which has seeped through the composition. The strip of the fillet across the curls which is hollowed for inlays, or meant to imitate them, is where the piece begins to curve inwards towards the top of the head. This places the fillet in a similar position to that worn by Tutankhamūn on the back of his golden throne, on a wig with overlapping layers around his face. Below the fillet and just above the break are the top arcs of two recessed circles. On Tutankhamūn's fillet, as mentioned, there is an inlaid disc in this position, on the head of a cobra; here, with two discs there may have been two uraei, or one on the vulture. On the inner surface a small piece of smooth unglazed composition is shallowly concave and follows the inward curve of the glazed surface towards the top of the head of the statue. H. 2·4 cm. W. 2·7 cm. Depth 1·7 cm. (UC 23413)



Figs. 2-4. Diagrams of fragment at (b), pl. XXIX, 1.

The rounded fragment at (b) is from a statuette. The ringlets are flat and the glaze blurs their shape; on them and on the wide fillet it has a glass-like consistency. It is pale green now, but the surface is crackled and iridescent and where the top of a curl has rubbed off the layer beneath has the look of lapis lazuli glass; the composition underneath is a chalky version of this colour.

The fragment is possibly the side of a wig because to the right of the point below the fillet there is a fragmented strip of glaze running for 0.8 cm. at right angles to the surface, up to the curving break above it (see fig. 3). If this decorated surface continued upward inside the arc of the now broken curve, it could have framed the face of the statuette (fig. 2). It would have made a small curve for the face, perhaps of a princess or prince wearing a Nubian wig with a fillet. The wide low band of the fillet would have crossed the brow. All edges are broken except for this short narrow strip of glaze at the point. Assuming this edge to be at the front of the wig, the back half of it could have been moulded separately and joined by a tenon in the mortise which crosses the head from side to side as seen in fig. 4.

If this mortise ran from the front of the wig it could have been for fixing the uraeus in place, but in this case the rising line of the glazed curls is unexplained.

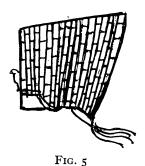
What remains of the fitting for the head inside the wig (fig. 4) is carefully shaped and squared in the manner of that on the earlier blue crown at (n) on pl. XXVI and not like the roughened concavities inside the other head-dresses described. It has the flat squared top and a flat surface descends at a right angle to it on the only remaining side, under the fillet, as though to fit on a projecting peg from a head.

H. of remaining head cavity 2 cm. Top width of cavity 2.5 cm. Circumference top of head to top of fillet 3.3 cm. H. of fillet 1 cm. L. of crown below fillet 2 cm. H. of fragmented strip of glaze at right angles to surface 0.5 cm. (UC 23406)

As noted above, the fragment at (c) is unusual and unidentified. Besides the stylized ringlets of a wig incised with oblique strokes, and part of a circle for an inlay adjoining the tail of the tie from

¹ I am very grateful to my colleague Miss Townend, of this Department, for these diagrams.

a fillet, it has rows of discs turned in at an oblique angle below the curls; the discs end in a glazed rim. The smoothed inside surface is concave while parallel to the curls, but at the beginning of the



discs it slopes out to meet them at the sharp glazed edge. This shape inside resembles that of the wig on pl. XXVIII, where the inner surface turns outward to meet the bottom rim. The rows of curls radiate outward from a centre, below the circle for an inlay, broadening as they rise, as they do on Nefertiti's tall crown in fig. 5. The over-all glaze is a French blue and retains a gloss. A parallel to these discs at an angle from the curls of a wig has not been traced on any head-dress; the discs clearly continued along the lower edge around the curve of the fragment, which is from a statue. Professor Harris has drawn my attention to the fact that some of Nefertiti's crowns were covered in stylized ringlets, as in fig. 5. The in-turned edge of discs is unexplained, but, as mentioned above, Ankhesenamūn wears discs

in a decorative band across her sidelock in the scene in the papyrus marsh on the left side of the gold shrine,² and this sidelock drops into a row of discs which are the top row of her necklace. The combination of curls, and discs and a decorated fillet suggests such an elaboration: also the intricate designs on wigs worn by the Queen and princesses in some of the reliefs from Hermopolis now in American Collections.³

H. of curls 3 cm. W. at base 6.5 cm. Depth across top break 2.5 cm. Depth across the discs 1.3 cm. (UC 23401)

Plate XXIX, 2

The six faience fragments of wigs with Nubian style curls (a-f) are all apparently part of tiles from composite inlays or reliefs. The unusual stone example at (g) is an inlay of a separate wig for a figure.

The fragment at (a) differs from the other four small pieces in having an unglazed slightly concave back, but this is not deep enough to suggest it comes from a statuette and the piece resembles the others sufficiently to ally it with them as an inlay.

At (a) the convex top surface is glazed a faded matt blue which covers the rims at both sides. The back is smudged, but has not been fully glazed. The top and bottom are broken. The Nubian type of ringlets are rounded enough to cast a slight shadow at the base; they and the spaces between them are covered by incised oblique lines.

H. 2.9 cm. Back width 3.2 cm. Depth at centre of front 1.2 cm. (UC 23410)

The piece at (b) resembles (a) in having a glazed rim on the unbroken (right) side, and the top surface convex, but the back is glazed and flattened. A brown discoloration near the centre back probably comes from a fixative. The glaze on the Nubian curls is a matt greenish blue, but underneath the tile some gloss remains on green glaze. The oblique stripes across the curls are clearer than on (a) and the cutting of them is fractionally deeper.

H. 2.5 cm. W. 2.5 cm. (UC 23412)

At (c) the depth of the tile at the centre is 3 cm., and the slope to the finished left side is steep; all other edges are broken. The wig was clearly an inlay of impressive size which stood well out from the surface of the wall. The glaze on the surface has faded to a dull green except for a patch on the

- ¹ L. Borchardt, Porträts der Königin Nofret-ete, 36, fig. 33 = our fig. 5.
- ² H. Carter, Tut-ankh-Amen, II, pl. 1.
- ³ J. D. Cooney, Amarna Reliefs from Hermopolis in American Collections (Brooklyn Museum, 1965).

right where the curls are bluer and some gloss remains. The back is unglazed, smoothed, and flattened composition, but for an overspill from the front around the edge.

H. 7.5 cm. Back width 5.5 cm. (UC 23402)

The Nubian ringlets at (d) are deeply carved, with faint oblique stripes. The glaze on them is a matt blue, but on the finished left edge and on the back, although also matt, it retains the deeper purplish blue of sheltered surfaces. The curve to the finished left edge is steep and rounded so that the inlay would stand over a centimetre above the wall surface. The top, bottom, and right edges are broken.

H. 2.8 cm. Back width 0.4 cm. Centre depth 1.4 cm. (UC 23409)

At (e) two pieces have been joined below the chip in the top edge which is otherwise perfectly finished, but serrated from the shape of the rounded Nubian ringlets. This edge is bevelled with the inwards slope making a ridge for fitting the tile. On the left the tile narrows; the bottom edge is a rounded, glazed surface that curves up to a point now missing. The bottom right edges of the tile are broken. The ringlets are deeply carved. The piece is glazed front and back and shows a differing degree of fading in the glaze which is sage green on the left with a stronger blue remaining on the right. A hole is drilled through the central break to the bottom edge which narrows as it penetrates the tile, presumably for pegging it in place, despite the grooves for insetting it.

H. 2.5 cm. W. 4.8 cm. W. across the flange 0.5 cm. (UC 23404 & 23408)

The fragment at (f) has the left side rounded as at (d), but the piece is shallower. The ringlets are well rounded and glazed a matt blue-green; oblique stripes cover the surface: the back is smoothly glazed in the same colour.

H. 1.8 cm. W. 2.4 cm. Depth 0.7 cm. (UC 23411)

The perfect basalt inlay of a wig at (g) is from a profile facing right. The edges and back are smoothed and rounded for insetting; the burnished surface is flat at the sides, but it rises very slightly above the fillet giving the head shape. The depth of the wig at the sides is 0.5 cm., usual for Amarna inlays. The nine parallel tapering strip-curls drop from the top of the head to a fringe at the edge of each one. A ridge separates these fringes from the first of the unusual number of six overlapping layers of hair, the same number as on the wig, pl. XXVIII. They reach a point which probably fell in front of the shoulder. The fillet crosses the two inner overlapping layers of hair to meet the brow near the temple, and an almost exact parallel can be seen in the Hermopolis relief from Amarna, of a princess facing left; her wig is of the same type without the fringes, and with only five overlapping layers, and the front of the fillet starts behind the profile eyebrow with the slight curve in the edge passing behind the eye. There are other examples from Hermopolis of fillets which do not cross the brow, on wigs of this type and on a Nubian wig.²

H. 11.5 cm. W. 6.8 cm. (UC 137)

G. Roeder, Amarna Reliefs aus Hermopolis, pl. 9.58, viiib. 2 Ibid., pl. 180(68).

A BUILDING DISASTER AT THE MEIDUM PYRAMID

By K. MENDELSSOHN

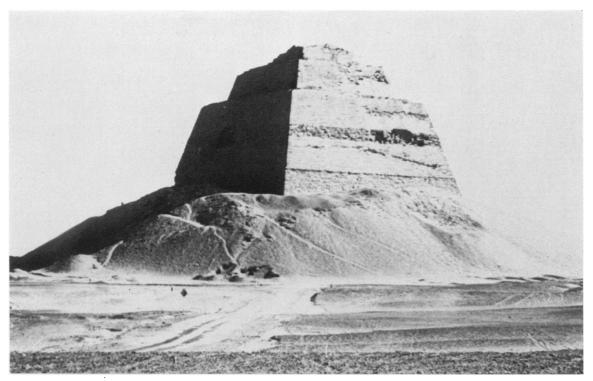
In 1837 J. S. Perring¹ suggested that the heavily ruined state of the Meidum Pyramid was due to the action of stone robbers who used the structure as a quarry. This explanation was repeated by Petrie² and Borchardt,³ and has since been generally accepted. After a visit to the site in 1965 I became convinced that the mass, nature, and disposition of the debris surrounding the building (pl. XXX, 1) indicated a catastrophe in the final stage of its construction. Although this explanation was published in scientific magazines, it attracted considerable attention among Egyptologists and archaeologists. In the present paper the technological evidence for the collapse and its influence on the construction of subsequent pyramids is therefore set out in more rigorous form.

Design and structure

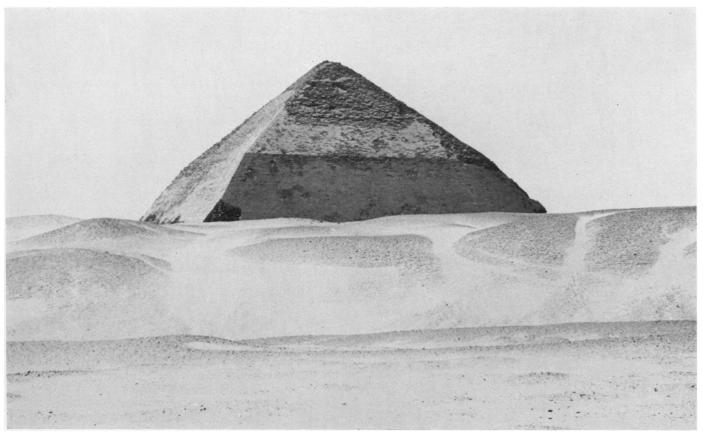
Petrie, Wainwright,⁴ and Borchardt have shown conclusively that the building passed through three consecutive phases, the first two being step pyramids with presumably seven and eight steps respectively, each being considered near the time of its completion as the final form, as is testified by the smooth finish of the surface. In the final phase the first true pyramid was superimposed over the second stepped structure, covering it completely. The angle of elevation of this pyramid is 51° 52′, the same as that chosen for almost all later pyramids.⁵

The first step pyramid, and the only other one which was ever completed, is that of Djoser at Saqqâra. The first monument built by Imhotep for Djoser was a large stone mastaba, about 9 m. high which subsequently underwent two small enlargements. Over this was then erected a structure of four steps which was later enlarged to one with six steps. Although the building in its final form gives the impression of six mastabas, decreasing in size, which were piled up one on top of the other, the design and construction of the step pyramid differs radically from that of the original stone mastaba. The latter is composed of horizontal courses of masonry and its sides incline inwards at an angle of about 73°. This was achieved by shaping off the horizontal outermost blocks to this slope (fig. 1a).

- ¹ H. Vyse and J. S. Perring, Operations carried out on the Pyramids of Gizeh (London, 1840-2).
- ² W. M. F. Petrie, *Medum* (London, 1892).
- ³ L. Borchardt, Die Entstehung der Pyramide an der Baugeschichte der Pyramide von Mejdum nachgewiesen (Berlin, 1928).
 - 4 W. M. F. Petrie, E. Mackay, and G. A. Wainwright, Meydum and Memphis, III (London, 1910).
- ⁵ Only two angles of elevation have been employed in early pyramid construction: $\sim 52^{\circ}$, corresponding to a gradient of 4 in π and $43\frac{1}{2}^{\circ}$ which is 3 in π . It has been suggested that the value of π was introduced unintentionally through measuring horizontal distances by counting the revolutions of a rolling drum. See T. E. Connolly, Am. Scientist 59 (1971), 396.



1. The pyramid at Meidum, seen from the north-west



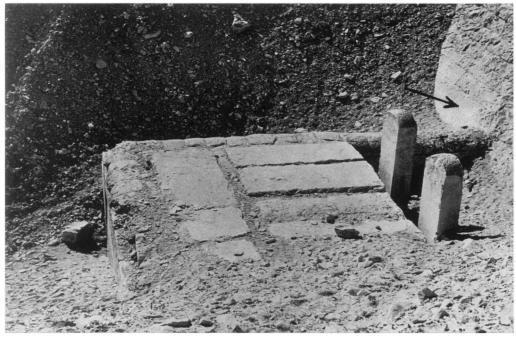
2. The 'bent' pyramid at Dashûr
A BUILDING DISASTER AT THE MEIDUM PYRAMID



1. The roof of the burial chamber in the Meidum pyramid. The blocks are well filled, but have remained undressed



3. The internal masonry of the Meidum pyramid



2. The temple and the uninscribed stelae at the Meidum pyramid. The outer casing is well preserved at the lowest courses (→), but is very much chipped above

A BUILDING DISASTER AT THE MEIDUM PYRAMID

In a step pyramid, on the other hand, the bulk of the structure is inhomogeneous. Around and above a relatively small nucleus it consists of a series of coats of masonry, each secured by a buttress wall, again designed with an inclination of $\sim 73^{\circ}$. However,

contrary to the construction of the mastaba, the casing stones are laid at right angles to the outer surface of the building which means that the courses of the buttress walls slope inwards at an angle of about 17° against the horizontal (fig. 1b). This is a crucial and significant advance on the design of the mastaba since the slope of the buttress courses creates an inward acting force without which it would have been impossible to retain the large mass of the pyramid. Final stability was attained by grading the height of the individual buttresses downward from the centre of the building. This, of course, gives the structure its stepped appearance.

The method of construction thus shows that in his first attempt at erecting a tall and impressive building, Imhotep had chosen a remarkably sophisticated design. In fact, his approach reveals a surprising command of the physical concepts underlying the laws of stability at a time when building in stone was at its very beginning. That the Egyptian architects of the pyramid age must have been fully aware of the stabilizing effect of sloping buttress courses, is shown by the modifications carried out on the Bent Pyramid which will be discussed later.

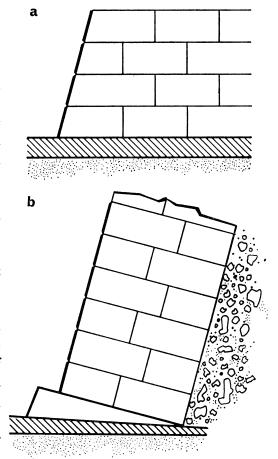


Fig. 1. Masonry in (a) a mastaba and (b) a buttress wall of a pyramid.

Perring, who discovered the existence of the buttress walls, noted that in Djoser's Pyramid a step is introduced at every second wall, the individual walls being spaced at intervals of about 2.5 m. (5 cubits). The same spacing was employed at the two unfinished step pyramids of Sekhemkhet and at Zawiyet el-Aryan. It is significant that at Meidum there is only one buttress wall for each step, making the spacing of these stabilizing features 5 m. (10 cubits), i.e. half the number in Djoser's Pyramid (fig. 2).

The step pyramid at Meidum differs also from its three predecessors in the arrangement of the tomb chamber and of the entrance. The chamber is not located as hitherto in the rock and well underground, but is situated at the base of the pyramid and has a corbelled roof. Access to it is by a sloping passage through the masonry, pointing roughly to the celestial North Pole. Its original entrance was at the top level of the first step of the seven-tiered pyramid and in the succeeding eight-step pyramid the steps

¹ Cf. J.-P. Lauer, Histoire monumentale des pyramides d'Égypte (Cairo, 1962).

had to be raised in order to accommodate the entrance at a corresponding position of the enlarged building. Thus, this arrangement of the tomb chamber and its access, which became the accepted pattern for all future pyramids, had already been adopted in the first stepped structure at Meidum, and well preceded its transformation to a true pyramid.

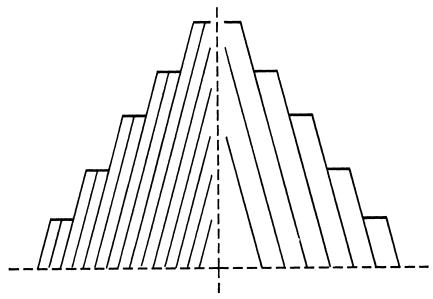


Fig. 2. Number and position of buttress walls in 1 (a) the Step Pyramid at Saqqâra and 1 (b) the Meidum Pyramid.

Destruction of the Pyramid

All pyramids have been used as quarries in later times and the method used by the stone robbers has been so consistent that a general pattern of their attack is clearly discernible. Almost exclusively the planed casing blocks of white Mokkattam limestone were taken. Even the well-squared blocks at the base of the Giza pyramids which were easy to move have been left in their place. On the other hand, the casing stones were stolen even from the top of the monuments. The attack always started at the base and especially at the corners where there was least danger from falling masonry. The stone robbers then proceeded along the edges, working their way upwards and later into the face planes. The pattern is well demonstrated at the lower section of the Bent Pyramid where, for reasons to be discussed later, the casing is still largely intact (pl. XXX, 2). Due to this selective pillaging of casing stones the large pyramids have all retained their essential shape.

The ruin of the Meidum Pyramid differs from this pattern in every detail. Except for two small excavations made in the last hundred years the lower part of the pyramid is completely covered by an immense quantity of debris which has fallen from the upper part of the building. That these enormous accumulations are material from the pyramid has always been taken for granted, and direct inspection of the debris leaves little

doubt about its nature and origin. A recent claim by Goedicke,¹ quoting Wainwright, that this is not so can hardly be taken seriously, since reading the passage in its context makes it clear that the debris referred to are mason's chips forming an approach ramp well away from the pyramid and preceding the latter in date. Early observers² were, in fact, under the impression that the steep core was the actual pyramid, standing on a flat natural hill. Spreading, as aerial photography shows, equally in all directions, the thickness of the rubble is least at the corners. In 1793 W. G. Browne³ removed the rubble from some corners and discovered the outer casing, pointing out that 'the stones and cement may be observed to the very bottom'. Perring's sketch, half a century later, shows some evidence of quarrying at the now bare north-east corner. The stones used for building the bridge at Tahme, which Perring mentions, were possibly taken from here. In 1891 Petrie laid bare all corners and found the south-east corner still perfect but inroads of about 7 to 10 m. had been made at the other corners. He also cleared the centre of the north face and found the casing in existence down to ground level. See Petrie, Medum.

There is thus little evidence of the usual type of quarrying having been carried out at Meidum to any appreciable extent. The total loss of stone from the structure, on the other hand, is enormous. The relatively simple geometrical conditions permit a good estimate of the amount of stone missing from the pyramid structure. Computation of this quantity yields about 100,000 cubic metres; roughly 20 per cent of the total. It is a good deal more difficult to estimate the amount of debris surrounding the foot of the Meidum Pyramid, but its fairly regular distribution allows at least an order of magnitude assessment which yields approximately the same quantity. In other words, the immense quantities of stone which are missing from the pyramid are heaped up around its lower part in the form of rubble.

Wilful and wanton destruction of the monument, a task which would have required a very large labour force over a considerable time and could not have yielded a useful result, can obviously be ruled out. It therefore appears to us that the building suffered some disaster which resulted in its spontaneous collapse. This assumption is supported not only by the general aspect of the site and by certain features of the ruin, but also by peculiarities in the design of later pyramids.

The most convincing evidence for a catastrophic collapse is the fact that the pyramid was never finished but abandoned before its completion. The funerary stelae in the little temple adjacent to the eastern side of the edifice were left uninscribed and the lower stone courses of the temple remained undressed. The large ceiling blocks in the tomb chamber were perfectly fitted together but remained equally undressed (pl. XXXI, 1). Smooth dressing of internal chambers was customary at the time as is shown not only by the tomb chambers of the two Dahshûr pyramids but also by the beautifully finished sarcophagus chamber of mastaba 17 at Meidum which preceded the construction of the pyramid.

¹ H. Goedicke, Am. Scientist, 59 (1971), 671. Cf. Wainwright in op. cit. p. 60 n. 4 above.

² F. L. Norden, Travels in Egypt and Nubia (1737).

³ W. G. Browne, Travels in Africa, Egypt and Syria (1793).

We must, therefore, conclude that the collapse occurred in the final building stage of the Meidum Pyramid when the outer stone mantle, giving the building its pyramidical shape, was being completed. This disaster was of such magnitude that the falling debris covered the already finished lower section so completely, that it prevented the casing stones from being pillaged. When in 1910 Petrie cleared the centre of the east face down to the base, he found the whole casing in position but badly 'weathered'; he tried to explain the discrepancy with the perfect state of the step pyramid casing by assuming the outer casing to be composed of softer stone. From my own observation and photographs (pl. XXXI, 2) it is clear that damage to the casing stones of the mantle gets progressively worse with increasing height; the blocks of the lowest courses being quite smooth and in perfect condition. In addition, the damage to the casing gives no appearance of 'weathering' but, as Petrie himself points out, it is chipped. All this is quite consistent with a landslide of stones careering down over the pyramid casing in which more material would pass across the higher than across the lower courses.

The aspect of the ruin thus provides a fair amount of evidence for a catastrophic collapse. In fact, serious technological weaknesses in the construction of the building allow us to determine with virtual certainty why and how the disaster occurred.

Reasons for the collapse

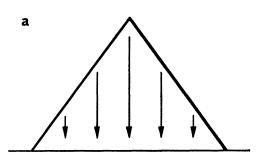
When analysing the nature of the disaster, three facts have to be borne in mind: (1) a stable step pyramid of approximately 70 m. height had been successfully completed in two consecutive building phases; (2) stability was suddenly lost at some stage during the addition of the stone mantle; (3) the instability was large enough to engulf nearly twenty per cent of the total structure. Purely local loss of stability could never have led to a catastrophe of these dimensions unless a considerable lack of stability had been inherent in large parts of the structure before the collapse was triggered off.

In a well-constructed pyramid of the Meidum size, built with perfectly squared blocks, the maximum pressure at the base is of the order of 25 kg/cm² (~ 25 atmospheres). This, while relatively large for a building, is quite insufficient to crush limestone, and the superincumbent weight of even a much larger pyramid cannot, in itself, lead to its destruction. Conditions are very different when the blocks are of more irregular shape and only touch in a few places. Then the pressure can rise locally to several hundred atmospheres, crumbling sets in at the affected regions of the stones and a shift in position of the individual blocks might take place. The large hole in the north side of the present pyramid core discloses the nature of the masonry underlying the smooth casing. The stones are relatively small and only roughly shaped, with large and irregular gaps between them (pl. XXXI, 3). Crumbling of this type of masonry under high local pressures can easily occur, and is likely to lead to catastrophic changes in a tall building.

The reason for this is the transformation of vertical into lateral forces. The weight of superincumbent stone in a well-built pyramid is a vertical downward-acting force which is compensated for by the vertical upward-acting force provided by the rigidity of the building material. Under these circumstances no deformation of the structure

occurs, except for the negligibly small elastic compression of limestone. Once local crumbling takes place, allowing stones to move sideways, the vertically downward-acting force will develop a lateral component (fig. 3). This means that now the super-incumbent weight will force building material horizontally out of the pyramid.

Any such change in the stability conditions will tend to become cumulative and eventually catastrophic. Crumbling of building blocks must further reduce the regularity of their shape, thereby giving less and less resistance to lateral motion. In fact, the debris as a whole will progressively lose its large-scale rigidity and begin to behave more and more like a fluid under pressure. From now on its movement will assume the well-known character of a landslide. The only way of preventing this type of disaster is to introduce into the structure inward acting lateral forces which can compensate the outward spread of the building material. This problem had evidently been fully recognized already by Imhotep who, for this reason, employed the device of the inward-inclined buttress walls. The buttress walls are thus the most essential feature in safeguarding large-scale stability of a pyramid. A small local crumbling would not result in a spontaneous flow of the building material to the outside, but can be taken up by a



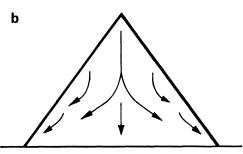


Fig. 3. The distribution of weight forces in (a) a pyramid built of well-squared blocks and (b) a pyramid with poor internal masonry.

slight 'settling' of the buttress walls. Cracks and fissures found in several pyramids are clear indications of local crumbling which, however, remained confined to a small region of the building. The fact that, except for the structure at Meidum, all the great pyramids have retained their shape for almost five thousand years bears witness to the success of Imhotep's assessment of the stability factors.

As has been mentioned, the number of stabilizing buttress walls at Meidum had been reduced to half the number that were employed at Djoser's step pyramid and its two unfinished successors. At Meidum the buttress walls had been spaced at ten instead of five cubits, each having to counterbalance twice the quantity of loose masonry found at Saqqâra. In addition to this dangerous departure from earlier design, the Meidum Pyramid had two serious structural weaknesses, both of which were connected with changes in the original building plan. The first as well as the second step pyramid were for a while considered as the final form of the building and had their surfaces smoothed before the next accretions were added. These smooth surfaces then

¹ This type of 'plastic flow' evidently threatened the pyramid of Pepi II and was dammed in by a heavy dyke surrounding the whole perimeter of the structure. Cf. I. E. S. Edwards, *The Pyramids of Egypt* (London, 1961).

represented dangerous internal slip planes along which the superimposed masonry could slide without adhering to the underlying structure. No such disaster evidently took place on building the second step pyramid on top of the first. However, when failure occurred in the outer pyramid mantle, slip took place not only along the surface of the second step pyramid but also along that of the first one. The nature of the ruin with the exposed smooth surfaces of both step pyramids shows clearly that slip played an essential part in the disaster (see pl. XXX, 1). Areas of mortar on the slip planes indicate that the masonry lying on top was to some extent sheared off as a whole.

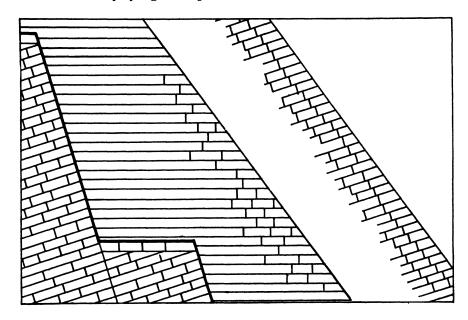


Fig. 4. Position of building blocks in the Meidum Pyramid (left) and in the Bent Pyramid (right). In this diagrammatical sketch the width of the unsupported mantle surrounding the step structure of the Meidum Pyramid is apparent.

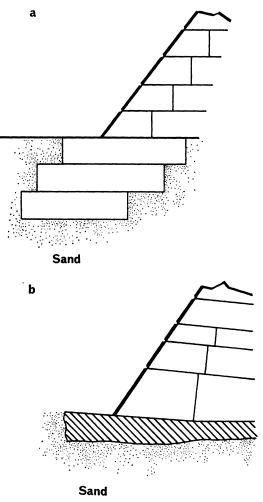
The last, and evidently fatal, weakness was introduced by the transformation of the building into a true pyramid. This was achieved by first packing horizontal layers of large blocks on to the steps of the second pyramid, and then by laying on an outer mantle of about seven metres thickness (fig. 4). Since the top of the pyramid is lost for ever we cannot be quite sure why it was decided to extend the pyramid beyond the limits of the steps. Possibly the reason was to attain the desired angle of elevation of 51° 52′. Whereas the packing blocks laid upon the steps were to some extent supported by the underlying buttress walls, the outer mantle had no underpinning whatever. It was resting loosely on the inclined surface of the underlying masonry and became progressively unstable as its own weight increased in the building process. While the first local failure may have occurred on the surface of the second step pyramid, it is more likely that the initial loss of stability took place in the outer mantle itself. Here the situation was particularly dangerous since the foot of this mantle had no foundation but rested directly on sand, an omission which was remedied in the Bent Pyramid (fig. 5).

The disaster was possibly triggered off by a heavy rainfall. The effect of seeping water on a basically unstable hillside is well known in the occurrence of landslides. In any case, wherever serious crumbling began, the other inherent weaknesses which we

have enumerated seem to have come into play immediately, leading to a large-scale catastrophe which probably overtook much of the structure within a few minutes. Indeed, the wide spread of debris indicates a high kinetic energy of the fragments.

Subsequent events at Meidum

There is a good deal of evidence that the ruin, as we see it today, is not very different from the state shortly after the disaster. A Greek inscription close to the present top of the pyramid and a name with the date 1801 high up on the north face have been assumed to indicate the contemporary height of the debris. However, this argument is hardly convincing since tourists often tend to leave their graffiti at the highest place to which they have climbed. In the fourteenth century Makrisi¹ quoted Sheikh Abu-Mohammed Abdullah, who visited Meidum in 1117-19, describing the pyramid as having five storeys and this has generally been taken to mean five steps.² However, in 1799 Denon³ made a sketch of the pyramid which is very similar to the present state, describing it nevertheless as having 'five large retreat- Fig. 5. Support of the casing blocks at (a) Meidum ing steps or stages', and saying later that the rubbish 'covers all but the angles of the first



and (b) the Bent Pyramid.

stage. The ruin begins at the third stage, of which about a third remains.' We thus can hardly regard Makrisi's statement as convincing proof that in the early twelfth century a pyramid of five steps was really in existence. The first drawing by Norden in 1737 shows the state of the building as little different from that of today.

The most important information in this respect was furnished by Wainwright's excavation in 1910. He found two figures of the Twenty-second Dynasty in the highest part of the rubbish, just below the present surface, showing the rubbish to have been practically as high in the XXII dynasty as it is today'. He, as well as, later,

Ahmad ibn Ali Makrisi, Description historique et topographique de l'Égypte (Paris, 1900).

² The Arabic word used by Makrisi translates correctly as 'storeys' not 'steps'.

³ V. Denon, Voyages dans la Basse et la Haute Égypte (1803).

Rowe,¹ found a number of intrusive burials in the debris, presumably of roughly the same date or later. There is little information about the nature of the site between the disaster and the Twenty-second Dynasty because the lower section of the pyramid is completely covered with debris. This evidently has never been moved, except for the two small areas at the centre of the north and east faces which were excavated in the last hundred years.

Technological evidence permits a reliable analysis of the causes of the disaster and even of the most likely failure to occur. It also allows an assessment of the ultimate state, in our case with the debris spread evenly around the pyramid. It is almost impossible, however, to say anything about the course of events between the original and the final state of the building. This course is bound to depend on a number of highly accidental factors which cannot be reconstructed. On purely general considerations one would assume that there must have existed some metastable intermediate phases when large scale destruction had initially occurred, but when the debris had not yet reached the final state of rest attained in the Twenty-second Dynasty. By then the debris had fallen equally in all directions from the central core of the pyramid, but it is quite possible that for some time parts of the masonry remained in a precarious position at higher levels only to crash down eventually—possibly again after heavy rains. Even such evidence as provided by the graffiti and other finds at the pyramid temple still leave ample latitude for conjecture.

Petrie, and also Rowe, discovered graffiti which show that the temple was accessible until the Eighteenth or Twentieth Dynasty, that sometime during that period a person was buried in it, and that at some earlier time, after the pyramid was abandoned, it served as a habitation for shepherds. Even this information cannot tell us whether initially the temple was spared during the original collapse or whether it was dug out, either immediately after the disaster or during the First Intermediate Period when tomb robbers may have entered the pyramid. This operation would not have been too difficult because in 1891 Petrie accomplished this task with only twenty-five men in under two months. The only way of obtaining information about these intermediate stages would be removal of the debris around the base of the pyramid which may show whether anywhere at the perimeter the casing had given way at its foundation in the underlying compacted sand.

Effect of the disaster on the construction of subsequent pyramids

More, and very convincing, evidence for a catastrophe at Meidum comes from the subsequent pyramids and particularly from the 'Bent' one. It is now generally accepted that this southern pyramid at Dahshûr followed the Meidum Pyramid chronologically in construction. A drastic change of plan took place when the core of the building had reached one-third of its intended height (cf. pl. XXX, 2). The angle of elevation which had up to then been roughly the same as in the Meidum Pyramid ($\sim 54\frac{1}{2}^{\circ}$) was decreased to 43° 20', leading to a final height of 102 m. Some Egyptologists have suggested that the change of plan was due to the premature death of the pharaoh which made it

¹ A. Rowe, Museum Journal (Pennsylvania, March, 1931).

imperative to finish the building quickly. This explanation is not very convincing since the saving in stone amounts to less than ten per cent of the total and, moreover, it fails to account for the same low angle employed in the next structure; the northern pyramid of Dahshûr. Others have ascribed the change in the angle of elevation to a reduction of the superincumbent weight, made necessary by small faults which had developed in the building.

Reasonable as this explanation might appear at first sight, the technological evidence is quite unconvincing. First of all, as we have mentioned earlier, the effect of pressure of the stone on the rest of the building is not serious and, moreover, the reduction in weight on lowering the angle amounts to only 23 per cent. Neither does the interior of the pyramid show any signs of damage except for a few small cracks such as have also appeared in other pyramids and would hardly have called for a drastic alteration in design. Some horizontal cedarwood beams in the upper chamber cannot, as Fakhry¹ has pointed out correctly, have served as a scaffolding, as has recently been suggested by Goedicke. Thus, there existed in the Bent Pyramid itself no reason to reduce the superincumbent weight of masonry.

On the other hand, there is ample evidence that it was primarily the angle of elevation and not the height which was considered perilous and that the danger envisaged was not a crushing of the interior chambers but a slip of the outer mantle. The likelihood of slip is much reduced at the lower angle of $43\frac{1}{2}^{\circ}$ compared with the earlier angle of over 50°. However, the stage of construction when the change of slope was decided upon evidently embodied already a steep core about 50 m. high and any safeguards against slip had to be applied to the mantle itself. This is shown significantly by the method adopted for laying the casing stones in this steep lower section of the Bent Pyramid. At Meidum the blocks for turning the structure into a true pyramid had been laid horizontally on to the steps of the second phase and this manner was continued into the outer unsupported mantle. It was this construction which evidently led to the disaster. In the Bent Pyramid the blocks of the outer mantle, including the casing stones, were laid at an angle sloping inwards into the pyramid (see fig. 4), a method of stabilization which had proved successful in the buttress walls of the step pyramid. To some Egyptologists this appeared as an archaic feature which, for some time, induced them to date the Bent Pyramid as preceding that of Meidum.² Finally, whereas at Meidum the outer casing rested simply on sand, that of the Bent Pyramid is firmly supported by a limestone base which itself slopes inward (fig. 5).

Summarizing, we find that the change of plan at the Bent Pyramid involves three separate features, all of which serve to prevent the type of disaster that had occurred at Meidum. It therefore seems justified to conclude that this change was a direct consequence of the collapse of the Meidum Pyramid and that this collapse occurred when the Bent Pyramid had reached a third of its height.

- A. Fakhry, The Pyramids (Chicago, 1969), 93.
- ² Attempts have been made to deduce a sequence of work at the pyramids from the position of dated casing stones. Unfortunately, the stones (probably in fitted adjoining rows) were dated at the quarry and, with construction periods of different pyramids strongly overlapping, the information which they convey is far from reliable.

At the northern pyramid of Dahshûr, which followed in construction the Bent Pyramid, the courses of packing stones are laid horizontally but throughout at the lower angle of elevation of $43\frac{1}{2}^{\circ}$. This had proved safe in the upper part of the Bent Pyramid, but it led to a rather flat and less impressive edifice. The fact that in the next pyramid, that of Khufu at Giza, the steeper angle of elevation of 52° was again employed, shows that its builders must have learned to overcome the errors in design which had resulted in the collapse of the Meidum Pyramid and which they had avoided in the two pyramids at Dahshûr.

Owing to the enormous bulk and the good state of preservation of the Giza pyramids, we cannot know whether alterations were introduced in the construction of the core. However, the smaller Giza pyramids and those of the Fifth Dynasty show that the basic pattern of inclined buttress walls was adhered to, and one therefore has every reason to assume that the Khufu and Khafrē pyramids were built on the same pattern. On the other hand the good state of the masonry exposed in the lower end of the ascending passage of the Khufu Pyramid and in 'Ma'mun's hole' suggests that the space between the buttress walls was filled with large and well-packed stones.

The layer of masonry underlying the casing stones which forms the now visible surface of the big Giza pyramids reveals the use of large and extremely well-squared packing blocks. Each of these blocks is about one cubic metre in size, weighing roughly $2\frac{1}{2}$ tons. They represent a distinct advance on the masonry of the earlier pyramids and they serve as an efficient means of preventing surface slip. The quarrying and careful shaping of very large numbers of these blocks, as well as the provision of sizeable and well-fitting blocks for the interior masonry, had evidently become necessary before the erection of very large, steep pyramids could be attempted. In the Khufu Pyramid stability has been safeguarded further by making the masonry layers concave with respect to the apex. This has been achieved by grading the blocks somewhat in size so that the edges of each course are slightly lifted. In this way, additional thrust of the surface layers towards the centre of the structure is created.

In the end this device seems to have been considered unnecessary or too laborious since it was not employed again in the Khafrē and Menkaurē pyramids. On the other hand, the base courses of granite casing stones in these two pyramids and that of Dedefrē may not have served as decoration, as is generally assumed, but as a safeguard to provide a firm foundation for the superincumbent limestone casing. As time has shown, the efforts to achieve stability in the three Giza pyramids have been highly successful.

Conclusions

On purely technological grounds we may assume that the Meidum Pyramid collapsed in its final building phase because its structure had a number of inherent weaknesses which had been avoided in the step pyramid of Saqqara. This catastrophe led to

¹ L. Borchardt, Einiges zur dritten Bauperiode der grossen Pyramide bei Gise (Berlin, 1932).

² Cf. Fakhry, op. cit. 129, 256.

modifications in the design of the southern pyramid at Dahshûr, including its unusual shape. Design details in the subsequent pyramids can be traced to lessons learnt through the Meidum disaster.

Assuming, as we do, that lowering the angle of elevation of the Bent Pyramid was due to the collapse of the Meidum Pyramid in its final phase of construction, we must conclude that the building periods of these two pyramids overlapped very appreciably. In fact, as much as 70 to 80 per cent of the total mass of the Bent Pyramid had already been erected when the design was changed. The meaning and implication of simultaneous work on more than one pyramid are beyond the scope of this paper and have been discussed elsewhere.¹

ACKNOWLEDGEMENTS

I am grateful to Dr. I. E. S. Edwards and to the late Professor W. Emery for many helpful discussions, and to the Egyptian Department of Antiquities for extending to me facilities at various pyramid sites.

¹ K. Mendelssohn, Science Journal 4 (1968), 48; Am. Scientist 59 (1971), 210; Physik in unserer Zeit 3 (1972), 41; The Riddle of the Pyramids (Thames and Hudson, in the press).

EINIGE BEMERKUNGEN ZUR ANGABE DER ST3T-GRÖSSE AUF DER WEISSEN KAPELLE SESOSTRIS I

Von ERHART GRAEFE

In der Sockelzone der Weißen Kapelle sind unter anderem die Namen der ägyptischen Gaue, die Hauptorte bzw. Götter derselben und gewisse Angaben in Flächenmaßen aufgezeichnet. Ähnliches findet man auch auf Weiheellen.

Das Material ist bequem — allerdings nicht allgemein zugänglich — zusammengestellt in der Dissertation von Adelheid (Schwab-)Schlott, die Angaben für die Weiße Kapelle hat man im inzwischen erschienenen Tafelband der Publikation von Lacau-Chevrier. Von der Größe der stet-Arure handeln die folgenden Bemerkungen.

Das System der Tabelle sieht folgendermaßen aus: In der ersten Zeile werden die Namen der 22 ober- und 16 unterägyptischen Gaue aufgezählt, es folgen die Namen der Hauptstädte bzw. deren Götter in der zweiten, in der dritten Maßangaben in jtrw sowie Zahlen in Tausender- und Hundertergruppen, in der vierten die für alle Gaue gleiche Zahl '100' und in der fünften und sechsten Zeile schließlich Angaben in Ellen und deren Bruchteilen 'Handbreite' und 'Finger'.

Dazu lauten die 'Überschriften' am Ende der Zeilen: (2) [], (3)] bzw. |->=, (4) | =, (5) | x | =, bzw. | z, (6) | bzw. | z, (6) | z, bzw. | z, (7) | z, (8) | z,

Die Addition der Ziffern in den Zeilen 5 und 6 ergibt (bis auf einige Fälle von offensichtlichen Fehlern), jeweils 100 (Ellen). Es handelt sich demnach um Angaben zur Größe der stit-Arure von (im Mittleren Reich) 100×100 Ellen Flächeninhalt. Frau Schwab übersetzt⁴ diese Beischriften in Anlehnung an Lacau:⁵

Zeile 2: 'Ort, an dem die stst ist'

Zeile 3: 'Jtrw-Meile'

Zeile 4: 'Verzeichnis der stst'

Zeile 5: 'Das, was von einer stst abgezogen werden muß'

Zeile 6: 'Rest (der st?t)'

Die von Gau zu Gau verschiedenen Angaben in Zeile 5 schwanken zwischen einer Elle plus drei Handbreiten und zwei Ellen plus vier Handbreiten.

¹ A. (Schwab-)Schlott, Die Ausmaße Ägyptens nach altägyptischen Texten (Darmstadt, 1969), T. 1-32. Vgl. Graefe, BiOr Jg. 29 (1972), 183-5). Photos der Ellen sind jetzt publiziert durch die gleiche Verf. in MDAIK 28, 1 (1972), T. 23-8.

² Lacau-Chevrier, Une Chapelle de Sésostris Ier à Karnak. Planches (Le Caire, 1969), Pl. 3 und 42.

³ Schlott, loc. cit. T. 4 und 7. ⁴ Schlott, loc. cit. 35.

⁵ Lacau-Chevrier, Une Chapelle . . . Texte (Le Caire, 1956), § 604 und § 608.

Die Folgerung daraus scheint zu sein, daß der Flächeninhalt einer Arure von Gau zu Gau verschieden war; im Mittelwert betrug die Seitenlänge 98 Ellen. Dabei bleibt allerdings als merkwürdig festzuhalten, daß der volle Wert 100 Ellen nie erreicht wird und daß die Differenz in mehreren benachbarten Gauen gleich groß ist.

Andererseits kann man nicht annehmen, daß im Mittleren Reich die Größe der stit nicht ein 'glattes' Vielfaches der Grundeinheit 'Elle' gewesen sein sollte, da wir wissen, daß z. B. im Alten Reich die stit zu 3000 Ellen Seitenlänge gerechnet wurde.¹

So ungerade Werte wie 97 Ellen plus drei Handbreiten sind daher kaum als regional verschiedene strt-Größen anzusehen, d. h. nicht durch Nachmessen eines unabhängig von der Einheit 'Elle' entstandenen Maße 'Arure' zu betrachten. Dazu gibt die konstante Zahl 100 in Zeile 4 den Hinweis, daß die Arure eigentlich zur Zeit Sesostris I mit 100 Ellen Seitenlänge gerechnet wurde. Bevor ich weitere Folgerungen daraus ziehen kann, muß ich mich erst der Beischrift in Zeile 2 (s. o.) zuwenden.

Lacau² und Frau Schwab³ lesen das Zeichen stit und übersetzen 'l'endroit où se trouve la stit bzw. 'Ort, an dem die stit ist', doch fragt es sich, mit welchem Recht. Eine Lesung stit ist für den Strick nirgends belegt⁴ und kann auch aus den Schreibungen der Zeilen 4–6 nicht abgeleitet werden, da der Strick jeweils nur als Determinativ auftritt. Seine Existenz in dieser Funktion ist hier leicht erklärbar, werden doch Flächen mit Hilfe eines Meßstrickes abgemessen. Außerdem: wie kann man wohl ein Flächenmaß aufbewahren? Doch höchstens in Form eines Strickes von der Seitenlänge dieses Maßes. Das nimmt auch schon Lacau an; nach ihm wären dann Eichmaß und davon abgeleitete Fläche mit dem gleichen Wort bezeichnet worden: 'Ce sont dans chaque province la ville et le dieu qui ont charge de conserver la valeur exacte de la mesure-étalon stit propre à cette province.'

Doch gibt es eine andere Möglichkeit für die Lesung des \mathfrak{t} : er kann $\mathfrak{s}n(t)$ gelesen werden als Phonogramm und dient auch zur Schreibung von $\mathfrak{s}t$ (älter vielleicht eben $\mathfrak{s}nt$) 'einhundert'. Da nach den Angaben auf der Weißen Kapelle die Berechnung der regionalen Unterschiede an Hand der 100-Ellen-Einheit vorgenommen wurde, dürfte auch das im Haupttempel aufbewahrte Eichmaß ein Strick von rund 52 m. Länge gewesen sein. (Zumal es ein Längenmaß ht n nwh von 100 Ellen Länge gibt.

Was liegt da näher, als % if (int) 'Hunderter-Strick' ('Hundert-Ellen-Strick') zu lesen und % if % into a stiff (zu) 100 (Ellen)'?

Akzeptiert man in dieser Weise die Bindung der Einheit stst an die Grundeinheit 'Elle', ergibt sich zwingend, daß die regionalen Abweichungen in Zeile 5 der Weißen Kapelle auf Unterschiede in der Länge des Grundmaßes 'Elle' zurückgehen. Die Länge der Elle wurde durch Nachmessen an erhaltenen Exemplaren mit 52·3 cm. festgestellt.⁸ Eine Abweichung von 98 auf 100 Ellen führt dann z. B. auf regional 51·25 cm., also eine Differenz von ca. 1 cm. die aber pro stst auf einen (Flächenunterschied

¹ JNES 15 (1956), 113 ff. ² Lacau-Chevrier, loc. cit. Texte, § 604. ³ Schlott, loc. cit. 35.

⁴ Gardiner, Eg. Gr.3, Signlist VI.
5 Lacau-Chevrier, loc. cit. Texte, § 608.
6 Gardiner, Eg. Gr.3, Signlist VI.
7 Wb. II, 223, 12.

⁸ JEA 4 (1917), 136 (Mittelmaß nach den Ellen des NR und der Spätzeit). Daß im MR die Länge etwas anders gewesen sein könnte, ändert grundsätzlich nichts.

von immerhin 110 m.² auf 2735 m.² führt). Solche Unterschiede in den Längen der regionalen Eichmaße sind ohne weiteres denkbar und nicht erstaunlich. Dann bliebe als Schlußfolgerung, daß die Tabelle in der Sockelzone der Weißen Kapelle ihre Existenz einer Revision der lokalen Eichmaße verdankt.¹ Fig. 1 gibt eine Zusammenstellung aller Daten (von der Kapelle Sesostris I Zeile 5 und den der Zeile 5 entsprechenden Eintragungen der Weiheellen). Leider wird die Beurteilung wegen der nur fragmentarischen Überlieferung der Datenserien erschwert.²

Einiges läßt sich an der Tabelle aber dennoch ablesen:

- (1) In einigen benachbarten Gauen sind die Abweichungen (von 100 Ellen) gleich groß. Das läßt auf die Existenz teils schon für mehrere Gaue verbindlicher Eichmaße vor der Revision im MR schließen. Die Serie gleicher Daten für z. B. den 2.-6. Gau kann kaum als Zufall angesehen werden.
- (2) Alle regionalen Größenangaben weichen gegenüber dem Postulat '100' nach unten ab. Dies spricht dafür, daß bei der erstmaligen Revision das neue 'Normal' etwas größer angesetzt wurde als die bisher in Gebrauch gewesenen.

Wenn es sich bei der Revision nur um eine Nachmessung auf Grund irgendeines der bereits verwendeten Eichmaße gehandelt hätte, wäre ein solches Ergebnis nicht zu erwarten, da es dann auch einmal Abweichungen nach oben gegeben hätte. Die Abweichungen nach unten liegen auch nicht in der Meßmethode begründet. In dem hundertmaligen Hintereinanderlegen der Eichelle entlang des ausgespannten Meßstricks mag zwar die Tendenz liegen, beim zweiten usw. Anlegen des Stabes etwas nach vorn zu rücken, aber das ergibt bei einigermaßen genauem Arbeiten insgesamt

¹ Man hätte sich das so vorzustellen, daß mit einer 'geeichten' 'Normal' elle die Meßstricke der Gauhauptstädte nachgemessen wurden.

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Dokumente nach der Liste Schlott, loc. cit. 33:
I = Weiße Kapelle Sesostris I.
3 = Elle Amenophis III (Gabra, MDAIK 24 (1969), 129/35).
4 = Elle Scheschonk I Turin.
5 = Elle eines Osorkon Kairo 31 | 12 / 22 | 2.
6 = Elle Nektanebos II Kairo 31 | 12 / 22 | 1.
7 = Elle Kairo 31 | 12 / 22 | 3.
II = Elle University College (Petrie, 3).
I2 = Elle University College (Petrie, 1).
I4 = Elle University College (Petrie, 2).
I5 = Elle Brit. Mus. 36656.
20 = Elle Kairo 31 | 12 / 22 | 4.
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Bei Lacau-Chevrier, loc. cit., Planches, Pl. 3 findet man für den 7. oberägyptischen Gau nur die Angabe '1 Elle' eingetragen. Die Zeichen sind jedoch in dem Kästchen der Tabelle ganz nach rechts gerückt wie sonst, wenn noch eine Angabe in Handbreiten folgt. Frau Schwab gibt (Schlott, loc. cit. T. 2) unter Benutzung von Photos aus dem Archiv Lacau: '1 Elle plus 5 Handbreiten' an. Daher scheint es sich auf Pl. 3 der Original-publikation in diesem Falle um ein Versehen zu handeln. Für den 18. Gau ist dort noch die Angabe '1 Elle plus?' sichtbar.

Die Eichmaß-Differenzen nach den Angaben der Weißen Kapelle und der Weiheellen für Oberägypten

	Datierung	Sesostris I	Amenophis III	Scheschonk I	22.Dyn.?	Nektanebos II	Spätzeit	۰.	¢.	¢.	¢.	٥٠	٥٠
	Dok.	-	ဗ	4	တ	9	7	Ξ	57	13	4	15	50
Gaue	22	×	×	×	×	×	×	×	×	×	×	×	×
	21	×	×	×	×	×	×	×	×	×	×	×	×
	50	×	×	×	×	×	×	×	×	×	×	×	×
	19	×	×	×	×	Ø	×	×	×	×	×	×	×
	8	x/x+1	×	×	×	N	×	×	×	×	×	×	×
	11	. 2/2	×	×	×	2/4	×/4	×	×	×	×	2/×	×
	16	2/4		×	×	2/4	2/4	×	×	×	×	×	×
	15	2/4	×	2/2/×	×	2/4	1/4	×	×	×	×	2/3	×
	4	2/4	×	2/3	×	2/4	x/3	×	×	×	×	2/3	×
	5	2/4	×	2/3	×	2/4	2/4	×	×	×	×	2/3	,×
	7	2/2	×	8	×	8	И	×	×	×	×	x/2	1/2
	F	Ø	×	N	×	Ø	×	×	×	×	×	1/2	2/2
	우	×	×	N	×	7	×	×	×	×	1/1/x	x/2	×
	თ	2 23	×	N	Ø	N	×	×	×	×	×	×	×
	ω	1/3/2	N	×	N	CV	×	×	×	X	×	×	×
	7	1/5	1/3	×	1/4	×	×	×	×	2/3	×	×	×
		1/4										×	×
	2	1/4									×	×	×
	4	1/4	1/3	×	1/3	×	×	×	×	×	×	×	×
	ო	1/4								×	×	×	×
	α	[<u>]</u> 4	1/3	×	1/3	×	×	1/3	, ,	×	×	×	×
	-	-	1/3	×	1/3	×	×	1/3	1/3	×	×	×	×
	Dok.	-	ო	4	S.	ø	7	1	12	13	4	15	50

Ę.

Die erste Ziffer bedeutet "Elle ", die zweite " Handbreite ", die dritte " Finger ", " X " steht für vollständige, " x " für teilweise Zerstörung. Die Bezeichnung der Dokumente folgt dem Katalog in der Dissertation von Frau (Schwab-) Schlott, S. 33

eine Verschiebung von vielleicht 10 cm., während z.B. bei einer obigen Differenz von 2 auf 100 Ellen der Unterschied ca. 1 m. ausmacht.

(3) Die Ziffern der Weiheellen weichen von denen der Weißen Kapelle und auch untereinander ab. Es könnte natürlich im Laufe der Geschichte mehrmalige Revisionen gegeben haben. Wenn nicht Abweichungen nach unten zu verzeichnen wären, würde man irgendeinen fiskalischen Trick hinter diesen Revisionen vermuten.¹ So aber scheint dies nicht der Fall zu sein.

Leider läßt sich die Frage nach wiederholten Revisionen wegen der schlechten Überlieferung der Ellen z. Zt. noch nicht klar überschauen (wie man an Fig. 1 sieht).²

- (4) Man fühlt sich natürlich zur Frage gedrängt, wieso die verschiedenen Eichmaße nicht standardisiert worden sind. Dies hätte nahegelegen, wenn man sie schon überprüfte. Dies ist leichter zu verstehen, wenn man daran denkt, wieviele miteinander konkurrierende Maße bzw. Maßsysteme mit z. T. gleicher Benennung bei uns in Europa jahrhundertelang nebeneinander standen oder heute noch stehen. Bei dem bekannt konservativen Sinn der Ägypter wäre dies ebenfalls nicht verwunderlich.
- ¹ So etwas scheint man in der Ptolemäerzeit gemacht zu haben. Vgl. bei Oertel, *Herodots ägyptischer Logos und die Glaubwürdigkeit Herodots* (Bonn, 1970), 33 und Anm. 78.
- ² Auf Zusammenstellung der Daten für Unterägypten wurde wegen noch schlechterer Quellenlage verzichtet. Zufälligerweise sind die Abschnitte mit den Angaben für Oberägypten weit besser erhalten geblieben.

BRITISH MUSEUM WRITING BOARD 5645: THE COMPLAINTS OF KHA-KHEPER-RĒ'-SENEBU

By GERALD E. KADISH

This well-known, brief, but unique text was first published by Sir Alan Gardiner as an Appendix to his edition of the 'Admonitions' of Ipu-wer.¹ He had been struck by the number of philological similarities between the two texts and by the fact that both belonged to that genre of pessimistic literature that includes such works as the dialogue between a man and his ba.² After working through B.M. 5645 in another connection, it seemed to me useful to publish for the first time photographs of the writing board, which Messrs. Edwards and James were good enough to have taken for me and, at the same time, to attempt a fresh translation and additional commentary.³ I have not been able to make enough significant improvement on Gardiner's transcription to warrant re-doing it here; such suggestions or observations as I have to offer are included in the commentary. Gardiner himself repeatedly stressed the need for periodic re-examination of these texts in the light of our expanding knowledge of things Egyptian.

The following translation gives higher priority to conveying the sense of the writer than to the regular reflection of the precise formulations of the Egyptian language. The commentary will indicate my understanding of the grammar and syntax where it is not immediately apparent in the translation.

Translation

- (rt. 1) The collection of sayings, the gleanings of maxims, the searching for phrases^a in racking the brain^b which the wb priest of Heliopolis, Seny's son,^c Kha-kheper-Rēc-senebu, called Ankhu, compiled. (rt. 2) He says: 'Would that I had (some) phrases which were unknown,^d sayings that were unusual,^e (or) new words that had not yet been used,^f free of repetition,^g devoid of the phrases of that familiar language^h (rt. 3) which the ancestors spoke. I have drained my bodyⁱ because of^j what was in it, to get rid of^k all that I have said (before),^l inasmuch as it is indeed (mere) repetition of what has been said repeatedly.^m
- ¹ Alan H. Gardiner, The Admonitions of an Egyptian Sage from a Hieratic Papyrus in Leiden (Pap. Leiden 344 recto) (Leipzig, 1909). The Appendix is on pp. 95-112, the transcription on pls. 17 and 18. To be cited as Adm.
- ² See the recent studies by W. Barta, *Das Gespräch eines Mannes mit seinem Ba* (Münchner Ägyptologische Studien, Heft 18, Berlin, 1969) and H. Goedicke, *The Report about the Dispute of a Man with his Ba* (Baltimore, 1970).
- ³ Many references have been made to specific passages. For Erman's translation, I have employed the English version: Adolf Erman (ed.), *The Ancient Egyptians: a Sourcebook of their Writings*, trans. by A. M. Blackman, with an Introduction by W. Kelly Simpson (New York, 1966). As Simpson points out (p. xxx), the most recent discussion is a stylistic and structural analysis by S. Herrmann, *Untersuchungen zur Überlieferungsgestalt mittelägyptischer Literaturwerke* (Deutsche Akad. d. Wiss. zu Berlin, Veröffentlichung Nr. 33, Berlin, 1957), particularly pp. 48–54.

What has been said is said.ⁿ One cannot boast^o of the words of the ancestors (rt. 4) or, indeed, of what subsequent generations discovered.^p (rt. 5) A speaker has not (yet) spoken who says what is yet to be spoken.^q What is found of another's, that is what will be said,^r without adding the statement afterwards: 'What they [i.e. the ancestors] did previously', without words which they [i.e. the modern copiers] had conceived of saying.^s (rt. 6) It is courting ruin!^t It is falsehood! There is no one who will recall such a person's name to others.^u

I have said these things on the basis of what I have seen [in the records of the past] from the first generation down through (rt. 7) those which came thereafter." These things have outlived what is past." Would indeed that I knew something others did not know," things which have not been repeated." (Then) I would express them, (so that) my heart might answer me. (rt. 8) I would explain to it about my suffering and (thereby) shift to it the burden which is upon my back, (namely) the words which afflict me. I would relate to it the things which I suffer on account of it. (rt. 9) (Then) I would (be able to) say: 'Ah!' because of my relief.

(rt. 10) I contemplate^{cc} what has happened, the conditions which have come about throughout the land.^{dd} Transformations^{ee} are taking place;^{ff} it is not like last year. One year is more troublesome than the other. The land is breaking up,^{gg} becoming a wasteland to me,^{hh} being made as . . .ⁱⁱ (rt. 11) Justice has been cast aside;^{jj} wrong-doing is (even) in the council-chamber. The plans of the gods are interfered with; their ordinances are neglected.^{kk} The land is in continuous distress.^{ll} Mourning^{mm} is everywhere. (rt. 12) The towns and nomes are in grief.ⁿⁿ All persons alike^{oo} suffer wrongs. (As for) reverence, backs are turned to it.^{pp} The Lords of Silence (i.e. the dead) are disturbed.^{qq} (When) morning comes each day, the face recoils at what has happened.^{rr}

I (must) speak about these things. ss (rt. 13) My body is weighed down. I am distressed because of my heart and it is painful to keep silent about it. Another heart would be bowed down. Now a brave heart, in evil circumstances, is a companion for its possessor. Would that I had such a heart, ww (rt. 14) able to suffer; then I would (be able to) rely upon it. yy I would load it down with words of misery. I would thrust on to it my suffering. 'zz (vs. 1) He says to his heart: 'Come, then, and my heart, that I may speak to you, that you might answer for me my statements, that you might explain to me that which pervades the land, that that which was bright, has been cast down. bb

I contemplate what has happened.^{ccc} Misery has been introduced (vs. 2) nowadays. (Such) tribulations have not occurred since the ancestors.^{ddd} Everyone is silent on account of it.^{ecc} The entire land is in a great state.^{fff} There is nobody free from wrong-doing; all alike are committing it. Hearts are sad. One who used to give commands (vs. 3) is (now) one to whom commands are given; geg both are content. One awakens to these things daily; hearts cannot put them aside. The conditions of yesterday are the same today because of the transpiring of many things, because of cruelty (?). There is no man so wise that he understands it. (vs. 4) There is no one (so) angry that he will speak out. The wretched man to protect him from the strong man. There is no strength for the wretched man to protect him from the strong man. It is painful to remain silent about what is heard. It is misery to reply to the (vs. 5) ignorant man. To criticize account of the content is not strength.

breeds enmity. The heart does not accept truth. A reply to a statement is not endured. A man's only interest is (in) his own words. 4 all men put their trust in crookedness. Correctness of speech is abandoned. 555

I speak to you (vs. 6), O my heart, that you might answer me. A heart which is appealed to¹¹¹ does not remain silent. Behold, the due of a servant is the same as a lord's. Many things are burdensome because of you.¹¹¹

Commentary¹

- (a) Gardiner (Adm. 96 and pl. 17) appears to be correct in reading [d]d·wt before md·wt. 'Sayings' seems to me to convey the intended meaning. For tsw and hnw, I have employed general terms for adages and phraseology. Cf. Faulkner, Dict. 192, 308. It was Sethe's suggestion (cf. Adm. 97) that kdf was the ancestor of Coptic κωτε meaning 'picking', as with flowers. 'Gleaning' adds emphasis to the idea of selectivity. See Erman, op. cit. 108; Herrmann, op. cit. 52. On der, cf. Wb. v, 539-40.
- (b) Adm. 97 renders m hhy n ib as 'with ingenious mind' (so Faulkner, Dict. 176). Erman, loc. cit.: 'with meditations of the heart'; Herrmann, loc. cit.: 'durch Nachsinnen(?) des Herzens'. A phrase like 'searching the mind' implies the kind of intellectual activity 'Ankhu is engaged in. 'Racking the brain' conveys the sense of futility he experiences. Cf. Wb. III, 151.
- (c) Gardiner, Adm. 97, doubted his initial instinct to read sny as a personal name, thinking it might more likely be some unknown title. I see the 'egg-sign' (Egn. Gr.³ H8) and a seated man under the sn-sign. As Gardiner notes, this would be typical Middle Kingdom filiation. The order of the names favours this solution in the absence of a known title.
- (d) hnw hmmy. The latter word is a perfective passive participle. Cf. Adm. 97 and Egn. Gr.³ § 360.
- (e) Gardiner's translation (Adm. 97) of hppy with 'strange' introduces connotations not intended by the writer. 'Ankhu is interested in originality, not peculiarity. Cf. Erman, op. cit. 109; Herrmann, op. cit. 53; Faulkner, Dict. 188.
 - (f) tmt sws. Adm. 97; 'that has never occurred (before)'. Egn. Gr. 3 § 397.
 - (g) Egn. Gr. 3 § 274, Obs. 2; Erman, loc. cit.; Herrmann, loc. cit.
- (h) $nn \ \underline{tsw} \ n \ sbt \ r$: Sethe, probably correctly, read r at the end of the line (Adm. 98). The phrase $sbt \ r$ is etymologically reminiscent of the German word 'Umgangssprache', although the latter has a somewhat different meaning.
- (i) shik i ht i: Adm. 98 explained shik as 'squeezing out'. I prefer Gardiner's original choice of 'purge', since 'Ankhu is trying to empty himself of all the trite language and thought he possesses. The idea is resumed with fh in the next part of the sentence. Cf. Erman, loc. cit.; Herrmann, loc. cit.
 - (j) hr ntt: Adm. 98; cf. Egn. Gr. 3 §§ 233, 252 (c).
 - (k) m f h n: 'as the releasing of'. See note (i) above; Adm. 98.
- (1) Adm. 98 for exx. of dd for ddt. The old, unoriginal things which have already been said are to be disposed of.
- (m) 'Ankhu is anxious to end this ceaseless repetition of things said over and over again. <u>dddt</u> appears to be a perfective passive participle. Cf. Egn. Gr.³ § 360; G. Lefebvre, Gr. § 587 (p. 285, top), translates: 'car c'est certes, du déjà dit qui est répété (sans cesse).' On rf after hr ntt, cf. Egn. Gr.³ § 252 e, c.
- (n) iw introduces the general principle. The perfective passive participle $\underline{d}ddt$ is followed by the old perfective $\underline{d}d(w)$. Adm. 97 has linked the sentences differently, unlike Erman, loc. cit. The

¹ More often than not, I shall use the name 'Ankhu rather than the longer name.

present solution overcomes the difficulty of taking *hr ntt* as the beginning of the previous sentence, something Gardiner was uneasy about.

- (o) Gardiner (Adm. 97-8) was puzzled by this passage, but Erman, loc. cit., sensed the idea: one cannot take pride in the language and ideas of earlier generations to the extent one could in new and original material.
- (p) gm is(t) imy·w-ht. Cf. Adm. 98 on gm for gmt. The imy·w-ht are those who came after the imy·w-ht. Gardiner has: '(when) those of later times find it' (transliterating gmi s(t) imy·w-ht). This might well result in: 'There is no taking pride in the words of the ancestors when later generations find them.' Cf. Erman, loc. cit.
- (q) This passage caused difficulties for Gardiner and Sethe (Adm. 99), Erman, loc. cit. and Herrmann, loc. cit. The key, it seems to me, lies in seeing the four grammatical forms of dd as part of an integral whole, while keeping in mind that 'Ankhu is complaining about the lack of originality. The sentence reads: $n \, dd \, dd \, dd \, dd \, tv \cdot fy$. It begins with a negated $sdm \cdot f$ form of dd. This is followed by dd with a seated man, a perfective active participle serving as the nominal subject of the preceding verb. The next dd is likewise a perfective active participle, 'who speaks'. Last, as Gardiner recognized, there is the sdm-ty-fy form of dd. We may have here another example of the rare passive of this form (Egn. Gr.3 § 363), although to construe it actively makes quite good sense: 'what he is (yet) to say'. If it were to be regarded as a passive—something about which I have doubts—it would yield a meaning well-suited to the context. In any case, this last participle functions as a noun and as the object of the preceding word. To recapitulate: the sentence consists of a negated sqm·f form with a participial subject which is in turn modified by a clause consisting of a participle (used verbally) and its object, likewise a participle (used nominally). This analysis appears to yield good sense and to be grammatically sound. The point of the sentence is that none of 'Ankhu's contemporaries is saying anything new ('what is yet to be spoken'). The passage that follows seems to bear it out. Cf. Herrmann, loc. cit. who follows Gardiner. For this kind of word-play, cf. Peas. B1, 109-10; B1, 120 and B1, 303-4.
- (r) gmy ky $dd \cdot ty \cdot fy$. Gardiner (Adm. 99) was probably right to regard gmy as a passive participle, but the way he links the clauses creates confusion. The $sdm \cdot ty \cdot fy$ form could be construed actively or passively here.
- (s) The difficulty in translating this passage is that the logical nexus is not immediately apparent. Gardiner (Adm. 99) had the beginnings of the idea, but was misled by his translation of what went before. The point is that Ankhu is charging that plagiarism is the order of the day, that there is a lamentable lack of originality and that people are passing off as their own the ideas of others, without adding the information that it is the work of others. I would transliterate the passage as follows: n(n) mdt n mdt n mdt n mr ir n ir n m md·wt ntt n is n.
- (1) I agree that the initial n should be amended to nn, although it is possible to regard the form as an n s $\underline{dm} \cdot n \cdot f$ with an omitted subject. 'Without' seems a good translation, however, since it conveys the continuity with the preceding clause.
- (2) The first mdt is probably the infinitive (Cf. Egn. Gr.³ § 299).
- (3) There are at least two reasonable explanations of the passage *ir·n·sn dr-c*. It is direct discourse, as Gardiner saw (Adm. 99). People are saying things without acknowledging that the ancestors had already said them. For Gardiner, the sentence began with a sdm·n·f with an omitted object. The alternative, which I have elected to adopt, is to regard the *ir·n·sn* as a relative form. The immediate objection to that view would be the absence of an expected t (i.e. *irtn·sn*). In response, it might be noted that this text has a number of examples in which the t appears to have been omitted: Cf. note I above; rt. 6 (msn·i) and vs. 5 (mr nb s). See Herrmann, op. cit. 53-4. On dr-c cf. Egn. Gr. § 205, 3.

- (4) As the translation indicates, I see no reason to omit the plural strokes in $md \cdot wt$, which I take to be a feminine plural noun. The clause $nn \ md \cdot wt \ ntt \dots$ is parallel in function—but not in structure—to the earlier clause $n(n) \ mdt \ n \ mdt \dots$ Both 'without'-clauses modify the line 'What is found of another's, (that) is what will be said.'
- (5) I cannot be certain about the signs at the end of the line. See Adm. 99. I follow Gardiner in reading kirs ddrs, assuming s in the first case to be the 3rd person plural suffix and in the second the 3rd person singular (or perhaps plural), the latter presumably referring back to mdrwt. dd would be an infinitive. Thus: '... without words which they had thought of saying them.'
- (t) hhy pw r sh. Gardiner thought the sign under the k might be a t. It looks very much like the x sign (Egn. Gr. 3 Z9). Cf. Wb. 1, 21. Literally the sentence reads: 'A searching it is after ruin.' See Herrmann, op. cit. 54, for a somewhat different slant.
 - (u) nn sh3-ty-fy rn-f n kt-hy. For kt-hy, cf. Egn. Gr.3 § 98. See Erman, loc. cit.; Herrmann, loc. cit.
- (v) Gardiner (Adm. 99–100) took the phrase beginning with iww to have future reference. I doubt whether 'Ankhu is claiming any prescience; he is merely reporting his conclusions after examining the past. I view iww as a masculine plural of the perfective active participle. Cf. Egn. Gr. § 359 and Lefebvre, Gr. § 534.
- (w) Gardiner (Adm. 100) found this passage obscure. I regard sni (written sny) to mean 'to pass by', 'to surpass' in the temporal sense. Cf. Wb. 111, 455, 12. swit is a plural participle used nominally. The reference in the passage is to the survival of things from the past, presumably those things which he has consulted in the records.
 - (x) On the emphatic h_3 and the form of hmny, cf. Adm. 100. For hywy, see Egn. Gr. 3 \quad 98.
 - (y) For the form of tmmt, cf. Egn. $Gr.^3$ § 397, 1.
- (z) Gardiner's uncertainty (Adm. 100) about this passage stemmed from two assumptions. The first has to do with the verb win. It is clear—and becomes clearer still—that 'Ankhu is disturbed that his heart is not dependable as a support in his moment of need. He wishes to transfer his burdens from his own back to his heart. Erman, loc. cit., saw correctly that the motion was toward the heart rather than away from it, as Gardiner had supposed. I do not see any serious obstacle to reading the prepositional phrase n:f as I have.

The second part of the problem is that Gardiner was looking for a verb in the last clause that would parallel win. The entire clause hnw m sfn n wi acts as a modifier of the word itp, 'burden'. If we must regard sfn as a participle, as Gardiner (Adm. 100-1) did, then the n after sfn would be superfluous. I can offer no other explanation for it.

- (aa) m-c-f appears certain to me. The pronoun must refer to the heart.
- (bb) Gardiner (Adm. 100-1) translated srf as 'mood', but recognized that the question of 'relief' might be involved. Faulkner, Dict. 236 has examples of the word meaning 'relief', which accords nicely with the exclamation ih. Some of Faulkner's examples show this combination of determinatives. I take the thought expressed to be that by relating his burdensome thoughts to his heart, 'Ankhu would experience a sense of great relief.
 - (cc) See Adm. 101 on nkiy. The seated man seems to be an error. See, also, vs. 1; Egn. Gr. 3 § 325.
- (dd) Gardiner (Adm. 101) is probably right about the missing word-divider; the thought ends here.
- (ee) On hprw, 'transformations', in the religious literature, see W. Federn, JNES 19 (1960), 241-57; Faulkner, Dict. 189; Herrmann, op. cit. 49; Erman, loc. cit.
 - (ff) A pseudo-verbal construction employing hr + infinitive: Egn. $Gr.^3$ § 320.
- (gg) sh₃ = swh₃. The basic meaning is 'to fall apart': Faulkner, Dict. 237; Adm. 2, 11; Faulkner, $\mathcal{J}EA$ 50 (1964), 25; Herrmann, loc. cit. On dns...r.., cf. Faulkner, op. cit. 27.
 - (hh) I read $n \cdot i$ after hpr m hd. The translation is not entirely satisfactory to me, but I am at a loss

for something preferable. On hd, cf. Adm. 2, 12 and Faulkner, op. cit. 25; Herrmann, loc. cit.; Erman, loc. cit.

- (ii) I can make out no more of the end of the line than could Gardiner (Adm. 101).
- (ii) Cf. Eg. $Gr.^3$ § 450, 2.
- (kk) Adm. 102-3. On $m\underline{h}r$, see Faulkner, Dict. 116. For the forms of $\underline{h}nn$ and $\underline{w}nn$, see Egn. $Gr.^3$ § 440, I (imperfective $\underline{s}\underline{d}m\cdot\underline{f}$).
 - (11) I see what looks like a t under the sn, but can cite no parallel. Cf. Adm. 103.
 - (mm) Following Gardiner's restoration of irtiw (Adm. 102-3).
 - (nn) For ienw, see Adm. 103 and Faulkner, Dict. 11; Cf. Wb. 1, 41.
- (00) I am nearly certain it is an r which Gardiner could not make out very well (Adm. 102-3). I read r-twt.
- (pp) rdiw s; r may very well be the idiom 'put an end to' preferred in Adm. 103; I prefer to take it literally and concretely, as in the English expression 'to give the back to' meaning 'to reject' or 'deny'. See Herrmann, 50, for these two lines.
 - (qq) On disturbing the Lord(s) of Silence, cf. Peas. B1, 27.
- (rr) Gardiner (Adm. 103) had some trouble with this sentence. The first clause, nhpw hr hpr rr nb, describes the circumstances upon which the action of the second is dependent. Cf. Herrmann, loc. cit.
- (ss) The text is rather uncertain after r. Adm. 104 suggests $hr \cdot sn$ (for $hr \cdot s$) which is plausible. The idiom dir recurs in vs. 4. Cf. Egn. $Gr.^3$ § 450, 2: perfective $sdm \cdot f$ with present usage.
 - (tt) Following Gardiner's reading of stp (Adm. 104). Cf. Leb. 127-8.
- (uu) It seems to me that these two ideas are closely linked. On snni wi and whd sw, cf. Adm. 104. On hip ht·i hr·s, see Faulkner, Dict. 163.
- (vv) Gardiner originally translated: 'A brave heart in evil case is the companion(?) of its lord' (Adm. 104). In Egn. Gr.³ § 96, he changed it to: 'as for a heart (which is) brave in an evil case, it is the equal of its lord.' I have preferred a minor modification of the earlier version on the grounds that it better represents the substance of 'Ankhu's dismay over his heart's behaviour. Cf. Herrmann, op. cit. 51.
 - (ww) ib seems certain.
- (xx) m rh whdw, following Adm. 105. Cf. Lefebvre, Gr. §§ 409, 426, 728; Herrmann, loc. cit.; Erman, op. cit. 109–10.
- (yy) A kind of condition contrary to fact. On k_3 and the model $k_3 \dots k_4 \dots$, see Adm. 105 and Egn. Gr.³ \S 242.
- (22) Gardiner was reluctant (Adm. 105) to read $m_i(i)r$ after $md \cdot wt$ on the grounds that it would jar in meaning with the implication of the second of these two sentences. The traces are suggestive—albeit not conclusive—of $m_i(i)r$. The conflict in meaning is only apparent and hinges on Gardiner's translation of the second sentence. Erman, op. cit. 110, saw that the point of the passage is that 'Ankhu complains that his heart is no comfort to him; a companionable heart would be prepared to accept his burdens. See Herrmann, loc. cit., on rt. 13-14.
 - (aaa) On the enclitic particle m(y) after the imperative, cf. Adm. 105 and Egn. Gr. 3 § 250.
- (bbb) Gardiner (Adm. 105) confessed himself baffled by the phrase ntiw hd pth. Erman, loc. cit., translated: '... that are bright and lie outstretched.' The first point to be noted is that the clauses that begin with nty and ntiw are dependent upon whc. Thus seen, the clauses contain things the heart is asked to explain. The content of ntiw hd pth is that those things previously bright and flourishing no longer are. I understand pth to be an old perfective; ntiw hd is its subject. On ni nty, cf. Lefebvre, Gr. § 106, Obs., n. 2; 597.
 - (ccc) See note (cc) above; Egn. $Gr.^3$ § 450, 5 c.

- (ddd) Here I am inclined to prefer Gardiner's original instinct rather than the view of Sethe's which he settled for (Adm. 105-6). nhpw, 'morning', does not make much sense here. Furthermore, sw; suggests that what appears to be drdrw should in fact be read dr drtiw. The determinative, a seated, bearded man, lends weight to this view. It is just possible that the sun disk written at the end of nhpw is an error stemming from the presence of one in min just preceding. Like Gardiner, I assume an omitted subject under the influence of the anticipatory emphasis.
- (eee) I have avoided such English expressions as 'concerning it' or 'about it' because they can imply a conspiracy of silence which, I believe, is not the point 'Ankhu is making.
 - (fff) See Adm. 106 for Gardiner's shrewd point on shr.w c.
 - (ggg) See Adm. 106; Egn. Gr. 3 §§ 357, 365 (p. 282, top).
- (hhh) I am unable to improve on Gardiner's suggestion (Adm. 106) for ib n sny hr, except to suggest that the n need not be regarded as superfluous. It can be taken as the genitival adjective n(y). We would then understand the sny (dual suffix) to fit into the sentence as follows: ib n(y)-sny hr(w) 'the heart belonging-to-both-of-them is content.' Cf. Egn. $Gr.^3$ § 114, 2; Lefebvre, Gr. § 74.
- (iii) I cannot make out what is above the s. An r is possible and would fit. The sense is that bad conditions are ever-present and cannot be ignored or put out of one's head. See below, comments on vs. 4.
 - (jjj) Still further reference to the unceasing nature of the misery.
- (kkk) The two clauses beginning with hr clarify why conditions remain unchanged. Sethe's view (Adm. 106) that in both cases hr is a preposition is preferable. sni must mean something like 'to come to pass' here. I take $r \cdot s$ to be subsumed in the word 'transpire'. dri is not clear to me; 'stolid' seems to miss the point of the determinative which suggests something bad or forceful.
 - (Ill) nn (rk \$53) f. Literally: 'There does not exist a wise man, he knows.' Adm. 106.
- (mmm) Following Gardiner (Adm. 106-7). The passage is reminiscent of Ipu-wer's self-reproach that he did not speak out at the right time. See Adm. 6, 5; Wilson, $ANET^2$ 442.
- (nnn) This sentence contains several problems. Gardiner (Adm. 107-8) emended the unclear word to nhm on the analogy with the expression nhm msir m-c wsr $r\cdot f$ and assumed an omitted sw after nhm. 'Protect' is very likely the correct sense here, but I am troubled by the final $r\cdot f/rf$ and the emendation of four signs, including sw. On pl. 18 (Adm.) Gardiner allows that, following the word he thinks is to be read as nhm, we might have $t\cdot f$ rather than $r\cdot f$, an altogether likely reading. A solution which requires the least emendation would be: nn phty n ms(i)r $m[k]t\cdot f$ m-c wsr $r\cdot f$. mkt is an infinitive; f the suffix object. Both Gardiner and Erman (op. cit. 110) took $r\cdot f$ as a comparative: 'stronger than he'; rf as a particle would be difficult to understand here. It is, however, possible to regard wsr $r\cdot f$ as meaning 'one who is strong against him'. A literal translation would run: 'There does not exist strength for the weak man to protect him from one stronger than he' (or: 'one who is strong against him', i.e. one who attacks him).
 - (000) On hsf, 'to criticize', see Adm. 108.
 - (ppp) rkw, 'enmity': cf. Faulkner, Dict. 153.
 - (qqq) mr nb s tsw·f: Adm. 108; Herrmann, op. cit. 51 on vs. 4-5; see above, note (s), (3).
- (rrr) h3bb, 'crookedness': Gardiner, JEA 9, 11 n. 8; Adm. 108; Faulkner, Dict. 200; and JEA 50, 28; Wb. 111, 361-2; Herrmann, op. cit. 52 n. 1.
- (sss) Adm. 108, has 'Rectitude has abandoned speech (?).' I prefer to regard bt as a passive sdm·f and mty tsw as its subject.
 - (ttt) ph seems to mean 'to approach' here, in the manner of a petitioner.
- (uuu) Adm. 108 has 'Behold the affairs of a slave are like (those of) the master'. This does not seem to me to be quite consonant with the rest of the section. The writer has resumed his address to his heart; Gardiner seems to think the lamentation over conditions has resumed. I take the phrase $hr \cdot k$ to be the end bracket of a homogeneous section beginning with $dd \cdot i \cdot k$. The point is that the

writer is claiming that his heart has an obligation to hear him out, regardless of position. The last sentence resumes the earlier complaint (rt. 8, 13-14) about the heart's insensitivity. Cf. Herrmann, loc. cit.; Erman, loc. cit.

One naturally experiences a certain fear of over-analysing a twenty-line text, bearing a rather grand title, which was preserved on a schoolboy's writing-board perhaps as much as three centuries after its composition. Nevertheless, the extraordinary character of the piece has long been recognized and it merits further consideration. The author of this remarkable work, we are informed, was a certain wb-priest of Heliopolis, Kha-kheper-Rēc-senebu, familiarly called Ankhu. In P. Chester Beatty IV, a scribe, extolling the great writers of the past, refers by name to four pairs of these famous sages: Hor-dedef and Ii-em-hetep, Neferty and Khety, Ptah-em-Djehuty and Khakheper (-Rē)-senebu, Ptah-hetep and Ka-iris.² A similar, somewhat more extensive list of the great savants of the past—of about the same date—appears on a fragment of a relief preserved in a drawing by Daressy.³ There, Kha-kheper-Rē^c-senebu is linked, significantly, with that anguished speaker of the 'Admonitions', Ipu-wer, but is said to have been a lector-priest. While this does not agree with the evidence of B.M. 5645, it is understandable that later generations would attribute this title to a man known for the books he had written.⁴ Thus, as late as c. 1300 B.C., Kha-kheper-Rē^c-senebu was still known and admired.

Although, certainty, is not possible in the absence of any new evidence, it seems to me probable that the twenty lines preserved on B.M. 5645 represent but a fraction of the original work composed by Kha-kheper-Rēc-senebu. Because the work we have includes the title, some scholars have concluded that it represents the beginning of the original,⁵ in itself not an unlikely inference. It would be very difficult to believe that, in a society which set little value on the notion that brevity is the soul of wit, Kha-kheper-Rēc-senebu's reputation should have rested on so slender a foundation. No conclusions may be drawn from the fact that we neither possess nor know of any other work attributed to him.

It is also possible that the scribe who copied out the text on the writing-board played a role in shaping its structure. That is to say, he may have skilfully excerpted from the original to produce a short piece which could be viewed as a complete and unified work. Presumably this would have been in the form of an exercise. I can provide no example of this kind of thing being done in Egypt, so the suggestion remains purely hypothetical. A few points about the layout of the text are worth mentioning. The physical arrangement of the text on the writing board is somewhat curious. For example, the very short line of rt. 4 does not seem to have been dictated by any clearly discernible

¹ See below for a discussion of the date of composition.

² Alan H. Gardiner (ed.), Hieratic Papyri in the British Museum, 3rd series (London, 1935): 11. iii, 5 ff.; cf. translation by J. A. Wilson, ANET² 432; on the identity of the two Kha-kheper-Rē^c-senebus cf. B. van de Walle, La Transmission des textes littéraires égyptiens (Brussels, 1948), 32-3.

³ J. Yoyotte, BSFE 11 (1952), 69 ff., dates it to the late Eighteenth or early Nineteenth Dynasty.

⁴ So, too, Neferty (ll. 9-10) is called a lector-priest.

⁵ Both Herrmann, op. cit. 48 n. 4, and van de Walle, op. cit. 10 n. 2 and 32-3, believe we possess only the introduction.

principle. It does mark the end of a sentence, but not of a section. What follows it seems to be part of the flow of ideas in progress. It may be a seam in the fabric reflecting an omission of some material. The last sentence of the verso does not seem to contain a sense of an ending. Considerable space remained after vs. 6, a fact which might be explained in several ways. On the one hand, one might argue that this proves the scribe was merely cleverly epitomizing or, on the other, that it shows there was no more to the original than what we have here. The use of a writing-board is likewise ambiguous. It is not ideal for making a complete copy of a long work, especially if it is done to preserve the work. On the other hand, it would be an ideal tool for the scribe to work out an exercise in excerpting or in copying out a brief text in toto. In the latter case, if this were all there was to Kha-kheper-Rē^c-senebu's work, it would be a good piece to set a scribe for copying.

Be all this as it may, the following discussion is predicated on the assumption that, for purposes of discussion, the text of B.M. 5645 may be regarded as a coherent entity and that its content and structure can be considered without further regard to the question of its completeness. The text appears to me to divide analytically into eight sections of varying lengths. The first of these is the title (rt. 1). Right at the outset, we are confronted with the unusual. There is, for example, the hapax legomenon for 'gleaning' (kdf). More important, however, is the pair of clauses 'searching for phrases' and 'racking the brain', for they are not only uncommon, but also set the tone for a major portion of what ensues. This theme is picked up immediately in the second section (rt. 2 to the middle of rt. 6), which is an indictment of the sorry lack of originality among the contemporaries of Kha-kheper-Rēc-senebu. Nor does he spare himself. We are told how he has tried to purge his mind of all stale repetition. He is weary of this repetitiveness of his age and yearns for something new to say and fresh language with which to express it. To make matters worse, he says, those who drone out the same old stuff in the same tired language do not even acknowledge that they are presenting the work of earlier generations as their own. The formulation may be somewhat modern, but then so is the charge 'Ankhu is levelling at his fellows, namely plagiarism, itself a comparatively recent concept. It is hardly surprising, however, that someone in antiquity should have been so troubled by ceaseless reiteration that he would give voice to his dismay. There is no doubt that he finds it all quite reprehensible, for he declares: 'It is falsehood!' He thinks it can come to no good: 'It is courting ruin!' One cannot and should not claim credit for what is not original; writers who do this will not gain a lasting reputation. The very fact that Kha-kheper-Rē^c-senebu incorporates this sentiment into his work sets him off in bold relief.

The third section (mid-line of rt. 6 to end rt. 9) is a rather artful transition from this initial complaint to the introduction of the two themes that will dominate the remainder of the work, namely the fact and nature of his suffering and his inability to establish any kind of communication with his heart about it. Lest we should think that he is indulging in idle carping about the lack of originality, we are assured that his judgement proceeds from knowledge gained by scrutinizing the literary achievements

¹ See plate 33 for the lines added in this space.

of the past. But why does all this bother him so? The immediate answer is that he bears a great burden which is causing him great suffering. If he possessed new means of expression, he would be able to express and detail his anguish to his heart and thereby gain relief, presumably from the solace he would expect his heart to offer. The heart is introduced as an aspect of the individual which could be 'objectified' as a separate entity and with whom one can enter into discourse, like the potential suicide and his ba^{I} or the young girl of the love-poems,² and find a sort of companionship.

The first of two divisions beginning with the words 'I contemplate what has happened' constitutes the fourth section (rt. 10 through all but the last sentence of rt. 12). In terms reminiscent of those employed by Neferty, Ipu-wer and the Eloquent Peasant, Khakheper-Rēc-senebu explains the precise causes of his suffering: change, dislocation, injustice, and impiety. In very brief compass, 'Ankhu is able to paint a picture of a society in turmoil in which traditional constructs are not only not honoured, but are turned upside down.³ His appalled response is utterly Egyptian. The bitter irony is that there is nothing very original about his description of his times; that it is true and that he is aware of it lends a special poignancy to his opening lament and its echo in section three.⁴ Kha-kheper-Rēc-senebu has consciously devised a literary technique which sets him off as an extraordinary mind. In his composition, structure effectively organizes content, forcing the latter to serve the writer's conception.

The fifth section (last sentence of rt. 12 to end rt. 14) is designed to underscore 'Ankhu's misery. He cannot ignore conditions and he desperately needs someone to talk to about it. In an age when men either do not listen or violently reject others' opinions, the heart is a logical candidate for the role of confidant. But his heart is consistently unresponsive. It does not minister to his needs by taking up his burdens. 'Ankhu states the desiderata for a good heart in the form of 'condition contrary to fact' statements of what he would do if he had a heart willing and able to suffer and assume the weight of his suffering. The passage constitutes a list of characteristics desirable in a friend.

Section VI (vs. 1 minus the last two sentences) is a rather brief one and contains the first direct address to the heart. He summons the heart, asking it to explain all these troublesome and unparalleled events which are at the root of his anguish. The heart's failure to respond is only a secondary source of aggravation. It is explanation which will alleviate his pain, first because it will help to comprehend what is going on and secondly, because it will get him a response of some sort from his heart.

To emphasize his troubled state and to amplify, for the heart's benefit, his earlier enumeration of contemporary ills, 'Ankhu launches into a seventh section (end vs. 1 through all but the last sentence of vs. 5). Like the fourth, it begins with the phrase 'I contemplate what has happened'. This is a somewhat longer rehearsal of the troubled conditions, although it falls far short of the mind-battering detail of Ipu-wer's outpouring. The extent of the troubles is unparalleled. Wrong-doing is pervasive. Everyone is depressed; it is impossible to talk to people about it, either because they are

¹ See above, p. 77 n. 2. ² Chester Beatty I, vs. C2, 9-vs. C3, 4.

³ Particularly like Ipu-wer and Neferty.

⁴ See below, for discussion of its relation to other texts; cf. Adm. 110.

fearful, angry, or too self-centred. Action to rectify the situation seems even less likely. Once more, we get a picture of a divided society rejecting or ignoring traditional values.

The last section is a second appeal to the heart, this time in a tone that is both demanding and pleading at the same time. He goes so far as to accuse the heart of contributing to his unhappiness. Like the Eloquent Peasant, 'Ankhu resorts to accusation when petitioning fails to achieve his ends. And there, regardless of how we might speculate about what might have ensued, the text ends.

I would offer only a few more general thoughts on this work here. The art of Khakheper-Rē^c-senebu is most apparent in his ability to weave a fabric in which content and structure are so consciously tied together. The structure emphasizes and, in a sense, illustrates what the author wishes to convey to us. Not only are we told the things which make 'Ankhu unhappy, but each is then elaborated upon. If the conditions of the time are disturbing, they are specified. If the lack of new means of expression and new things to say about those conditions creates a sense of failure in the writer, then this is made manifest in the way in which his complaints are expressed.

To accomplish this, Kha-kheper-Rēc-senebu skilfully blends the familiar and the unfamiliar. A number of scholars have made note of the ideas and phrases contained in this work which remind one of very similar material in other important literary works of that age, such as the 'Eloquent Peasant', the 'Dialogue between the Man and his Ba', the Prophecy of Neferty and the 'Admonitions' of Ipu-wer. The use of such ideas as the bearing of burdens, suffering, dialogue with the inner self, the reversal of normal conditions, the prevalence of wrong-doing, the difficulty in speaking out or taking action, may be found in this genre. We are engaged by the familiar and when that happens, 'Ankhu's point is made. He has, with one important exception, said nothing new. One could very likely conduct a more exact comparison than I have done, but it seems unlikely that any evidence will be found that 'Ankhu lifted phrases verbatim from the other works we possess, especially a work such as that of Neferty, which is most likely to have been composed earlier than the text of B.M. 5645. There is the hapax legomenon, the familiar lexicon, used perhaps a bit more metaphorically, and the subject matter—all in that 'familiar language which the ancestors spoke'—; vet Kha-kheper-Rēc-senebu is effectively showing his reader that his initial complaint is justified; he can handle the familiar themes with only the slightest variation in language.

The unfamiliar makes its appearance in 'Ankhu's self-conciousness. Where else in Egyptian literature do we encounter a writer able to recognize the limitations in himself and his contemporaries? Where else do we meet an Egyptian who laments his inability to break the pattern of obedience to past models? 'Ankhu's uniqueness lies in his awareness that he is not unique in what he has written and how he has written it. This attitude may, of course, have applied to only one phase in his career. Surely this in itself is remarkable.

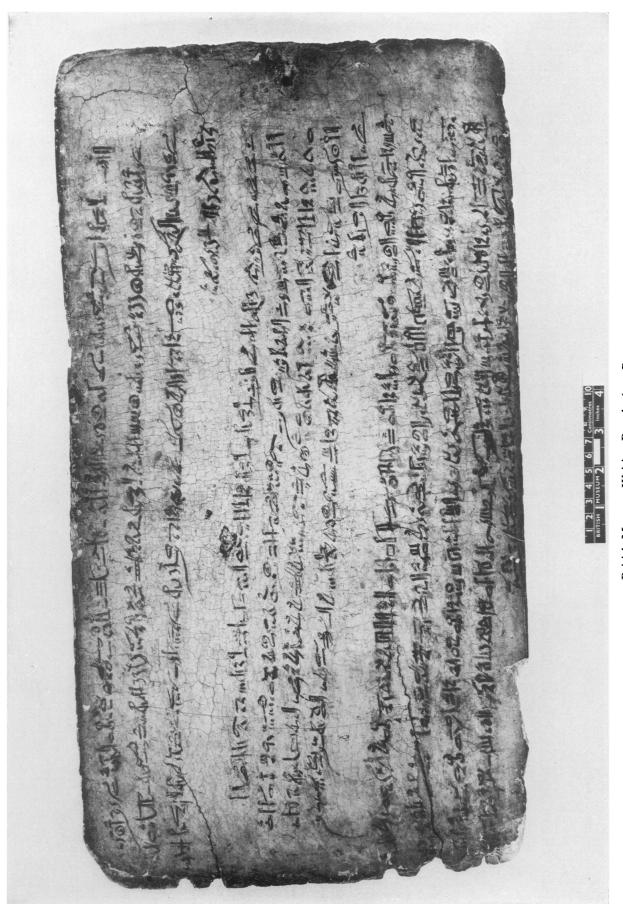
¹ Adm. 17-18, 110-12; Gardiner, JEA 1 (1914), 100 n. 2; Herrmann, op. cit. 48-54 et passim; Goedicke, op. cit. 3, 14.

Perhaps the most interesting aspect of Kha-kheper-Rēc-senebu's mind is that he illustrates an essentially 'historical' aspect of the mind of the ancient Egyptian. What he has witnessed and what he laments he has measured against what he has learned of the past from the inspection of the remains of the past. On the one hand, he is terribly unhappy over the social and political changes that have taken place. They are basic alterations which he regards as morally unacceptable. But he is no slave to the past in other ways. He wishes for fundamental changes in literary expression. He knows it has all been done over and over again in the same shop-worn ways. He is not advocating a return to some ideal style and mode of discourse set down at the beginning and valid for all time. He cannot break the old pattern; he has tried to show us just how little he is able to do that. But—and this is important—he wishes he could. He is sensitive enough to see the problem; his tragedy is his lack of the creative imagination necessary to do what must be done. The fame of his work may have rested on that insight. Perhaps in some other work, he was able to succeed. We may never know. The very fact of the complaint and the form it took from 'Ankhu's reed pen secure his place as one of the most interesting minds preserved for us from pharaonic Egypt.

The question then arises whether this lament is the real subject of the piece. One could easily defend the position that the subject of the original work was, like the 'Admonitions', an indictment of the evil times in which the author would be assumed to have lived. In that case, the complaint about the lack of originality would merely be a rather elaborate way of saying that circumstances are so bad that a sensitive person is at a loss for words to adequately describe them. Without the rest of the work (if more existed), it is difficult to be sure. An uneasy compromise seems to me to require saying that this last interpretation is not really in conflict with the earlier discussion, that Kha-kheper-Rēc-senebu was distressed by what was going on and used his inability to find peace of mind as a vehicle to display the inadequacy of his verbal skills. To some extent, this depends for its acceptability on the date of Kha-kheper-Rēc-senebu.

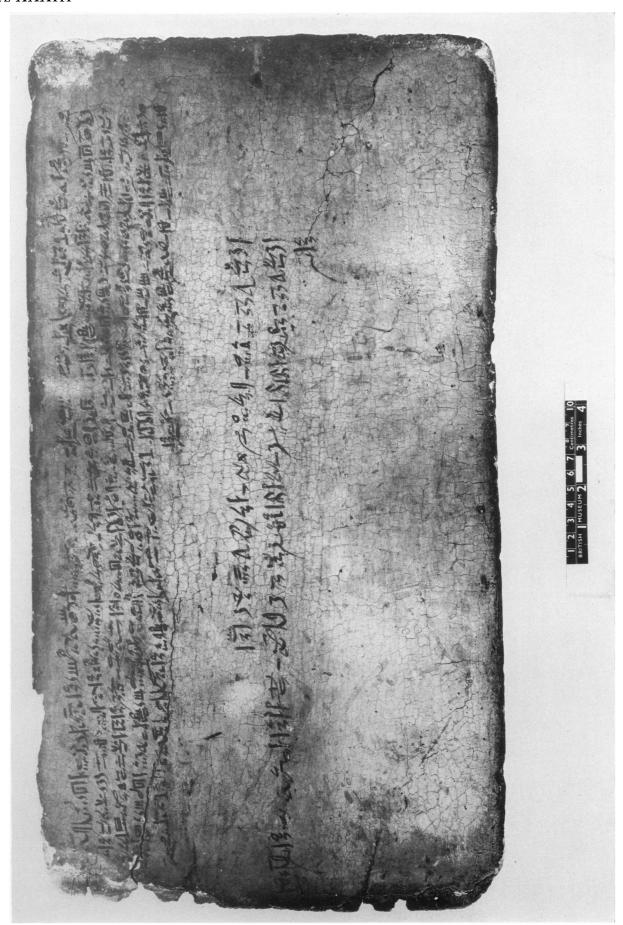
I do not propose to undertake here the detailed discussion of the comparative chronology of Middle Egyptian literature which I think would be necessary to arrive at a date for the original composition of this work or to date 'Ankhu himself. I would, however, make one observation. I find the most telling point of van Seters's argument for placing the 'Admonitions' in the Second Intermediate Period in his perception of a sense of immediacy which emerges from the narrative; the other points have varying force. (In any case, he hardly needs the 'Admonitions' to prove anything about the Hyksos; his archaeological data are much more impressive.) There remains the question of how to deal with this sense that the writer is, in either case, a contemporary of the events and conditions described. In the past, in the case of the 'Admonitions', the argument was that the writer, living under the new stable reign of Ammenemes I, was describing the events of the immediately preceding period through which he had

¹ J. van Seters, *The Hyksos* (New Haven and London, 1966), 103-20. I remain unpersuaded that Ipu-wer belongs in the Second Intermediate Period.



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himself lived. The present tense of the narrative would, in this view, be explained solely as a literary device designed to enhance realism.

Whatever the truth of this view, it can hardly be applied to Kha-kheper-Rē^c-senebu. His name, compounded as it is with the praenomen of Sesostris II, provides a terminus post quem,¹ before which he could obviously not have lived. This leaves us with two alternatives: either place the work in the period following the end of the Twelfth Dynasty as van Seters has done with the 'Admonitions', or assume that the sense of immediacy referred to above is largely subjective and that Kha-kheper-Rē^c-senebu was writing in an art form (Gardiner called it the historical romance,² a regrettable term) which was already far removed from the events which gave rise to the class of sentiments expressed in the various works of the genre.

The only information that can be brought to bear on this matter comes from two sources. The first is the occurrence of the name Kha-kheper-Rē^c-senebu as that of the owner of a coffin of one of the nomarchs at Meir whose 'good name' was Iy.³ The date for this individual is difficult to establish, but seems likely to fall in the second half of the Twelfth Dynasty. The second datum is the appearance of the name Kha-kheper-Rē^c-senebu in Pap. Kahun XIV which, as van Seters has pointed out,⁴ is to be dated to the reign of Ammenemes III. Neither item serves to settle the question, and I can offer no other procedure for making a determination of the date of composition. On balance, I am inclined to believe that the text of B.M. 5645 represents a literary composition of the latter part of the Twelfth Dynasty reflecting the tradition of those texts which can with ease be assigned to the late First Intermediate Period and the early Twelfth Dynasty.

One can only lament the fact that we possess no more of the work of this remarkable man.

Postscript

After completing the above article, I had occasion to read a paper by Dr. Barbara Bell (American Journal of Archaeology 75 [1971], 1-25), an astronomer at the Harvard College Observatory, in which an attempt is made to re-examine the texts of the end of the Old Kingdom and of the First Intermediate Period in the light of climatological considerations. Dr. Bell concluded that the breakdown of political and social coherence in these periods resulted from prolonged drought and resultant famine with which the authorities were unable to cope.

I do not propose to undertake here the serious appraisal Dr. Bell's work merits, although, aside from a number of specific doubts I entertain, I do believe she has made a significant contribution to the historical interpretation of the circumstances of that era; previous explanations have never seemed to me to be fully satisfactory. Dr. Bell's views do, however, have some potential relevance to the discussion of the Kha-kheper-Rē^c-senebu text.

I indicated in the above article that, like van Seters with the Ipu-wer text, I detected a sense of immediacy in Kha-kheper-Rē'-senebu's distraught state, something rather difficult to square with apparent peace and prosperity of the later Twelfth Dynasty. Assuming for the moment that the author is not merely aping a literary genre and that the dating I have suggested is likely, the answer

¹ Adm. 111; van Seters, op. cit. 104 n. 28.

³ PM IV, 254; Kamal, ASAE 14 (1914), 75-7.
⁴ van Seters, op. cit. 104 n. 28.

may indeed lie in a point Dr. Bell has made to me in a letter, namely that there is the possibility of 'excessively high floods' in the reign of Ammenemes III. The very vague statements of Khakheper-Rē^c-senebu could find their genesis in the aftermath of serious flooding as well as in drought. I do not see any terms in the text which lead to a climatological explanation independent of external information, but the possibility that that was the case is very attractive, especially since it lends some weight to the dating of Kha-kheper-Rē^c-senebu.

A WHEEL HUB FROM THE TOMB OF AMENOPHIS III

By A. C. WESTERN

In February 1915 Howard Carter, working for Lord Carnarvon, cleared the interior of tomb 22 (Amenophis III) in the Valley of Kings. Although he did not publish a full report of this excavation, Carter described one of the more interesting finds, the fragmentary nave and spokes of a chariot wheel, in some detail in *The Tomb of Tut-ankh-Amen*. In 1923, after Lord Carnarvon's death, Almina, Lady Carnarvon, presented this wheel fragment to the Ashmolean Museum, where its intricate construction and excellent joinery have continued to arouse interest, particularly since a drawing was published by Gordon Childe in *A History of Technology* (see pl. XXXIV). As Carter argued, the wheel was probably made about a quarter of a century before those placed in the tomb of Tutankhamūn and in its fragmentary state offers an excellent opportunity to study details concealed by sheet-gold on the complete wheels from this tomb. With a view to an even better understanding of the wheel's construction the two woods used in making the nave and spokes were recently sampled and identified.

The wheel is constructed in a very unusual way, since the spokes also form the major part of the nave (see fig. 1). They were made of battens about 4×6 cm. in thickness, of unknown length, bent into a 60° angle at the mid-point, probably by heat. The surplus wood of the inner and outer sides of the V thus formed was then cut away. The wheel has six spokes, each consisting of two halves of the V-shaped battens, carefully joined together longitudinally between nave and felloe, and bound with rawhide. There is no sign of any transverse joint in the spokes, and it seems likely that the timber of each spoke extended continuously from felloe to nave to felloe. This means that each batten is likely to have been at least one metre in length. The timber used for the nave was a species of *Ulmus* (elm).

In order to keep the wheel upright, and at right-angles to the axle whatever stresses were placed upon it when travelling over uneven ground, a separate cylindrical flange was fitted on to each side of the nave, and slotted into mortices in the nave by means of dove-tailed tenons (see fig. 2). The axle, of which we have no remains, then passed through the flanges and the nave. The timber used for the flanges was a species of *Tamarix* (tamarisk). They were made by hollowing out billets of Tamarisk wood about 14 cm. long and 10 cm. in diameter. An investigation of the pattern of the medulary rays shows that while one flange was hollowed out more or less centrally, removing

¹ Porter-Moss, Top. Bibl. 1 (2) (1964), 547-50.
² II, 57-9.

³ Accessed as 1923-663; surviving length of nave 29 cm.

⁴ I (1954), 211, fig. 132 (edited Singer).
⁵ H. Carter, op. cit. 58.

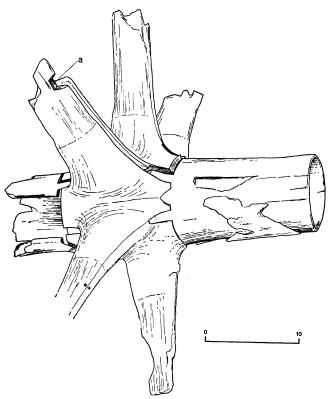


Fig. 1. Spoked wheel showing point from which sample of *Ulmus* was taken (a), and bent structure of spokes. Note also triangular tongue keying between nave and flange. (Scale $\frac{1}{4}$.)

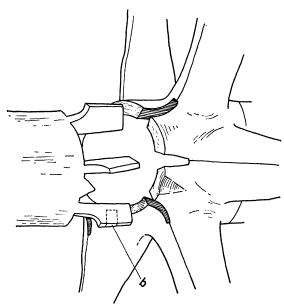


Fig. 2. Expanded diagram of wheel showing mortice and tenon joints between nave and flange, and sample point of tenon of *Tamarix* (b). (Scale $\frac{1}{3}$.)



Wooden spoked wheel from the tomb of Amenophis III, now in the Ashmolean Museum, Oxford. The cylindrical flange for the axle is 13 cm. long. Courtesy Ashmolean Museum

most of the heart-wood, the other cylinder was cut from the radius of a half-branch, as the pith-point or centre of growth lies outside the circle of the flange. It is a common feature of tamarisk wood, which frequently does not grow to a large diameter or tend to develop a main trunk, that its branches will produce a quantity of tension wood and the pith-point or mid-point of the growth rings will be as much as 75 per cent off centre. Neither of these cylinders would have needed a branch much, if any, thicker than about 14 cm. in diameter.

The use of elm is of particular interest for two reasons. It is a twisted and wavy-grained timber almost impossible to split or cleave, and has therefore been generally preferred by wheelwrights of Europe and Western Asia for wheel hubs until the modern use of metal wheels. It can withstand the shocks and strains imposed on the nave by heavy weights and uneven ground. This suggests that wheels of this kind were designed by people accustomed to using timber, and experienced in choosing woods suited to particular purposes. On the other hand, elm does not seem a good choice for the spokes, owing to its twisted grain, and it is a little surprising that it should have been used for a wheel of this design.

The second point of interest is the source of the timbers used. The question whether the wheel was assembled in Egypt, using native or imported timber, or was perhaps made elsewhere and carried to Egypt either as part of a do-it-yourself assembly kit, or as a whole chariot, cannot be considered in detail here. But some suggestions as to the possible sources of the timbers may contribute to discussion of this question. It seems probable that spoked wheels such as this example were devised by people knowledgeable about the working properties of timber, and with a good choice of local material. It has often been suggested that the most likely region for such a development was within the arc of foothills and mountains running through Anatolia, northern Syria and northern and north-eastern Iraq. Certain species of both *Ulmus* and *Tamarix* are recorded for these regions at the present time.¹

Ulmus is a genus that is not, and almost certainly never could have been, native to Egypt. But there are a number of indigenous species of Tamarix. If the wheel was locally made, the elm at least must therefore have been imported. The species used cannot be definitely determined, but is likely to have been either Ulmus procera Salisb. or U. nitens Moench. The timber of Ulmus is somewhat similar to that of Zelkova of the same family, but after lengthy consideration this genus has been rejected in favour of Ulmus. In passing, it may be worth noting that the late L. A. Boodle of the Royal Botanic Gardens, Kew, hesitated in the same way over specimens from a chariot wheel from the tomb of Tutankhamūn sent to him by Howard Carter, and he also decided in favour of Ulmus nitens Moench.² The species of Tamarix used is clearly not T. articulata Vahl, but compares with the T. jordanis Boiss. type.

Comparable material so far botanically identified seems to be restricted to two specimens. The hub of the wheel of the chariot in Florence has been identified by

¹ P. H. Davis (editor), Flora of Turkey, II (1967); E. Boissier, Flora Orientalis, IV (1879); Ali Al Rawi, Wild Plants of Iraq (1964); and G. E. Post (edited J. E. Dinsmore), Flora of Syria, Palestine, and Sinai (1932).

² Carter Archive, Griffith Institute, Oxford.

Ugo Fasoli¹ of the Florence Botanic Gardens as *Ulmus campestris*, but as he gives no authority it could be *U. campestris* L., which is partly synonymous with *U. nitens* Moench.² The other example is that identified by Dr. L. Chalk, which was the spoke of a wheel from a chariot in the tomb of Tut^cankhamūn, which he found to be *Ulmus sp.*³

Acknowledgement

I wish to record my thanks to Dr. P. R. S. Moorey for advice, and to Mrs. P. Clarke for line drawings.

- ¹ G. Botti, 'Il carro del sogno', Aegyptus 31 (1951), 197.
- ² L. H. Bailey, Manual of Cultivated Plants (revised edn. 1949).
- ³ L. Chalk, Dept. of Forestry, Oxford, 9th Ann. Rep. (1932-3), 9.

ZUR OPFERLISTE AMENOPHIS' IV. (JEA 57, 70 ff.)

Von W. HELCK

Im 57. Band dieser Zeitschrift haben Ramadan Saad und Lise Manniche einen Block aus dem 9. Pylon zu Karnak mit einer Opferliste Amenophis' IV. veröffentlicht. Dazu erlaube ich mir, einige Bemerkungen anzuschließen, die möglicherweise die Benutzung dieser Inschrift erleichtern.

- 2. Bei der Übersetzung der eigentlichen Eintragungen in die Opferliste ist die Form, nach der solche Aufstellungen vorgenommen werden, nicht eindeutig getroffen. Betrachten wir als Beispiel etwa die erste Eintragung (Kol. 4/5, Zeile 1) so kann 🚉 🏃 ନିନ୍ନ | የሮ nicht aufgelöst werden zu 'cbit-loaves: 240 (measures containing) 60 hekat', sondern nur zu 'bit-Brote, Backverhältnis 60 (Einheiten auf eine oipe), 240 (Stück)'. Dabei ist einmal die Zeichengruppe, die hinter der Bezeichnung der Brotart und vor der ersten Zahl steht, nicht, wie es die Verfasser anscheinend meinen, als eine Schreibung für heqat (1) anzusehen, sondern als eine Ligatur zwischen (1) (fs 'Backverhältnis') und poipe. Es liegt hier eine verkürzte Schreibung für diejenige Art von Backverhältnis 10 auf eine oipe, Stück 20' (Medinet Habu III, pl. 142, Zeile 193). Das 'Backverhältnis' ist diejenige Menge Brote einer bestimmten Art, die aus einer oipe Getreide gebacken werden kann; damit ergibt sich die Größe der betreffenden Brotart. Beim Bier bedeutet fs 'Brauverhältnis', d. h. wieviele ds-Krüge Bier mit aus I oipe Getreide gebackenen Braubroten hergestellt werden können; damit ist die Stärke des Bieres angegeben. Je niedriger diese Verhältniszahl, desto größer sind die Brote und desto stärker die Biere. Im oben gegebenen Beispiel der Inschrift Amenophis' IV. werden also aus 1 oipe Getreide 60 derartige bjt-Brote gebacken; für die zu opfernden 240 Stück bracht man also 4 oipe gleich 1 Sack Getreide.

Dies führt zur Frage der Maßangaben bei Getreide und ihrer Benutzung in den einzelnen Epochen. Wie die Abusir-Papyri und die Heqanacht-Briefe erkennen lassen, wurde im Alten Reich und in der 11. Dynastie mit einem heqat (: 4,785 1) gerechnet, von dem 10 auf eine nächsthöhere Einheit gingen. Der Name dieser höheren Einheit

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ist nicht belegt, dürfte aber wohl schon der 'Sack' (hir) gewesen sein. Man erkennt in den Abrechnungen (e.g. Abu Sir Pap., pl. 38) die hegat daran, daß sie durch Punkte angegeben werden, die höhere Einheit an der Schreibung mit den 'normalen' Zahlzeichen. Hierbei wird das hegat mit dem Zeichen en geschrieben. Im Mittleren Reich ist jedoch die Schreibung d bzw. hieratisch) u (vgl. Siut, 1, 279; Bauer, R 5; Pap. Boulaq, 18, 47; Pap. Rhind, 44; 82, 6. 7) bzw. [2] (Pap. Kahun pl. 30, 41). Am Ende des Mittleren Reiches¹ wird daneben ein Doppel-hegat eingeführt in der Schreibung (Pap. Rhind 82, 11; Pap. Kahun 15, 65/7; pl. 20, 217. 9); auch von diesem gehen 10 auf eine nächsthöhere Einheit, die wohl auch der 'Sack' war (vgl. Pap. Kahun, 22, 14; Griffith, PSBA 14, 429). Im mathematischen Papyrus Rhind wird endlich mit einem vierfachen hegat gerechnet, von denen 5 auf die höhere Einheit gerechnet werden, sodaß diese gegenüber der Rechnungseinheit aus 10 doppelten hegat gleich bleibt. Mit der 18. Dynastie tritt die letzte Änderung im Getreidemaßsystem ein, als jetzt ein Vierfach-hegat erscheint, von dem nur noch 4 auf die jetzt sicher als 'Sack' belegte nächsthöhere Einheit gehen; dieses Vierfach-hegat erhält den Namen ipt 'Maß', griechisch oipe. Dieses Maßsystem ist im Neuen Reich innerhalb der säkularen Abrechnungen allgemein benutzt worden; schon in der Verkaufsurkunde der Königin Ahmesnofretere wird Getreide von 400 oipe (() angeführt. Dabei wird jedoch auffallenderweise nicht in Sack umgerechnet. Mit dem Dattel-Papyrus Louvre 3226 treffen wir die Rechnung nach 'Sack zu vier oipe' eindeutig an; die Schreibung ist dabei in diesem Papyrus wie auch späterhin (Pap. Petersburg, 1116A vso 17. 81. 105 et pass.; RAD 11a, 15; 12, 10; 17a, 6. 11, aber auch bereits auf Rückseite des math. Pap. Rhind in einer Notiz, in der auf der Basis 1:00 hg; t, < : 50 hg; t etc. gerechnet wird, vgl. Gardiner, Grammar, § 266 Mitte) hieroglyphisch erscheint der 'Sack zu vier oipe' Urk. IV, 667, 14 in der Schreibung im ft. Gegenüber der gewöhnlichen Rechnung des Neuen Reiches nach der oipe finden sich aber in bestimmten Fällen auch noch Rechnungen nach dem einfachen hegat. Das ist einmal Urk. IV. 429, 11 f., wo Gold zunächst in normaler Form nach Gewicht in dbn abgerechnet wird und das dann umgesetzt wird in hq_{j} ·t, 'gemessen nach dem hq_{j} ·t des Amuntempels'. Myrrhen rechnet man weiter nach einfachem $hg \rightarrow t$ (h) (Urk. IV, 702, 5; 720, 7), jedoch Urk. IV, 756, 11 anscheinend nach oipe (: D). In einer Opferliste Thutmosis' III. (Urk. IV, 761 ff.) rechnet man Anlieferungen an Weihrauch, Honig, Früchten in hq: t um, einmal Früchte in 'Doppel-hq: t' ()). Auch in der Inschrift aus Semneh, die eine Erneuerung einer Stiftung des Mittleren Reiches durch Thutmosis III. darstellt, rechnet man anzulieferndes Getreide in hq: t ab (1). In diesen Fällen ist jedoch bezeichnend, daß man nicht in 'Sack' konvertiert. Dabei befinden wir uns jetzt im Bereich der Opferlisten, also des kultischen Bereichs, in dem eine konservative Haltung, auch Maßangaben gegenüber, verständlich ist. Dies zeigt sich nun ganz besonders bei den Angaben für 'Backverhältnisse'. Diese werden bis mindestens in die Zeit Thutmosis' IV. nach hg: t und nicht nach oipe berechnet, wie die Opfer-

¹ Zum möglichen Auftreten des Doppel-hq. t bereits in den Briefen des Heqanacht vgl. James, The Hekanakhte Papers, 64 (anders Cenival, RdE 15, 142).

listen Urk. IV, 177 (Thutmosis III.), 1341, 10 (A, Amenophis II.), 1553, 9 ff. (A Thutmosis IV.), 1952 (Privatopferliste eines Nfrw) anzeigen. In der zuletztgenannten Liste des Nfrw, deren zeitliche Zuordnung allerdings nicht sicher ist, erscheint daneben einmal bei Bier eine Angabe des Brauverhältnisses in der Schreibung en. Diese Schreibung tritt dann aber seit Echnaton auf: Für Echnaton ist die hier vorliegende Liste anzuführen, für Haremheb Urk. IV, 2131, 8/9 (= 3,0), für Ramses II. die Opferstele ASAE 10, 153 (: BMM 15, 1956, p. 84), und endlich für Ramses III. die große Inschrift von Medinet Habu (). Dabei unterscheidet man in der Ramessidenzeit : :: oipe und n: Sack. Die Berechnungen zeigen eindeutig, daß wir es hier mit der oipe zu tun haben, von der 4 auf den Sack gehen. Denn dort, wo in der Opferliste von Medinet Habu das 'Backverhältnis' auf in, also 4 oipen bezogen wird, ergibt sich aus der Summenberechnung, daß damit der 'Sack' gemeint ist. Wir dürfen also annehmen, daß der Wechsel von den Angaben für die 'Backverhältnisse' und auch bei sonstigen Berechnungen innerhalb der Opferlisten angibt, daß man jetzt, etwa seit Amenophis IV., auch in den kultischen Inschriften mit dem in zivilen Bereich schon lange benutzten oipe-Maß (= Vierfach-hg:t) rechnet.

- 3. Kol. 4 Eintragung 5 ist kein 'Weißbrot' registriert, wie in der Übersetzung angegeben, sondern ein nfr-hz-tj-Brot, das mir allerdings sonst unbekannt ist.
- 4. Kol. 4 Eintragung 6 ist nicht zu übersetzen 'ksw-cakes white bread', sondern wahrscheinlich 'Früchteweißbrot'. qsw (!) ist nach der älteren Schreibung, etwa in Urk. IV, 770, 9 () wohl mit dq·t 'Frucht' gleichzusetzen. Dieses Brot ist in den Opferlisten sehr häufig belegt. Diese Bemerkung gilt auch für Kol. 10 Eintragung 2.
- 5. Kol. 5 Eintragung 8 ist 'Bier in ds-Gefäßen, Brauverhältnis 20, 12 (!) Stück' zu lesen, wie sich aus der folgenden Bemerkung ergibt.
- 6. Kol. 6/7 sind die Eintragungen 2 und 3 als Summierung zu lesen, wie ein Vergleich mit der Medinet Habu-Liste erkennen läßt. Auch dort wird nach Abschluß der Aufzählung der Brote und Biere eine Zwischensummierung durchgeführt, ehe die anderen Lebensmittel aufgeführt werden. Die Bezeichnung ist in beiden Fällen die gleiche: 'verschiedene Brote des Gottesopfers'. Die hier genannten 12 ds-Krüge Bier sind die gleichen, die in Kol. 4/5 Eintragung 8 stehen. Daher wird auch Kol. 6/7 Eintragung 3 kein 'Brauverhältnis' angegeben, weil es sich um eine 'Summierung' handelt.
- 7. Kol. 6/7 Eintragung 5 ist zu übersetzen: 'Früchte, in \(\cdot -\nabla\) Räpfen (gemessen), 12 (\(\cdot -\nabla\) auch hier scheinen die Übersetzer anzunehmen, es wäre 1 \(\cdot -\nabla\) Napf gemeint, der 12 nicht genannte Maßeinheiten umfasse; dies ist nicht möglich.
- 8. Kol. 6/7 Eintragung 6 ist zu übersetzen: 'Gemüse: 4 hrš und 1 htp·t', und nicht 'herbs, 1 bundle (containing) 4 bundles'. hrš und htp·t sind zwei nebeneinander benutzte Einheiten für Gemüse, wie wieder die Medinet Habu-Liste deutlich zeigt.
- 9. In Kol. 13 ist mit Sicherheit [[] [] [] [] [] [] zu ergänzen; die in der Umzeichnung gegebenen angeblichen Randspuren eines Zeichens sind nur die Schatten des Bruchs der Oberfläche. Die Anm. 1 der Verf. auf p. 72, in denen sie sich gegen diese Lesung wenden, ist nicht stichhaltig, da šw·t-Rc ja auch außerhalb der Amarnazeit vorkommt, e.g. Urk. IV, 497 (Hatschepsut). Außerdem dürfte diese Bezeichnung auch

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in *Urk*. IV, 1991, 14, einer Opferliste auf zwei Amarnablöcken, die zusammengehören, zu ergänzen zu sein (und nicht das von mir dort gegebene [hw·t n] P3-Rc!).

10. Die Verf. halten diesen Block für 'unique', indem sie die Opferlisten auf den 'kleinen' Blöcken (talatat) in einer Anmerkung beiseitelassen. Ich möchte jedoch darauf aufmerksam machen, daß der von mir Urk. IV, 1990, Nr. 750 veröffentlichte Block einer Opferliste Amenophis' IV. zu den 'großen' Blöcken gehört. Leider ist dieser Block zwischen 1965 und 1967 zusammen mit anderen recht interessanten Fragmenten, die zwischen dem 9. und 10. Pylon lagerten, verschwunden. Hoffen wir, daß er in eins der normalen Sterblichen unzugänglichen Magazine des Karnaktempels gebracht worden ist.

Abschließend möchte ich meine Übersetzung des Blockes vorlegen:

Es befahl S.M., Gottesopfer neu zu stiften seinem Vater 'Re-Harachte, der jubelt im Horizont in seinem Namen Schu, welcher] die Sonnenscheibe ist', auf den Sonnenaltären von Memphis bis Sm3-bhd·t. [Gottesopfer,] gestiftet vom König von O.u.U.Ä. Nfr-hprw-Rc-wc-n-Rc für seinen Vater als tägliches Opfer in Memphis:

```
bit-Brot
                 Backverhältnis 80 auf die oipe 140 (Stück)
psn-Brot
                                                87
Weißbrot
                                                12
wdn·t-Brot
                                                12
nfr-h3·tj-Brot
                                16
                                                12
Früchteweißbrot
                                80
                                                14
Bier, ds-Krüge
                Brauverhältnis 12
                                                12
Bier, ds-Krüge
                                                12
šrjj·t-bj·t-Kuchen Backverhältnis 20
                                                 4
                                    zusammen 379 Brote
                                               34 ds Bier
```

```
Weihrauch <-Schalen
Milch
                       2 hin
Früchte
          r-Schalen
Gemüse
           hrš
                       4
           htр
                       1
gewöhnliche Vögel
Brandopferaltar
                       2
Bronze, tnj-Schale
                       I
Bronze, hsw-Napf
                       1
Bronze, Ständer
                       T
Bronze, Räucherarm
                       I
Bronze, nmśt-Krug
```

Opfer, die der Herr für Neujahr geweiht hat: 2 Opferständer. Was darauf ist:

```
Weißbrot in 2 Körben Backverhältnis 2 1/2 auf die oipe macht 10 Weißbrote wdn·t-Brote in 2 Körben ,, 25 ,, ,, ,, ,, 10 wdn·t nfr-hstj-Brot ,, 20 ,, ,, ,, ,, 2 (Stück) Früchteweißbrot ,, 20 ,, ,, ,, ,, 2
```

```
Bier, jnh·t-Krüge Brauverhältnis 5 auf die oipe macht 2 (Stück)
Weihrauch, Körbe 2 ,,
Früchte, Körbe 2 ,,
Wein, Amphoren 2 ,,
gewöhnliche Vögel 2 ,,
```

Opfer, die S.M. seinem Vater 'Re-Harachte, der im Horizont jubelt, in seinem Namen Schu, welcher die Sonnenscheibe ist' gestiftet hat als tägliches Opfer im Sonnenschatten, welcher in Memphis (?) ist:

```
bjt-Brote Backverhältnis 60 auf die oipe 240 (Stück)
psn-Brote ,, 40 ,, ,, ,, 87 ,,
Bier, ds-Krüge Brauverhältnis 20 ,, ,, ,, 30 ,,
Früchteweißbrot [. . .
. . . [. . .
[. . .
[. . .
gewöhnliche Vögel [
W[ein . . .
[. . .
```

THE GREAT ENCHANTRESS IN THE LITTLE GOLDEN SHRINE OF TUT'ANKHAMŪN

By KATE BOSSE-GRIFFITHS

THE little golden shrine is one of five objects of the treasures of Tut'ankhamūn with pictures of the King and Queen in Amarna style. The others are the golden throne, an ornamented chest, an alabaster lamp upon a trellis pedestal, and a gold open-work ornament which probably comes from a harness. All these objects show the young king and his queen in a variety of actions which apparently have nothing to do with funerary themes. They have not yet been treated together. In a description of the ornamented chest in the British Museum Exhibition of 'Treasures of Tutankhamun', however, it is stated that no more than four pieces from the tomb of Tut'ankhamun 'show the king and queen together in a style reminiscent of so much in the art of the preceding Amarna Period but different in theme'. The most detailed description of the little golden shrine, so far, is also to be found in the same Guide.³

On the whole, the inclination has been to interpret the scenes in a domestic sense. Carter⁴ himself had set the tone when he described the pictures on the little golden shrine thus:

a series of little panels... depicting, in delightfully naïve fashion a number of episodes in the daily life of king and queen. In all these scenes the dominant note is that of friendly relationship between the husband and the wife, the unselfconscious friendliness that marks the Tell el Amarna school.

Penelope Fox⁵ calls them 'charming, unaffected, domestic' and Christiane Desroches-Noblecourt⁶ interprets them as 'a variety of episodes centred upon their relationship as lovers'. Cyril Aldred,⁷ who had stated in 1963 that the famous scene on the back panel of the throne of Tutankhamūn shows the Queen 'anointing her husband during the coronation ceremonies', was able to write in 1968⁸ about the 'domestic nature' of exactly the same scene. Edwards⁹ follows a similar line when he says that 'on the

¹ All these objects are mentioned in A Brief Description of the Principal Monuments of the Egyptian Museum, Cairo (Cairo, 1964), 144 ff. among 'Objects from the Tomb of Tutankhamun' and also in A Handlist to Howard Carter's Catalogue of Objects in Tutankhamūn's Tomb compiled by Helen Murray and Mary Nuttall (Oxford, 1968). Given the numbers of the Handlist first and the numbers of the Cairo Museum Guide in brackets, they are registered as follows: the little golden shrine 168 (14); the golden throne 91 (1); the ornamented chest 540 and 551 (1189); an alabaster lamp 173 (184); a gold open-work ornament 519 (557).

² I. E. S. Edwards, *Treasures of Tutankhamun* (Guide through the 1972 Exhibition at the British Museum), no. 21.

⁺ Howard Carter and A. C. Mace, The Tomb of Tut-ankh-Amen (London, 1923), 119 f.

⁵ Tutankhamun's Treasures (Oxford, 1957), 16.

⁶ Tutankhamen (Penguin Books, 1965), 197.

⁷ The Egyptians (London, 1963), 254.

⁸ Id., Akhenaten (London, 1969), pl. 10.

outer faces of the door are representations of incidents in the daily life of the king and the queen'. But otherwise he shows a new direction of approach when he compares the little golden shrine with the per wer of Nekhbet, which together with the per nu of Wedjoyet formed the iterty; the two sanctuaries were regarded, it is said, as 'representative of the sanctuaries of all the local deities in their respective regions of the united kingdom', the vulture goddess of El-Kâb, Nekhbet, being the tutelary goddess of Upper Egypt and the serpent goddess of Buto, Wedjoyet, the tutelary goddess of Lower Egypt.

Edwards is also the first to draw attention to the importance of 'The Great Enchantress' in the hieroglyphic inscription of the little golden shrine. Discussing the inscriptions on the jamb of the doorway, he states concerning the King that 'in each case he is proclaimed as "beloved of (the goddess) Urt Ḥekau", a name meaning "The Great Enchantress" who is called in another inscription on the shrine "Lady of the Palace". He is doubtful, however, about the identity of the Great Enchantress, and later on (in connection with a scene on the right side of the shrine) he suggests that she may be 'Isis, Hathor or Mut, any one of whom may be called the Great Enchantress'.

There is no satisfying evidence, up to now, to explain why incidents of 'the daily life of the king and queen' should be depicted on the walls of a state sanctuary (even if it is a sanctuary in miniature). The identity of the 'Great Enchantress' who plays such an important part on the shrine also deserves closer scrutiny.

It is here that I have been able to gather additional information concerning the identity of the goddess and, closely connected with this, concerning the meaning of the pictures of the shrine and the significance of the shrine itself. To begin with the 'Great Enchantress': as if obedient to the rules of true magic, the name Wrt Hkiw appears at the end of each vertical inscription on all four corners of the shrine—that is eight times—and additionally once on the roof and once on the right-hand side of the shrine, as mentioned above. Eight times the King is called 'beloved of Wrt Hkzw' although the shrine has the form of the sanctuary of the Upper Egyptian goddess Nekhbet, who is not commonly known as 'Great Enchantress'. The solution to the identity of Wrt Hkw is to be found inside the shrine. While on the outside the dominant theme seems to be the relationship between King and Queen, inside the shrine the King is literally to be seen represented in the embrace of Wrt Hkjw. The Handlist mentions three objects which remained in the shrine after the thieves had interfered with it, namely 108a, stand for a statuette; 108b, part of a corslet and collar; 108c, necklace and gold snake-deity pendant. While the stand for the statuette and the reconstructed corslet have been pictured in books,2 the 'snake-deity pendant' has remained almost unnoticed. Carter³ called it 'a large gold pendant in the shape of a very rare snake goddess' and the 'Brief Description'4 of the Cairo Museum (under No. 85) speaks of a 'pendant representing a serpent goddess of gilded wood'. But so far, no picture of it has been published.

In 1966 I was able to see the object in the Cairo Museum where it was exhibited in Hall 4, the room of the gold coffin, in case 34. Dr. Abd el-Rahman, then Director of

¹ See p. 100 n. 1 above. ² For example in Carter and Mace, op. cit. 1, pl. 38.

³ Op. cit. I, 120.

⁴ See above, p. 100 n. 1.

the Museum, was most helpful in getting photographers to take a picture of the object in his presence. Unfortunately, I did not receive the promised print. I am therefore most grateful to the Griffith Institute, Oxford, and especially to Miss Helen Murray, who made it possible for me to get prints from photographs taken during the excavation of the tomb of Tutankhamūn of the snake amulet and of several aspects of the little golden shrine. She also most helpfully provided for me copies of Carter's notes describing the necklace with the snake amulet, and of several photographs related to the subject.

The two photographs of the necklace with the snake-deity pendant are shown here for the first time (pl. XXXV, 1 and 2). The first picture shows the necklace as it was when it was taken out of the little golden shrine, where it had been lying under what remained of the ceremonial corslet, 'bound round with strings of cloth' (back view). In the second photograph appears the necklace with pendant unwrapped and in frontal view. The pendant is described in Carter's notes as

Goddess with plumed and horned head-dress and snake body, suckling a standing figure of the King. Made of heavy plate gold on? Two large suspension rings at back, just below head-dress. Inscription on base.

Dimensions. Pendant H. 14 cm., max. width 7.3 cm. max. thickness ·6 [cm.]

There are also six strings of beads strung on the two figures of the pendant: one just below the head-dress of the goddess; one round her head; two round her neck; one round the King's neck, and one round the King's legs.

The King is standing completely impassive with his hands hanging down at the sides of his body. He is wearing the *khepresh*-crown with uraeus, the usual head-dress of the Egyptian kings during the Eighteenth Dynasty. He wears sandals and is dressed in a kilt with a big apron, and is decorated with a bead collar and bracelets. Although he is standing on a pedestal he is only about half the size of the goddess. She is putting her left arm around the little king's shoulder, while her right hand is guiding his mouth to her breast. From the inscription we understand that this is 'the King of Upper and Lower Egypt, Neb-kheperu-Rē^c, beloved by *Wrt Ḥk/w*, the mistress of heaven'. In fact, this group of uraeus-goddess and King seems like a pictorial representation of part of utterance 508 of the Pyramid Texts.¹

The Mistress of Buto rejoices and she who is in Nekheb is glad On that day when the King advances in the place of $R\bar{e}c$... That he may go up thereon unto his mother, The living uraeus, that is upon the head of $R\bar{e}c$... She has compassion on him, She gives him her breast that he may suck it... The god is on his throne, Well is it that the god is on his throne. (1115c).

It seems therefore that the Wrt Ḥkiw named so often on the outside of the little golden shrine is the uraeus goddess Wedjoyet of Buto, the crown goddess who with her divine milk prepares the King for his office.

¹ Pyr. 1107b ff. Cf. Sethe, Komm. v, 6 ff.; Faulkner, Pyr. Texts, 183.

Looking more closely at the outside of the little shrine, one can see there, too, as Edwards has noticed, that 'a winged uraeus with the eternity sign between the wings occupies the entire length of each of the vertical sides of the roof'. To dispel any doubt that this is the correct interpretation one can compare the coronation scene in the temple of Queen Ḥatshepsut at Deir el-Baḥari^I in which Wrt Ḥkw as well as Amūn are taking part. Wrt Ḥkw, here shown as a goddess with lion-head and crowned with the sun-disc, is stretching her menat-necklace towards Queen Ḥatshepsut with the words:

To be spoken by the Great Enchantress: 'Daughter of my body, beloved . . . I have suckled thee on his throne to be a king lasting eternally'

The word for suckle, *rnn*, is here written with the determinative of a woman giving suck to her child. So, even if the appearance may vary, the Great Enchantress who suckles the King also prepares him for his coronation.

Iconographically the closest parallel for a goddess giving suck to a standing boyking is perhaps to be found in the temple of Sethos I at Abydos.² There a number of Hathor-goddesses are suckling the young Ramesses, who is wearing different crowns, with Hathor of Dendera, Hathor of Diospolis, Hathor of Cusae, and Hathor of Aphroditopolis, while Isis herself is holding in her arms a still smaller sitting figure of the infant king wearing the *khepresh*-crown (fig. 1). Ramesses is here named *Lord of the Two Lands* as well as *Lord of the crowns*.

The important role played by Wrt Ḥkw during the coronation of the King is also confirmed by an inscription on the back of the double statue of Ḥaremḥab and his queen Mutnodjme, which gives a written record of Ḥaremḥab's coronation at Luxor:³

Then did he proceed to the King's house, (when) he (Amūn) had placed him (Ḥaremḥab) before himself, to the Per-Wēr of his noble daughter the Great-[of-Magic [Wrt Ḥkɜw], her arms] in welcoming attitude, and she embraced his beauty and established herself on his forehead, and the Divine Ennead, the lords of Per-neser were in exultation at the glorious arising . . . Behold, Amūn is come, his son in front of him, to the Palace (ḥ) in order to establish his crown upon his head and in order to prolong his period like to himself . . .

By fixing the uraeus on the forehead of Ḥaremḥab, his right to be king is established although he was not of royal blood. The uraeus on the royal forehead is, of course, Wedjoyet. One need not be disturbed by the fact that Wrt Ḥkw is called the daughter of Amūn, for her followers are still to be found among the Lords of Buto (Per-neser).

Now it becomes clear what it means when, on the left side of the little golden shrine, Wrt Ḥkṣw is once called nbt cḥ in the inscription Tutcankhamūn, Lord of the crowns (nb khow), beloved by the Great Enchantress, Lady of the Palace (nbt cḥ).

¹ Naville, Deir el-Bahari, IV (EEF, 1901), pl. 101 and p. 5.

² Mariette, Abydos (Paris, 1869), 1, pl. 25, temple of Sethos, Salle C.

³ Sir Alan Gardiner, 'The Coronation of King Ḥaremḥab', JEA 39 (1953), 13-31, p. 15.

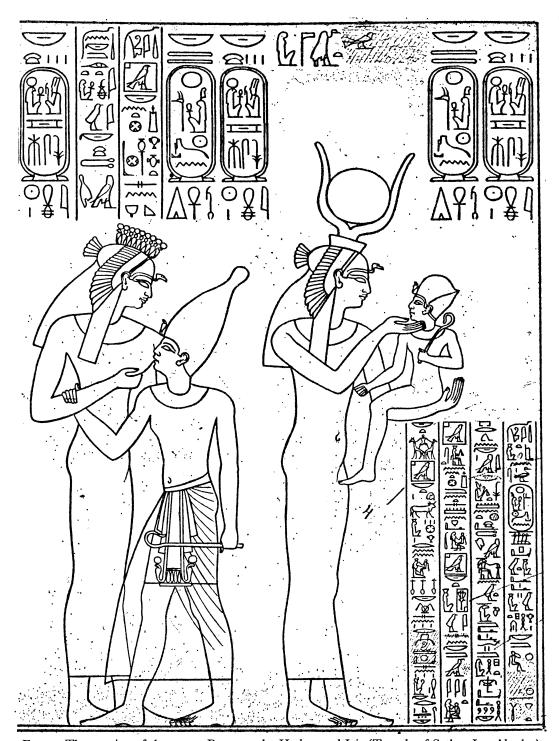
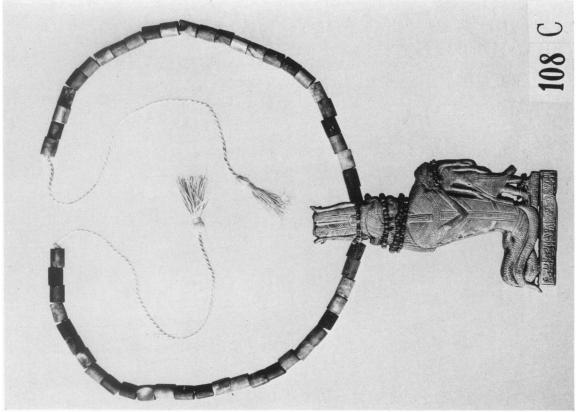


Fig. 1. The nursing of the young Ramesses by Hathor and Isis (Temple of Sethos I at Abydos).



2. Unwrapped, showing Wrt-Ḥkȝw nursing Tuttankhamūn

NECKLACE AND GOLD PENDANT WITH SNAKE-DEITY IN THE LITTLE GOLDEN SHRINE Courtesy Griffith Institute, Ashmolean Museum, Oxford

108 C



Above: the anointment of the King; below: Tut'ankhamūn on the throne of Horus
THE BACK OF THE LITTLE GOLDEN SHRINE OF TUT'ANKHAMŪN
Courtesy Griffith Institute, Ashmolean Museum, Oxford

One has to conclude, then, that every time Wrt Ḥk/w is named in the inscriptions of the little golden shrine, she is understood to be the cobra goddess Wedjoyet of Buto in her office as coronation goddess and that this little shrine has a meaningful relation to the coronation of Tut(ankhamūn himself.

A closer study of the pictures and inscriptions on the outside of the shrine support and confirm this conclusion. Direct proof can be gained from the lower of the two pictures at the back of the shrine (pl. XXXVI) which can in no way be interpreted as a mere 'episode in the daily life of the king and queen'. Edwards gives a detailed description without commenting on its probable significance:

In the lower scene the king, seated on a throne and wearing the crown of Lower Egypt, raises his left hand to receive from the queen two notched palm-ribs, the hieroglyphic sign for 'years'. Within these signs are the symbols for jubilee festivals and also amulet signs in groups. They are attached at the bottom to single tadpoles—the sign for '100,000'—mounted on the sign for 'eternity'. The inscription behind the king reads: 'The son of Re, Lord of Diadems, Tutankhamun has appeared in glory on the throne of Horus like Re.'

There are only a few small points where I would differ. The King, it seems to me, raises his left hand in greeting while his right hand clutches the crook and flail. Perhaps it would be better also to translate hcw as 'crowns' instead of 'diadems', as the crowns of Upper and Lower Egypt, for example, which are included in the concept of hcw, are evidently not diadems in the strict sense of the word (something which is tied around the head). Gardiner himself is not quite consistent in his translation of the inscription of Ḥaremḥab. In line 17, where the word hcw used for the crowns which Amūn sets upon the head of the king is determined with the *khepresh*-crown (the 'blue' crown), he translates it 'crowns', while in the introductory line I he renders nb hcw as 'Lord of Diadems'.

In fact, this scene is almost an illustration of the ceremony described in the Ḥaremḥab inscription (line 18) where the new King receives the Jubilees of Rēc and the years of Horus as king and also of the words in line 26 mayest thou give him millions of jubilees.

The decisive symbolic objects in this ceremony are the 'notched palm-ribs' in connection with tadpole, the sign for eternity, and the symbols for jubilee festivals (double halls with and without thrones, and bowl with diamond pattern). These occur mainly in pictures connected with the coronation and the *Sed*-festival, which in essence is a repetition of the coronation.

A close parallel to our picture of a king sitting on his throne wearing the red crown and receiving the notched palm-ribs can be found in a Sed-festival scene from Medamūd¹ where Sesostris (Khaʿ-kaw-Rēʿ) is sitting in the twin pavilion on his throne wearing in one half the white crown of Upper Egypt and in the other the red crown of Lower Egypt. He receives notched palm-ribs from Horus and Seth-Nubty who are perched on standards with human hands while near by are the tadpole and symbols for eternity. The double pavilion is surmounted by the winged sun-disc of Horus of Beḥdet exactly like the front of the little gold shrine. The only striking difference is

¹ A good reproduction is to be found in H. Frankfort, Kingship and the Gods (Chicago, 1948), fig. 25.

that Tut'ankhamūn is wearing the ordinary royal dress and not the all-enveloping white coat. Another similar scene is to be found in the Luxor temple¹ showing Amenophis III sitting in the twin pavilion and receiving notched palm-ribs and symbols of jubilees from Horus-falcons perched on standards, again under the protection of the

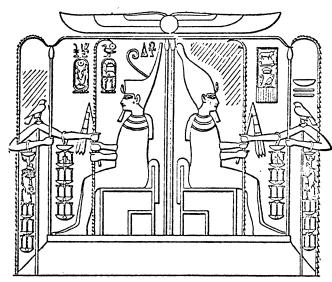


Fig. 2. Amenophis III in the Double Hall of the Sed-Festival (Temple of Amenophis III, Luxor).

winged sun-disc (fig. 2). One might be inclined to assume that the Queen rather than the 'Gods' (or their symbols) was chosen to present, at the coronation of Tut'ankhamūn, the jubilees and the years of Horus in the tradition of Amarna, as a device of adapting traditions without obliterating them.

But even here a precedent is given by Amenophis III, as is shown on a carnelian plaque carved in relief. This was found near the entrance of the tomb of Amenophis III.² Here the King is again shown seated in the double pavilion which is resting on a bowl with diamond pattern (the symbol for *Sed*-festival) and sur-

mounted by the winged sun-disc. Amenophis III is dressed in the festival garment; he carries the flail and crook, and wears the red and white crown respectively. In front of him stands Queen Tiye (her name is written behind her) wearing a tall plume on her head and holding in one hand the notched palm-rib on tadpole and eternity sign, and in the other something like a flower.

It is evident, therefore, that for their coronation ceremonies Tut^cankhamūn and his Queen are only following examples set already by King Amenophis III and Queen Tiye.

Once the true character of this scene has been established many other peculiarities become clear and fall into their place: for example the naming of Ptaḥ and Sakhmet as well as Amūn and Mut as the King's father and mother on the frame of the back; the recording in full of the five great names of the King which are given to him during the coronation, on the left and right side of the shrine:

May he live, the Horus, mighty Bull, Beautiful-of-Birth, The Two Ladies, Goodly-of-Laws, who pacify the Two Lands, The Horus of Gold, Exalted-of-Crowns who placates the gods, King of Upper and Lower Egypt, Lord of the Two Lands, Neb-kheperw-Rēc, given life.

The son of Rēc, Tutcankhamūn;

¹ A. Gayet, Le Temple de Luxor (Mém. Miss. F., 15, Cairo, 1894), pl. 71, fig. 177.

² Cyril Aldred, Akhenaten, 217, figs. 90 and 91.

also the appearance of lapwings in adoration on the inside of the doors of the shrine and the lapwing on the left hand of the ruler on the outside of one door.

I want to address myself here to the interpretation of the uppermost picture at the back of the shrine (pl. XXXVI). It is an anointing scene in which a vulture holding the symbols for eternity and life hovers behind the head of the King, who is wearing the *khepresh*-crown and is sitting on a throne which carries as an ornament the symbol for the union of the two countries. Edwards describes the Queen as follows:

The queen stoops towards the king, her right hand touching his left arm. In her left hand she holds in addition to a bunch of lotus flowers and buds hanging downwards, an unguent-cone holder mounted on a stand and decorated with lotus flowers. Apparently it is a replacement for the unguent-cone holder with plumes already on the queen's head above the crown of uraei.

With his last sentence, which is here given in italics, I cannot possibly agree. According to any standard the Queen could hardly be involved in such a double action, carrying spare equipment for herself and 'touching' the King at the same time.

That the cone in the hand of the Queen is not a mere 'replacement' becomes obvious when one compares this scene with the almost identical scene on the back panel of the golden throne, which has the additional advantage of showing the figures in colour. It has already been interpreted by Aldred as 'the queen anointing her husband during the coronation ceremonies'. Here the Queen is carrying her ceremonial crown on her head, and not the cone-holder; in fact there is no cone-holder at all but only a small basin in the left hand of the Queen. Otherwise the similarities between the two pictures are striking: the same attitudes of King and Queen, the same dress, the same throne with the symbol of the union of the two countries; even the different position of the left arm of the Queen may have artistic reasons in that overcutting of lines on a gold surface is thus avoided.

The decisive difference lies in the crowns and in the gods who are patrons of the scene. On the throne the hands of the sun are giving life to King and Queen, while on the little golden shrine it is the tutelary goddess of Upper Egypt, the vulture, who is the life-giving power.

One rather surprising similarity is to be found in the titles of the Queen, who both times is called rpct wrt hnt nbt ismt mrwt hnwt tswy: the great princess, the cherished and loved one, Lady of the Two Lands. But only on the little golden shrine is she also called great beloved wife of the king.

As the name of Aten is not yet completely deleted from the golden throne, and the sun-disc is still shown in its Amarna form, it is clear that the picture on the throne shows an older and less censored version of the anointment scene.

There remain still many problems to be solved, but it will be difficult to deny that the picture on the throne as well as the picture on the back of the little shrine show the anointment of the King during his coronation, and that the little golden shrine itself is a model of the *pr-wr* in which the King was crowned. Quite possibly representations in relief were shown on the actual *pr-wr* just as inscriptions and scenes were shown already

on the outside of the sanctuary erected by King Sesostris I at Karnak on the occasion of his Sed-festival. It seems likely that all the 'intimate' scenes of King and Queen are representations of happenings during the coronation and that the objects on which they appear were used during the coronation itself: the alabaster lamp with the translucent picture of the Queen extending the notched palm-ribs to the King would certainly be most suitable for such a purpose and the decorated chest, too, might have kept the coronation robes; even the golden open-work ornament shows the Queen touching, perhaps anointing, the King, and might have been used during the coronation procession.

Edwards himself has designated certain objects of Tut'ankhamūn's treasure as ones which might have been used during the coronation: these are the little gold figure² of the King and the flail³ which still bears the name of Tut'ankhaten. He claims that 'it is at least possible that this object was used by Tutankhaten in his coronation at El-Amarna when he was about nine years of age and before he was crowned at Karnak'.

I assume that all objects which show the notched palm-rib on top of the tadpole and symbol of eternity were made to be used during the coronation, and especially the ceremonial corslet found (in parts) in the little golden shrine with its picture of the god Amūn himself presenting the notched palm-rib and the festival-hall as well as the sign of life to the young King.⁴

If this is correct, the part of the treasure of Tut'ankhamūn which is connected with the coronation achieves a new historical importance which goes far beyond the significance of the symbolic and material value of objects made for funerary use only.

¹ See for example Eberhard Otto, Egyptian Art and the Cult of Osiris and Amon (London, 1968), pl. 21.

³ Ibid., no. 44.

- ² Edwards, op. cit., no. 22.
- 4 Detlef M. Noack, Tut Ench Amun (Cologne, 1966?), pl. 60.

THREE DOCUMENTS FROM THE REIGN OF RAMESSES III

By G. A. GABALLA

FROM the inexhaustible wealth of Cairo Museum three minor documents from the reign of Ramesses III may merit attention, particularly as they have not been published before, so far as I know. All three documents are stored in Room 19 on the

ground floor and each exhibits its own features of interest. As mentioned in a previous paper, I hope to publish other such monuments in due course.

1. The chief physician Ben-anath

The first document is a sandstone block that measures 98 cm. high, 37 cm. wide, and 18 cm. thick. It was registered in the museum's *Journal d'entrée* in May 1908 under No. 40031. Its provenance is not certain, but is reputed to be Saqqâra, where it seems to have formed the lower part of a door-jamb.

The front of the block is occupied principally by a representation of the owner shown kneeling and raising his hands in adoration to the nomen of Ramesses III entitled 'Lord of Appearings' and 'Given life' (pl. XXXVII, 1 and fig. 1). The man wears a pleated upper garment with long wide sleeves and a very full lower robe. He also wears a long wig. Above this little scene, which is beautifully executed in sunk-relief, is the end of a vertical line of large hieroglyphs reading: . . . beloved of . . . residing in the Mansion of Life.^a

Before and above the man we read the following text: For the ka of the Chief Physician, Benanath of the Mansion of Life.

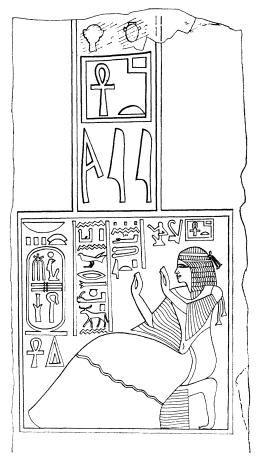


Fig. 1. Ben-anath Adoring the Royal Name.

Notes

- (a) The Hwt cnh was probably that part of the royal palace in which the pharaoh actually resided; cf. Gardiner, JEA 24 (1938), 83-91.
 - G. A. Gaballa, 'Some Nineteenth Dynasty Monuments in Cairo Museum', BIFAO 71 (1972), 129-37.

- (b) In the New Kingdom some eleven physicians are known to have borne the title wr-sinw listed by F. Jonckheere, Les Médecins de l'Égypte pharaonique (Brussels, 1958), 97, Nos. 1, 6, 26, 27, 32, 55, 58, 66, NN5, NN6, NN7. In a recent paper, L. Habachi and P. Ghalioungui, BIE 51 (1970), 15–23, added a twelfth Chief Physician, namely wr-sinw Nay, owner of the tomb chapel No. 211 in the Theban necropolis (PM I/1², p. 350). However, only one chief physician, No. 32 of Jonckheere's list, is entitled wr-sinw n hwt cnh like Ben-anath. This is a certain Men (or Menna) of the Eighteenth Dynasty whose funerary papyrus is at Florence Museum (No. 10480), see Botti, Aegyptus 34 (1954), 70–2 and pl. iii.
- (c) This name is pure West-Semitic (Heb. בּן בְּלֵבֶה) and is well attested in the New Kingdom. It is known, for example, that Si-montu, the twenty-third son of Ramesses II, married the daughter of a Syrian ship's captain called Ben-anath in the year 42 of that pharaoh (cf. Spiegelberg, Rec. trav. 16 [1894], 64). The feminine form of the name is Bint-anath and was borne by the eldest daughter of Ramesses II, cf. e.g. Petrie, A History of Egypt, III (London, 1905), 37, 87–8, and Gauthier, Livre des rois, III, 102–3. The goddess Anath, consort of Baal, shared with Astarte and Asherah the role of patroness of sex and war in the religion of Canaan, and was well known in Egypt in the New Kingdom; cf. W. F. Albright, Archaeology and the Religion of Israel (Baltimore, 1956), 74 ff.

Commentary

In the New Kingdom the repute of Egyptian physicians in Western Asia seems to have been very high indeed. We know of a wealthy Syrian patient (the name is not given) who paid a visit to the physician Nebamūn. In the Amarna Period Niqmad II, king of Ugarit, sent a letter asking for an Egyptian doctor. Moreover, in a cuneiform letter Ramesses II mentions an Egyptian physician serving in the Hittite lands of Anatolia.

Now the question is: was Ben-anath a foreign (Syrian?) physician who served in the court of Ramesses III? Or was he an Egyptian doctor bearing a West-Semitic name? At first sight it is tempting to take him for a foreigner who practised his profession in Egypt. If so he would be the first foreign physician that we know of in pharaonic Egypt. However, the only evidence for his foreign origin is his name. This is but flimsy evidence particularly as we know of many Egyptians bearing foreign names.⁴

2. A dated donation stela

The second document is a round-topped limestone stell that bears the JdE No. 66612 and measures 1.34 m. in height, 0.60 m. in width, and 0.18 m. in depth. It was found in 1936 at Nazlet el-Batran, together with some other objects, while digging a canal from Saqqara to Gizeh.

Here, as in many other similar stelae, only the upper half is inscribed. It is divided into two sections, the upper section of which was occupied by a scene, now badly mutilated. Nevertheless we can still see the outlines of the god Ptah standing on the left, clad in his traditional garment, while holding a long staff. The upper part of the

¹ The scenes of this unique incident are depicted in his tomb (No. 17) at Thebes. Cf. T. Säve-Söderbergh Four Eighteenth Dynasty Tombs (Oxford, 1957), 25-7 and pl. 23.

² Albright, BASOR 95 (1944), 33.

³ Cf. A. Götze, JCS 1 (1947), 248, and Albright, AASOR 17 (1938), 77 n. 38.

⁴ Supra note (c), to which add Gaballa, op. cit. 132-3 and note (k).

god is lost. On the right stands the king, head lost, extending his hands as if in the act of offering. He wears a short tunic and the customary long tail (pl. XXXVIII and fig. 2). None of the legends which once accompanied this scene is left.

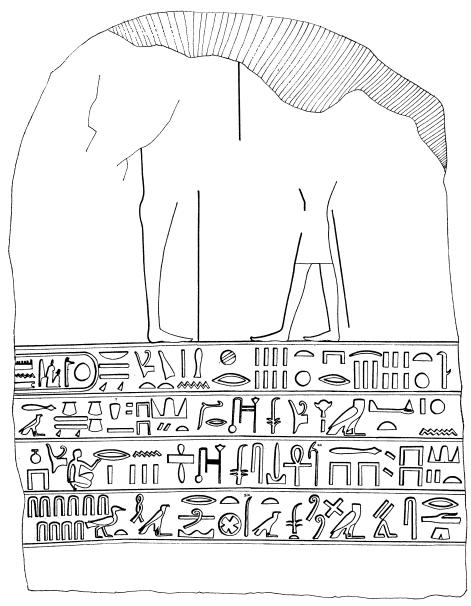


Fig. 2. Donation stela from Nazlet el-Batran.

The lower section is occupied by four lines of hieroglyphic inscription. It may be rendered as follows:

(1) 'Regnal Year 6, third month of the Second Season (winter), day 8, under the Majesty of the king of Upper and Lower Egypt, Usimarēc Meiamūn. (2) This day a charge was given to the royal scribe, overseer of the Double Granary...a of the Thrones of the Two Lands, great one(?) of (3) the granary of Pharaoh, life, prosperity, and health, the royal

scribe Sa-nu-ro(?)^b of the . . . (4) ? to fix limits in the southern outskirts^c of the village^d of Ra-stau, fields, arourae 100^c.'

Notes

- (a) The signs here are difficult to determine; they may be $\frac{\square N}{2}$ snwty p_i n nswt tswy 'Double Granary of the Thrones of the Two Lands'.
 - (b) This name does not appear in Ranke, Personennamen.
- (c) Following the rendering of E. Iversen, Two Inscriptions concerning Private Donations to Temples (Copenhagen, 1941), 6. However, it may also simply be rendered 'district'.
 - (d) Read wh(y)t 'settlement', 'village', see Gardiner, Ancient Egyptian Onomastica, II, 205*.
- (e) The writing of 100 with the ten signs of \cap rather than the usual % is remarkable, but not unparalleled; cf. the Nauri stela of Sethos I, K. A. Kitchen, *Ramesside Inscriptions*, 1/2, 1971, 49 end, 53, and 58.

Commentary

The present stela belongs to that special class of monuments, steadily growing, known to Egyptologists as donation stelae. In spite of the specific date given in the text, there is still a certain difficulty in fixing the pharaoh to whose reign it belongs. This is due to the fact that it mentions only the prenomen Usimare Meiamūn with no qualifying nomen. This prenomen is shared by both Ramesses III and Shoshenq IV, and so arises the problem as to which of the reigns this stela properly belongs.

In his monograph, Iversen listed some 35 donation stelae, while Schulman has raised this number to 68 such stelae. Of his list Schulman observed that the vast majority belonged to the Late Period, only four coming from an earlier age, the Ramesside Period. Thus he concluded 'we may assume that the Libyans adopted a form of religious endowment known occasionally from an earlier period, and made it a characteristic institution of their own.'2

This statement has been questioned by R. A. Caminos³ who justly observed that much earlier examples are known, citing a Thirteenth-Dynasty example from Medamūd.⁴ Such stelae also occur in the Eighteenth Dynasty, as in the case of the stela dated to the third year of Ay,⁵ besides increasingly in the Ramesside Period.

Although decisive evidence is lacking, I am inclined to favour the Ramesside date for the stela in question, on three admittedly limited grounds. In the first instance, a Ramesside date would be consistent with the slowly increasing number of the early donation stelae. Secondly, the remarkable use of 'ten tens' to spell out the hundred is, as noted above, directly paralleled under Sethos I. Thirdly, and perhaps most significantly, the text of this stela is strictly confined to the date, decree, and details of

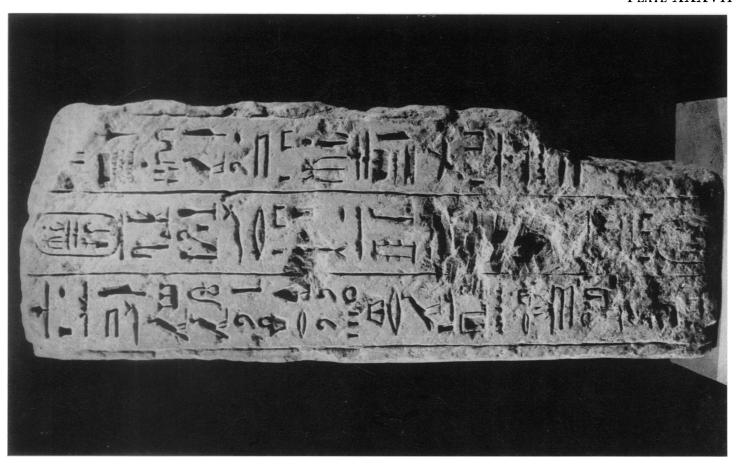
¹ Iversen, op. cit. 10–12; A. R. Schulman, 'A Problem of Pedubasts', JARCE 5 (1966), 33–41. However, Schulman's list has recently been supplemented and corrected by K. A. Kitchen, 'Two Donation Stelae in the Brooklyn Museum', JARCE 8 (1969–70), 59–67, especially 69 nn. 54–5.

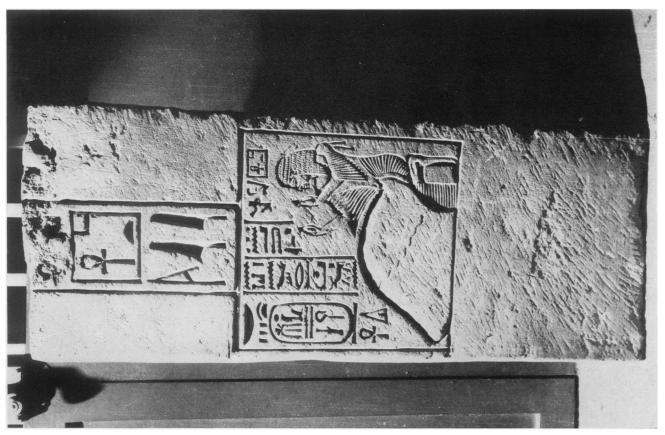
² Schulman, op. cit. 34.

³ Centaurus 14 (1969), 45 n. 2.

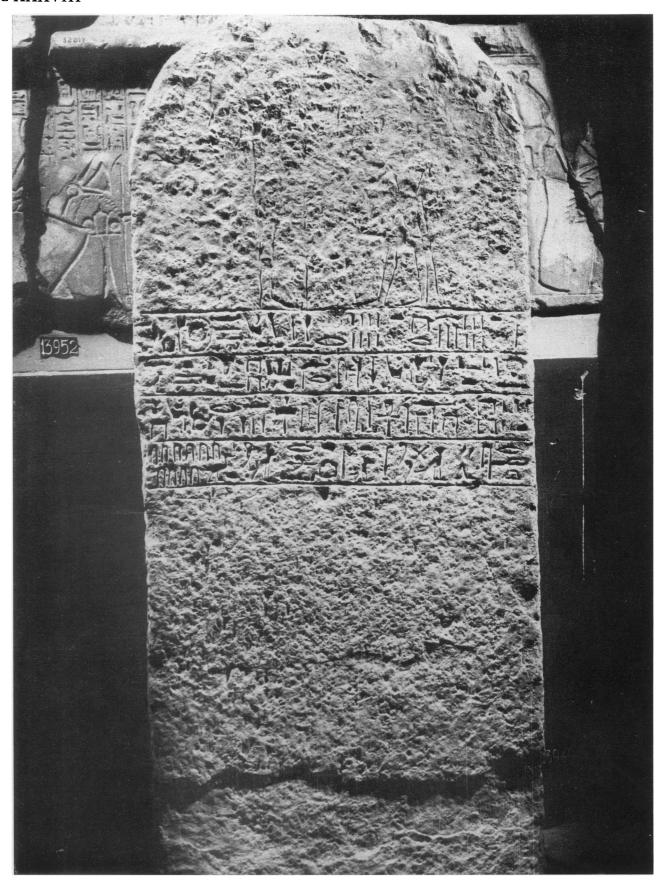
⁴ Ibid.; this stela belongs to Sekhemrē^c-Wadjkhau Sekbemsaf I (cf. W. C. Hayes, CAH^2 , II, ch. ii, p. 8) and is published by F. Bisson de la Roque and J.-J. Clère, Rapport sur les fouilles de Médamoud: 1927, FIFAO 5-I (Cairo, 1928), 88, fig. 64, and 141, No. 466.

⁵ Helck, Urkunden der 18. Dynastie, Heft 22, 2109-10.





1. The Block of Ben-anath, Cairo jdE no. 40031



Donation Stela, Cairo JdE no. 66612

the land donated; no curses or blessings conclude the text. This classes the stela here discussed with the New-Kingdom group of donation stelae, by contrast with the almost invariable usage of the Late Period terminating with sanctions against the would-be transgressor. In conclusion, therefore, the Ramesses III dating may in fact be preferable.

3. An enigmatic fragment relating to Ramesses III

According to the Journal d'entrée which lists this piece under No. 45570, it was found by C. Fisher at Mit-Rahineh in 1916. Its material is sandstone, and it measures 59 cm. in height, 21 cm. in width, and 10 cm. in thickness. The disposition of the text in three vertical lines suggests that it was inscribed on a door-jamb, much of it now being lost. As can be seen from the picture (pl. XXXVII, 2 and fig. 3), some of the hieroglyphic signs are either lost or terribly mutliated. Hence, the following translation does not pretend to completeness and ameliorations may be desirable:

(1) '[Regnal Year] 20+X(?), a first month of the third season (summer), day 24. One was in the House of Ramessesmeiamūn, the Great Soul of $[Pr\bar{e}c-Her]akhty^b...(2)$ Ramesses Ruler of Heliopolis. Following His Majesty to the House of Ptaḥ the Great, South of His Wall, Lord of [cAnkh-tawy]... in the House of Ra[cases-mei]amūn...(3) resting in it. Two hundred persea trees[cases-mei]amūn...(3)

Notes

- (a) Possibly traces of two ten-signs.
- (b) The full name of the Delta Residence of Ramesses II used at the end of his reign and particularly after his death. See R. A. Caminos, *Late-Egyptian Miscellanies* (Oxford, 1954), 5, 547.
- (c) Cf. Gardiner, Onomastica, I, p. 20*, and R. Engelbach (ed.), Introduction to Egyptian Archaeology (2nd edn., Cairo, 1961), 358.
 - (d) The end of the text is utterly obscure and only partly legible.

Commentary

This intriguing fragment offers tantalizing glimpses of the activities of Ramesses III, perhaps fairly late in his

reign; the year-date shows no units and could be either year twenty or year thirty. We perceive the pharaoh travelling from the Delta Residence of his great predecessor Ramesses II, to Memphis, where this piece was found. The reference to 200 persea trees further illustrates the known interest of this king in adorning the precincts of Egypt's great temples with trees and flowers.²

- ¹ On the chronology of the literary forms of these stelae, cf. Kitchen, FARCE 8, 66-7.
- ² As is evident in the Great Pap. Harris; cf. Breasted, Ancient Records, IV, §§ 189, 194, 210, 213, etc., and the text in Erichsen, Bibliotheca Aegyptiaca, V, pp. 4:12, 5:14-16, 9:1, 9-14, etc.

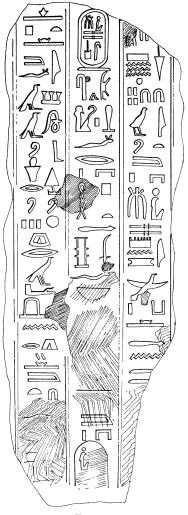


Fig. 3.

THE EVIL EYE OF APOPIS

By J. F. BORGHOUTS

- § 1. To the evil glance of the eye of Apopis¹ so far relatively little attention has been paid. Under the entry 'Apophis' or 'Böser Blick' in the *Reallexikon* of H. Bonnet, this aspect is nowhere mentioned.² There is, however, a valuable article by L. Kákosy dealing with a very condensed version of Chapter 108 of the *Book of the Dead*³ found in a Budapest funerary papyrus which contains at least the main mythological facts of that chapter: how the sun-boat approached the Mountain of B½w, how the crew was overwhelmed by the dreadful glance of the snake residing there and how that snake was subsequently subdued by the god Seth.
- § 2. The earliest certain passage in which the eye of Apopis plays a role is the prototype of Book of the Dead, 108, mentioned above. In Coffin Texts, II [160], 375 b ff. (= BD 108, Budge 218, 12)⁴ it is said: 'I know that mountain of B?hw / on which heaven rests. / It is a plateau (?),⁵ 300 rods in its length, 120 rods in its breadth. / Sebek, / lord of B?hw is on the East side of this mountain. / His house is of carnelian / and there is a snake on the top of that mountain, / 30 cubits in his length; / 3 cubits from his foreside on are a knife.⁶ / I know the name of this snake: / "who is on his mountain, who is in his flame" is his name. / Now when it is the time of the evening, he will turn his eye
- ¹ For the transliteration Apopis (not Apophis), see Gardiner, *Hieratic Papyri in the British Museum*, IIIrd Series (London, 1935), I (Text), 30 note 4.
- ² H. Bonnet, Reallexikon der ägyptischen Religionsgeschichte (Berlin, 1952¹), 51-3 (Apophis); 122 (Böser Blick).
- ³ L. Kákosy, 'Une version abrégée du chapitre 108 du Livre des Morts', Bull. du Musée hongrois des beauxarts 20 (1962), 3-10.
- ⁴ The later version of *BD* 108 has been studied together with the then known Coffin Texts manuscripts by K. Sethe and others, 'Die Sprüche für das Kennen der Seelen der heiligen Orte', ZÄS 59 (1924), 43* ff. (transcription); 73 ff. (translation and commentary). The episode is also found in a somewhat modified form in *BD* 149, Budge 370, 2 ff.

 ⁵ Ti, determined by a wall, unattested elsewhere. Or read mti?
- 6 Ds, determined by the knife; BD manuscripts have ds, 'flintstone'. Something similar is said in the magical P. Turin 1993 (New Kingdom), rt. 2, 4-6 (= Pleyte-Rossi, 119, 4-6): 'then Rsnt shall come with great amulets (siw wrw; or 'a great protection'), then / Wedjoyet shall come to you (the sufferer) with pure water. I am purified by it—just as they did for their father Rē^c-Ḥerakhty, on the / big mountains of Bihw—when the great mhy-snake appeared, in the frontside of whose form the mcbi-spear is, of one cubit of flintstone (nty pi mcbi n mh wc n inr n ds m hit hprif).' A mhy-snake occurs also in BD 168, Budge 433, 12 (in whose retinue the deceased would like to be) and as a holy local snake (for both, cf. Wb. II, 127, 5-6). Is the name mhy a variant of mhn (cf. CT VII, 428c [only B2Bo])? B. Stricker has asked whether at some time the Egyptians identified Apopis and the mhn-snake; see his De grote zeeslang (Leiden, 1953), 8. Perhaps the 'one cubit of flintstone' in our passage is only the point of the spear? For the passage, cf. CT VI, 39h (read snt, 'two-barbed harpoon'?).
- ⁷ The name varies according to the manuscripts of the CT version: tpy dw whn: f, tpy dw whm: f seem to belong together; some introduce after dw a separate name, imy whn: f or imy whm: f. The BD manuscripts have tpy dwf, imy hh: f (hm: f, wh: f), while the related version of BD 149, Budge 370, 5, and Naville II, 392 has sty ds: wy, 'who throws two knives'. Elsewhere (CT II [154], 276/7a; 278/9a = BD II5, Budge 237, 3; 4-5; Sethe [footnotes 7 and 8 continued on next page]

towards Rē. / A standstill comes about among the crew / and a great bewilderment (sgw·t) during the course. I / Seth will bend himself / within his reach. I' he says to him by way of magic. I' stand within your reach! The course of the boat passes off in a regular manner! / You who see from afar, I just close your eye! / I have ensnared you— / I am a robust male! / Cover your head; / when you are safe, I am safe! I am somebody whose magic is great; I have ensnared you! What is this? "Something useful, O you who creep on your belly ', etc.

To summarize: the sun-boat meets a snake in the place of setting who certainly is Apopis, though the name given here is different. The snake 'hypnotizes' the crew and only Seth can withstand him. It is one of the earliest testimonies of Seth as a defender of the sun-god.⁷ It is not impossible that Seth can stand up to the snake because he himself possesses a dreadful eye (see § 33), but this is nowhere stated in the spell; in the sequel of the text, he seems to lift up the snake, thus taking away its power.⁸

§ 3. No other Middle-Kingdom text speaks of the glance of Apopiso in a clear

and others, $Z\ddot{A}S$ 57 (1922), 12; 19; 3*) the name of the snake with whom Atum had to contend in order to gain the rule over Heliopolis, is *imy whm:f*. This incident was still remembered in *Urk*. VI, 63, 21, where the snake's name is, however, *imy nsrsr:f*, rather than *imy whm:f* as S. Schott (ib. 62, 21-2) reads. The latter name reminds one of the name *imy nsr:f* given to Apopis in *Edfu*, I, 62, 9 (here text no. 5).

- 8 So here the conflict between Apopis and the sun-god takes place in the evening in what seems to be the west. Usually the fight is situated in the east at morning (Bonnet, Reallexikon, 52; Kees, Der Götterglaube im alten Ägypten [Berlin, 1956²], 54). Apopis belongs to Bihw, according to the Book of the Heavenly Cow, version of Seti I, 87 (Ch. Kuentz, BIFAO 40 [1941], 103). It is still a problem how Bihw in early texts, as here, designates the west, and later on the east. See recently J. Assmann, Liturgische Lieder an den Sonnengott (Berlin, 1969), 39, text-note 1. The latter's proposal that the terms Minw and Bihw can sometimes be understood as the place of the rising or of the setting of the sun according to whether the context concerns the upper world or the nether world, is attractive.
- ¹ For parallels see Sethe, $Z\ddot{A}S$ 59 (1922), 84-5; A. Klasens, A Magical Statue Base (Socle Behague) (Leiden, 1952), 91-2. See also P. Leiden I 348, vs. 11, 5, where a threat uttered by the magician begins: 'you will be dumbfounded (gg: in), O Ennead—for then, there will be no heaven, for then there will be no earth . . .', etc.
- ² Sethe et al. ZÄS 59 (1922), 74: 'dann beugt sich Seth ihr entgegen'; 86: m-dr: 'im Abwehr von offenbar eine zusammengesetzte Präposition für entgegen.' For 'out of the reach of' (m separative) for which in the Belegstellen to Wb. v, 586, 10 no examples are given, see CT III, 267f; 293b; VII, 393c = BD 130, Budge 280, 11; 65, Budge 147, 8. For 'within the reach of', see Wb. v, 586, 3; 9 and J. Zandee, ZÄS 97 (1971), 158 n. 318 c. Does Seth bend himself while being safely out of the reach of the snake, or does he exactly the contrary, asserting proudly in 381c: the im dr.k, 'I stand within your reach' (and yet I can withstand you)?
- ³ Or, following S₂P: $m_i(w)$? $m_i(w)$? (S₂C has $m_i(i)$): 'O you whom I have seen from afar.' The other CT and BD manuscripts have $m_i(w)$? $w_i(w)$? which may contain an active participle. For the expression, cf. e.g. P. Chester Beatty III, rt. 10, 11 and 9, 4; VIII, vs. 4, 2-3 (gmh $w_i(w)$); Oracular Amuletic Decree L. 2, vs. 21-2 (nw $w_i(w)$); Edfu, 11, 288, 3.
- ⁴ I.e., when you keep yourself calm, I shall do the same, and both of us will benefit by the agreement. For a similar argument, see *Pyr*. 1230d (king and demon); CT v [454] 326 g–h = BD 90, Budge 192, 10–12 (similarly); P. Turin 1993, rt. 4, 8 (= Pleyte–Rossi, 124, 8) (demon and sufferer).
- ⁵ For Seth's magic, here expressed in the manner of an epithet, compare Pyr. 204a; CT II, 218a; Urk. IV, 1542, 3. Perhaps he is the hkyw smsw, 'eldest magician' in Amduat, see E. Hornung, Das Amduat (Wiesbaden, 1963), II, 131; but cf. H. Te Velde, JEOL 21 (1969–70), 1970, 177, who differentiates between Seth and the Eldest Magician.

 ⁶ h; or 'magic power', 'spiritual power' (Sethe: 'Geistermacht').
 - ⁷ For this role, see H. Te Velde, Seth, God of Confusion (Leiden, 1967), 98-108.
 - 8 See P. Barguet, 'Parallèle égyptien à la légende d'Anthée', Rev. Hist. Rel. 445 (1964), 1-12.
- ⁹ Apopis as such is not known before the Middle Kingdom, but he may be connected with the snakes in the anti-snake spells in *Pyr*. (among which is the *rrk*-snake, who in *BD* 39 appears as a sort of Apopis). These spells deal to a great extent with the dangerous eye of the snake. See § 30.

manner as something dreadful, but the peculiar moveability (dbndbn; m!m) of the 'pupil' (bi)¹ of his eye is noted in CT VII, 495a. There may be an allusion to it in one of the particular spells devoted to him, in CT V [414], intended 'to ward off Apopis from the boat of Rēc' (244a). A menace by Apopis is cited (244e-f): 'He has said that he would rebel against Rēc, / that he would commit a robbery (cwi) against him.' Elsewhere (247b-c) this accusation is repeated, but then follows (d-e): 'but Rēc falls down on him in his beautiful boat ($nfrw\cdot t$) / and he (Rēc) sails on with the fire-spewing eye ($irt\ wtt$, B1C and B1L).' Evidently the latter is unharmed. Was it the eye of Rēc which Apopis thought to rob (cf. § 5)? If so, the conflict alluded to in this spell might actually be between the Eye of Apopis and the Eye of Rēc, the latter being hypostatized in the form of a goddess, as it often is in late texts (see § 28).

§ 4. The robbing or damaging of the eye of $R\bar{e}^c$ as part of the difficult circumstances which the sun-god has to endure at the hand of Apopis may already be a rather common theme in certain Middle Kingdom texts. The result of the conflict is always a victory for the sun-god, but the latter is wounded during the battle. From some CT spells, belonging to the Book of the Two Ways, it might appear that the wounds, referred to as $nsp\cdot w^2$ are the wounds in his face, through the fact that the eye is damaged (therefore, it is called $nkn\cdot t$). In this way, an 'obscuration' or 'bleariness' $(h\cdot ty)^3$ comes about, which is healed by the care of the deceased, the speaker. CT VII [1089], 369d-370b: 'He (the speaker) has driven away (dr) the obscuration from $(hr)^4$ the Lord-of-All, / he has spit on the wounds $(nsp\cdot w)$ of $R\bar{e}^c$, so that he $(R\bar{e}^c)$ revives (nh) and feels well (ndm). / NN knows how to ward off (hsh) Apopis, so that he is driven back (ht) when he has come (hsh). It is this NN who has driven away (dr) the obscuration (hsh) from the damaged eye $(nkn\cdot t)$, so that it is bright (hsh) (373 a-b) '... NN has saved $R\bar{e}^c$ from the rage (nsh) of Apopis. / He does not fall into his (Apopis's) fetters. / NN is the one

¹ For $b_i(i)$, 'pupil' (of the eye), an early form of br, see CT II, 45a-b=P. Turin 54003, vs. 4; 9 (A. Roccati, Papiro ieratico n. 54003, Turin, 1970). Cf. also a verb nb_ib_i (Wb. I, 243, 14): Pyr. 98a; 104a; CT VII, 472f.

² Wb II, 319, 9.

³ Wb. III, 35, 8–12 ('cloudiness'); 35, 13–14 ('bleariness'); Wb. der medizinischen Texte, II (Berlin, 1962), 584–5. Cf. CT VII [1099], 393c: wbi bii har hity m drf, 'heaven is opened, the cloudiness is driven away from it' (determinative of hity: the eye [D 5], except B_6C , which has the raining heaven [N 4]; the latter in all manuscripts in the version of BD 130, 14, Naville II, 339, and Budge 280, 10–11). See also CT VII [1099], 408b = BD 130, 29, Naville II, 340; Budge 283, 2; CT VII [1100], 418b; [1112] 441a; c = BD 135, Budge 295, 1; 295, 3. See also Litany of the Sun, version of Seti I, 113 (A. Piankoff, The Litany of Re [New York, 1964], p. 32 and pl. 11).

⁴ Or: 'the obscuration of the face', etc., as suggested by one of the manuscripts which shows an ideogramstroke after hr (B₁₂C). Clearly 'obscuration of the face (view)' is meant in CT VII, 426c (hsr hsty hr); cf. also VII, 441c where some manuscripts have hsr hsty m hr hrsf ('the bleariness in the face is driven away from him') as in BD 135, Budge 295, 3-4 (hsr hsty m hr n Wsir / NN).

⁵ Following B_1B_0 ; B_2B_0 has 'successfully, successfully' (m htp, m htp) while $B_{12}C$ seems to have taken ht and ht together, thus showing a word ht determined by the snake: 'he who should be driven back' (cf. CT II, 13d) or 'he who roams about' (cf. Wb. III, 348, 18?).

⁶ Determined by ∞ . In the prototypes of BD 90, Budge 192, 8, namely CT v [453], 323b and [454], 326a, the word $nkn \cdot t$ in $ir \cdot t$ Tmw nknt, 'the damaged eye of Atum' is determined in the same manner. Cf. also Wb. II, 347, 6 and 9 (nknkt, resp. nkkt). The theory of H. Te Velde (Seth, 36) that these terms refer to a sexual abuse of the eye seems unwarranted to me.

who creates a rumour $(šd \ \rlap/brw)^1$ / and the damaged eye $(nkn \cdot t)$ is caused to be bright $(sb \cdot \rlap/k)'^2 (376b-377c)$ '. . . NN brings the Sound Eye $(w \not d \cdot t)$, saving it from its harm $(\rlap/kn)' (378c)$. The phraseology, however, is not too clear; nowhere is it said that Apopis really snatched away the eye of $R \vec{e}$, as it is said about Seth with regard to the eye of Horus.³

- § 5. The robbing of the eye of the sun-god as a mythological theme occurs also in texts of the New Kingdom. In the sixth hour of the Book Amduat it is said that the kings of Upper and Lower Egypt are addressed by Re^{ζ} , and then comes: $hm \cdot /n$ st $cw_{i}w_{i}$, 'the robber does not know them'. In many versions immediately after this the word $nt_{i}t$ (not determined) follows, and next comes the 'copula' (provisional subject) pw_{i} , and then the words $nt_{i}R^{\zeta}$. Perhaps one might interpret this as 'this means that the robber of the Divine Eye of Re^{ζ} does not know them', or else 'the robber of the Divine Eye does not know them—that is, (the Divine Eye) of Re^{ζ} . $cw_{i}w_{i}$, if referring in this case to Apopis, reminds one of CT_{i} , $cw_{i}v_{i}$, cited above. A curious
 - In the role of Seth, the opponent of Apopis? For &d hrw referring to the latter, see Wb. IV, 566, 7.
- ² Cf. the use of the word sbikt, 'eye-which-bestows-brightness' (?) in the Ritual of Hitting the Ball, for which see §§ 10-29. For sbik, sbk, as a verb meaning 'to see', see Wb. IV, 94, 15. Other references p. 125 n. 9.
- ³ For this, see J. Gwyn Griffiths, *The Conflict of Horus and Seth* (Liverpool, 1960), 28 ff.; H. Te Velde, *Seth*, 46 ff. At a certain point in the history of the conflict with the Eye, the distinction between the Eye of Re^c and the Eye of Horus seems to have got lost; cf. M. Heerma van Voss, *De oudste versie van Dodenboek*, 17a (Leiden, 1963), 248; H. Te Velde, *Seth*, 47. The typical robber of the eye of the sun-god (the *hpp wdivt*) is the oryx, but the core of this myth is still unknown.

For the spitting on the wounds after the fight with Apopis, cf. also CT VII [1033], 273 a-b: 'I have warded off (hsf; but other manuscripts have ini, 'to fetch') for him Apopis, / I have spat for him on the wounds $(nsp \cdot w)$ ' = BD 136B, Budge 302, 8; 147, Budge 361, 2 (all manuscripts have hsf); CT VII [1113], 444 a-d (foll. B_9C): 'I am the horror of Apopis, / because I know (how) to spit on the wounds $(nsp \cdot w)$ / when I see (them?). / I am the one who spits on the wounds, so that he (the sun-god?) is relieved $(ndm \langle \cdot w \rangle)$ '. Elsewhere, the sun-god 'comes out of' (pri m; 'to recover from'?) the wounds $(nsp \cdot w)$, as in Edfu, III, 222, 15; non-committal is BD 99, Budge 204, II. Elsewhere, e.g. in CT VII [820], 19p, the meaning may be 'fight'. The latter two passages perhaps refer to the fight with the 'speckled snakes' $(s \cdot b w t)$, the description of which shows many similarities (including the terminology) to that of the fight with Apopis (cf. Excursus II in my The Magical Texts of Papyrus Leiden I 348 [Leiden, 1971 = OMRO 51]). Further, the sun-god is 'wearied $(g \cdot h)$ of the wounds', CT II, 154a; BD 39, Budge 106, I. In a way, the 'wounds' have become so characteristic of Rec, that he—or the deceased, who wants to be his equal—is indicated as nb nspw, 'lord of the wounds'. For relevant passages, see J. Assmann, Liturgische Lieder, 122, text-note 6 (citing also P. Leiden I 344, vs. 3, 2 for the enemy as one pri mspw).

Magical texts, especially those belonging to the genre of the anti-scorpion and anti-snake spells, use the conflict between Rē' and a snake in their own way. Two mythical antecedents are prominent: one concerns Rē' bitten by a snake created by Isis (e.g. P. Turin 1993, rt. 6, 12 ff. = Pleyte-Rossi, 131, 12 ff. and variants; many other allusions), the other concerns Rē' and Apopis. In the latter conflict, Rē' is bitten and a glance of the snake—to return to the theme we are pursuing—is hardly mentioned, perhaps only in a text on the Louvre Statue 10777, 34-5, cited by E. Jelínková-Reymond, Les Inscriptions de la statue guérisseuse de Djed-Her-Le-Sauveur (Cairo, 1956), 20 n. 3): 'this hand of Atum which drives away the disturbance (nšni) at heaven, the disorder by his eye (hnn m ir t·f).' The first part of the sentence is more or less a parallel to Ddhr Statue, 12 ff.; the latter part is unique.

- 4 Amduat [6] 102, 4-5 (hm/n st cw;w); sequel in 103, 7 (ntrt pw nt Rc, following some versions). Not in the Version abrégée.
- ⁵ E. Hornung (Das Amduat, II, II3 n. II) thinks rather of Seth as the 'robber', pointing to BD 138, Budge 314, I. But there Seth is, as often, the robber of Osiris. Apopis's qualification as a 'robber' might also refer to his robbing the sun-god of his place in the bark which, like the robbing of the Nile-water, also leads to the theme of a cosmic catastrophe. Cf. e.g. P. Ramesseum C, vs. 4, II-I2 (Gardiner, The Ramesseum Papyri [Oxford, 1955], p. II); pl. 32; P. Turin 1993, vs. 9, 3 (Pleyte-Rossi, I22, 3).

passage in CT v [454] 324 f—i contains an address to a demon (who is ordered not to look at the deceased) which runs as follows: 'Look at the evildoers (isft-yw, here as torturers) of Shu / who come after you / in order to chop off your head, in order to cut off your neck / as an order of he-who-turns-with-his-eye (m wpwt nt n irt-f).' Since the god Shu can be feared because of his eye (§ 33), he might be the one who gave the order to the executioners. But remarkably enough, the version of BD 90, Budge 191, 14, replaces the words n irt-f by n0 n0, 'he who has robbed his lord'. Did the New-Kingdom redactors think of Apopis? Also, in n0, a spell for 'passing along the nasty bank of Apopis', the latter is addressed as 'O you, (only) a piece of wax, / who take by robbing' (i1 w1 m1 i1 m1 i2 m2 i3, Budge 29, 6–7). What the object of the alleged robbery is, is not clear; Apopis might as well be accused of robbing the water of the Nile.

In the Book of Gates,³ [9], 14-15 it is said by a group of magicians (hkiw): 'Hey, rebel who is / engaged (in evil)! Apopis, whose evil has been brought about! Your face is destroyed (htmw hr.k), Apopis!' The latter phrase, where the word hr is used, reminds one of CT II, 382d cited above: hbs tp·k, 'cover your head!' An even more striking parallel is provided by a passage in the tenth division (80), where the gods who protect Rēc say to Apopis: 'Darkness for your face (kkw n hr.k), O Wimmty!' Perhaps it is rather because of his eye than because of the general repulsiveness of his head or face that in the Book of Gates, [5] 55, Apopis is called dwdw-tp, 'he with the very bad head'. Tp and hr may both refer to the faculty of seeing, as appears from some other passages to be cited. In the Book of Caverns, [5], 62, V—63, V, it is said: 'Rēc sets in the western

- ¹ J. Zandee, who has translated and commented on the chapter in *Nederlands Theologisch Tijdschrift*, Wageningen 7 (1953), 193–212, discusses the passage (p. 211) but offers no solution. He thinks it improbable that Seth would have been meant here. If it is not Apopis, it might be Shu; for Shu as a dreadful god in funerary texts, see J. Zandee, *Death as an Enemy* (Leiden, 1960), 215. Perhaps some unknown mythical role of Shu is alluded to; perhaps he robbed his father Rē' of the throne. In the turbulent stories concerning the god-kings as told on the Ismailïa Naos (G. Goyon, *Kêmi* 6 [1936], If.), Shu's reign at the beginning of the myth is, however, peacefully established.—For *on m irt*, cf. perhaps *CT* vI, 235d.
 - ² Cf. note 5 on previous page.
- ³ Cited from [division] and plate in the various fascicles of Ch. Maystre and A. Piankoff, *Le Livre des portes* (Cairo, 1939 ff.). In the following, use is made of the recent translation by J. Zandee, 'The Book of Gates', pp. 282-324 in: *Liber Amicorum*. Studies presented in Honour of Professor C. J. Bleeker (Leiden, 1969).
- 4 Wimmty as a name of Apopis occurs from the New Kingdom on (see Wb. I, 251, 15). A genius wimmw (no special determinative) occurs in CT vII, 117p. He is mentioned among the four Apopis-snakes occurring in late mythology: Dw-kd, Wibr, Wimt and Hmhmti (Medamud [105] in É. Drioton, 'Les Inscriptions', in Rapport sur les fouilles de Médamoud (1925) [Cairo, 1926], 46). Perhaps they correspond to the four Apopis-snakes already mentioned in an 18th-Dynasty funerary text, see A. Shorter, JEA 23 (1937), 36; 38. Four priests deal with the Apopis-snakes: one is for Wimmty (Edfu, I, 538, I-2), one for Wbr (539, I3-I4), one for Apopis himself (543, 9-I0), and one for Hmhmty (543, I7-I8). Are they a reminiscence of the enemies who in religious texts are sometimes said to act against the sun-god in a group of four? Cf. Pyr. 229b; BD 15, A. Shorter, Catalogue, I (London, 1938), 73, 15; P. Turin 1993, rt. I, II (Pleyte-Rossi, II8, II); Ddhr Statue, 83-4; Urk. VI, 99, 17-18; II5, 17-18.

Wimmty as an evil snake is sometimes distinguished from Apopis proper, as in the texts cited above and in e.g. Kom Ombo, no. 635, vertical col. 2: 'Fear Horus, the champion, the Unique Lord, who slays the enemies—as Apopis fears him and (hnr) Wimmty, the enemy of Rēc!'

⁵ A similar name is given to a snake in the Book of Caverns (cited from [division] and plate in the edition of A. Piankoff, BIFAO 41 [1942], 42 [1944], and 43 [1945]) [6] 129, 2 and 130, 1: dwdw-hr. There is, however, no proof in the text that the snake is Apopis. But in [5] 62, V (a) that name is undoubtedly assigned to Apopis. In [6] 135, 9, a snake dw-hr is mentioned. Cf. dw-hr in a passage cited in § 32, and bin-hr, in § 35.

mountain in order to make provisions for those who are in the earth. He shines in the eastern mountain in order to drive him away, |Wnty, Apopis, whose eye is evil $(\underline{d}w)$ irt, who should be blinded $(\check{sp}[\cdot w])$. A parallel text in enigmatic writing (62, V, a . . . a) refers to Apopis as the $\underline{dw}\underline{dw}$ - \underline{hr} , 'he with the very bad face'.

§ 6. If the malignant glance of Apopis is sufficiently established from such texts, it is time to turn to BD 39, devoted to the 'warding off of the rrk-snake'. Rrk is known as a name of Apopis. The text runs: 'When you speak, your face is averted $(pncw \ hr \cdot k)$ / by the gods, your heart is cut out by Mafdet, / your bonds are laid by $Hdd \cdot t$ (a scorpion goddess), your / damage is brought about by Ma'at; she slays you!' (Budge 105, 10–13). The averting of the face probably means the averting of his piercing glance. Elsewhere, the rrk-snake is situated on a particular mound in the realm of the dead, and he is addressed by the deceased as follows (BD 149, g, 43–4, Naville II, 403; Budge 372, 14): 'Backwards, you, Rrk, the one who is at home in 'Iss, who bites with his mouth, who lames $(?gb)^2$ with his eyes!'

An isolated passage on a very fragmentary stela from Deir el Medineh³ runs: 'in order to slay (shr) Apopis, in order to blind him (r šp·f).' Somewhat similar is an address in a spell against Apopis attested on a statue of Ramesses III (Cairo JdE 69771),⁴ also found in the great collection of anti-Apopis incantations of the Ptolemaic P. Bremner-Rhind: hr hr hr·k šp hr·k, 'Fall down on your face, your face is blinded!' (Cairo JdE 69771, III [back side], 18 = P. Bremner-Rhind, 26, 12). In P. Bremner-Rhind 26, 16, it is said: nn m³·k nn dg·k³· 'you shall not see, you shall not perceive!' The earlier version has: nn m³· tw·k nn dg·tw·k, 'you shall not be seen, you shall not be perceived' (Cairo JdE 69771, III, 23).6

- § 7. A text on a wooden tablet of the late period in Berlin, published by S. Schott,⁷ is directed against the evil eye. It is said to 'all men (rmt), / all patricians $(pr \cdot t)$, all
- ¹ Wb. 11, 440, 2 (BD-passages); J. Zandee, Death, 100. In Old- and Middle-Kingdom texts the rrk-snake is a dangerous being in the nether world, in the New Kingdom (BD) the name is also applied to Apopis. After that period, the name disappears.
- ² Wb. v, 164, 4, mentioning only this passage. The word is written gb; g;b and once (Lc) gb;g. The determinative is the eye. Perhaps the verb in the various manuscripts is the simplex of gbgb, given by Wb. v, 165, 9-10 intransitively as 'to be lame'. But in P. Chester Beatty VII, rt. 8, 3 (kbkb) it has an object.
- ³ B. Bruyère, Rapport sur les fouilles de Deir El Médineh (1927), Cairo, 1928 (= FIFAO, Rapports préliminaires, 5), 42, fig. 29, fragment 4 (tomb 1126).
- ⁴ É. Drioton, 'Une statue prophylactique de Ramsès III', ASAE 39 (1939), 57-89; translation also in 'Une statue de Ramsès III dans le désert d'Almazah', Pages d'égyptologie (Cairo, 1957), 53-68.
- ⁵ E. Edel, $Z\ddot{A}S$ 81 (1956), 16, sub X, reads $g_{i}\cdot k$; however, to judge by the photograph, Faulkner's transcription dg_{i} seems correct.
- 6 Other utterances in this papyrus about the blinding or being blind (sp) of Apopis: 'I have blinded his eyes!' (27, 11); 'he shall be blind!' (27, 20); 'you are blind, being fallen / and annihilated—the two fingers of Thoth are in your eyes!' (30, 2-3); 'you are blind, being annihilated!' (30, 15); 'you are blind, being annihilated and driven back!' (30, 21); 'you are blind, you shall not see (nn gmh·k)!' (31, 10); 'Horus in his bark has blinded you!' (31, 15); 'you are blind, being annihilated, and vice versa!' (31, 18); 'be blinded, you!' (31, 24). In an anti-Apopis spell, attested inter alia on the Socle Behague, it is said ([6] g, 13 and variants; A. Klasens, A Magical Statue Base, 38): 'your head has been cut off; you have been cut to pieces, you do not lift up your face against the great god!' The latter may refer to the undoing of the effect of the evil glance; cf. ibid. 100 and J. Zandee, Nederlands Theologisch Tijdschrift, Wageningen 7 (1953), 210-11.
- ⁷ Berlin 23308; see S. Schott, 'Ein Amulett gegen den bösen Blick', ZÄS 67 (1931), 106-10; also translated in G. Roeder, Zauberei und Jenseitsglauben im alten Ägypten (Zürich, 1961), 124-5 and pl. 13.

plebeians (*rḥy·t*), all people (*ḥnmm·t*), etc., who will / throw the evil eye (*irt bint*) against Pediamon-/nebnesuttaui, son of Meḥwet-em-weskhet / in any evil or bad fashion: you will be slain like / Apopis, you will be dead and not be alive for ever!' (I, 5—II, 1-4). It is possible that in this context the comparison with the slaying of Apopis more particularly refers to the averting of the latter's glance, rather than to the unspecified massacre which is always his doom and that of his followers.

§ 8. Apart from the special ritual best attested in Ptolemaic texts which forms the subject of §§ 10 ff., there are a few other mentions of Apopis's evil eye in Ptolemaic texts. A passage in Edfu, 111, 341, 6–10 (a hymnic address to Rēc) runs as follows: 'O Rēc, be high, be high! Come, please, Rēc! You are high in your highness, while Apopis / is debased in his debasedness. Come, please, Rēc, that you may appear in your appearance, while there is darkness (kkw) in the eye of Apopis! / Come, please, Rēc, that [you may be] beautiful in your beauty, while Apopis is hateful in his hatefulness—while you, O Rēc, are joyful, joyful and your / crew is in rejoicing and reverence; there is reverence to you every day, while Atum is endowed with right-and-truth (msct). [Trium]phant is Rēc over Apopis (four times); Horus of Beḥdet, / the great god, is triumphant over his enemies (four times)! 'Darkness in the eye of Apopis' may be a literary device of asserting the enemy's privation of the light which spends life, because 'appearing (of the sunrays) in the eyes' of the living is a well-known theme in sun hymns.² But in view of the passage in the Book of Gates [10] 80 cited above, it should rather refer to the blinding of Apopis, that is, the undoing of the influence of his malevolent eye.

When the boat of the sun-god is in safety, this is due to the ritual action of the king, who 'bends down (ksm) the one whose eye is aggressive (? khb irt); he is like Horus, being content with his eye, / his enemies fallen down onto the slaughter-block' (Edfu, v, 72, 8-9). The term khb irt also occurs in Edfu, vi, 313, 10 (here no. 9, § 19).3

§ 9. From all this, it may be clear that one of the terrible weapons to be feared from the demon of chaos is his malevolent eye. When the sun-boat would be caught by its glance, a cosmic calamity might be the result. The danger is countered by averting the glance in some magical way—or by defying it; but the latter can only be done by someone equal to Apopis, like Seth, or by the sun-god's eye itself. Before passing over to the third device, one of ritual order, it is necessary for the sake of completeness to consider the curious relation between the eye of the sun-god and the demon of the dark elaborated in some of the Nether-world Guides. In a singular representation in the tomb of Ramesses IX the eye of the sun-god, mounted by a ram's head, finds itself in the body of a crocodile.⁴ The latter's name is *Wnty*, which is often a name of Apopis.⁵ Apopis in

¹ As S. Schott (op. cit. 109, under 12) already presumed.

² See J. Assmann, Liturgische Lieder an den Sonnengott, 41-2 (n. 3), with many examples from texts.

³ See p. 130 n. 2.

⁴ A. Piankoff, La Création du disque solaire (Cairo, 1953), 67–9 and pl. 38; B. Stricker, De geboorte van Horus I (Leiden, 1963), 41–2; fig. 8. Another representation exists in the tomb of Ramesses VII, but here the eye is missing. The legends are the same. As a vignette, the scene is also found in P. Salt 825, 9, see Ph. Derchain, Le Papyrus Salt 825 (Brussels, 1965), II, pl. 21* and B. Stricker, op. cit. 42, 43 (fig. 9). Here there is mention of Mwt (perhaps the uraeus in the disc?), Mich (the plume on the crocodile's head), and the crocodile itself which is called iry ssif, inh m hwit, 'he who belongs to his ash, living on putrefaction'.

⁵ See references given by A. Piankoff, op. cit. 69 n. 1.

the form of a crocodile is rather rarely attested, though he is closely associated with the tortoise² and the scorpion.³ It is said in this particular cave of Wnty: 'The disk of the great god opens the dat of Wnty. The god (Rec) emerges from his mysteries. Wnty vomits $(b\check{s})$; he breaks out (csc) the eye of $R\bar{e}c$ which is in his (Wnty's) belly. Its (the eye's) pupil enters into its apparitions.' Though it is not expressly said so, one may suppose that the sun disk entered the crocodile's body through his tail.4 Though Wnty is a not infrequent name of Apopis, it is rather not an Apopis-like animal in the usual inimical sense which is represented here.⁵ The crocodile rather represents a primeval divine being, a kind of equal of Rec, and the latter rejuvenates himself at night by passing through its body.6 It looks like Reg meeting his other, chaotic counterpart,7 but without feelings of enmity; is it the depth and the primeval surroundings of their meeting-place which annihilate the contrasts? Elsewhere, Wnty is hailed.8 The same ambivalent character is sometimes owned by Wimmty, who, apart from being Apopis himself or an associate of his, o also occurs as the guardian of the gods in their restingplaces. 10 The same may be the case with Nhb-k/w who is sometimes an equivalent of Apopis, 11 but elsewhere a beneficent god 12 who at times even bestows life. 13 The same holds good for the snake Dsr-tp.14

- I The crocodile Nh:-hr (Wb. II, 290, 17) as an enemy of Rē appears as a kind of Apopis in some texts, e.g. Amduat [2] 38, I; [7] II8, 2; I23, I; I23, 5; I24, 4; I25, 6; I27, 2; [10] I75, 4; Book of Gates [10] 79; P. Mag. Harris, rt. 5, 7; Ddhr Statue, 72; I56; P. Bremner-Rhind, 23, I2; Edfu, I, 417, II (left); V, II3, 9; Dendera, IV, 193, I4 (no. 10). In Dendera, VI, 91, 8, Nh:-hr occurs as a snake-god. In CTI, 208a, nh: in Nh:-hr (who is perhaps Apopis in that passage, since his 'band', sm:y.t, occurs ibid. 207f) is determined by ... Mostly the determinative is O. Perhaps in P. Jumilhac 16, 8, it is used transitively of the eye (cf. J. Vandier's note 524 on p. 195 of the edition).
- ² See B. Van de Walle, 'La tortue dans la religion et la magie égyptiennes', *La Nouvelle Clio* 5 (1953), 173-189, 180 ff.
- ³ Cf. P. Turin 1993, vs. 4, 1 (= Pleyte-Rossi, 136, 1): 'A small, small thing, the sister of the snake, the scorpion, the sister of Apopis!'
- ⁴ Cf. a similar passage in Amduat [12] 197, 7, where the sun-god, in order to be reborn, 'enters into his (the snake's) tail and comes out of his mouth'. In Amduat [11] 180, 2 a snake, named ptry, 'looker' (no. 756; the name is determined by the snake only in the Version abrégée, 258) carries a goddess on its back who 'devours' the figures (sšm·w) of the stars but brings them forth again when the sun-god is born.
- ⁵ Contra A. Piankoff, op. cit. 69 n. 1 and E. Hornung, Das Amduat, II, 133; cf. also A. Volten, MDAIK 16 (1958), 359 n. 4. Piankoff also refers to a crocodile cbš in Amduat which holds an eye between its jaws. This is rather not, as he says, the eye of Rē^c, but that of Osiris (Amduat [7] 132, 10–133, 3 and no. 554; see E. Hornung, op. cit. 138–9, n. 6). But the final clause of this section: 'He who knows it—him the cbš-crocodile shall not devour' suggests that this representation at least indicated something terrible for the Egyptians. Elsewhere the cavern of Pn-wnty contains two snakes who function as protectors, see A. Piankoff, op. cit. pl. 25, 3 and pp. 29–30.
- ⁷ Sethe, ZÄS 57 (1922), 12 n. 1, pointed to the fact that Atum himself was sometimes represented as a snake. Kees, Götterglaube², 248 n. 1, referring to the fight of Atum with the snake before Heliopolis (see above p. 114 n. 7) asked whether the snake was 'im Grunde Atum selbst?' For primeval gods as snakes, see especially W. Brede Kristensen, Het leven uit de dood (Haarlem, 1949), 37–8. Very characteristic is C. De Wit, Les Inscriptions du temple d'Opet, à Karnak (Brussels, 1958), 278, left section, where Osiris is addressed: 'You are the Smooth Snake (ncy), the lord who prospers(?) that which exists, the most masculine of the gods, who began darkness (šr snkt) in the primeval time.' For other characteristic passages, see Kees, op. cit. 55 ff.
 - ⁸ BD 15, Budge 38, 5; 136A, Budge 298, 4.
 - ⁹ See p. 118 n. 4. ¹⁰ E. Hornung, Das Amduat, 11, 106-7, with references.
- ¹¹ E.g. Pyr. 229 a-b; '2255a' = Neith, 717 (R. Faulkner, The Ancient Egyptian Pyramid Texts, 11 [Oxford, 1969], 77); CT vi, 39h; P. Louvre 3865, 4, 2-3 (cited by J. Zandee, Death as an enemy, 99 n. 7).
- 12 References from CT apud J. Zandee, op. cit. 98 ff.; see also Edfu, IV, 301, 15.

The rite of hitting the ball

§ 10. Finally, there are the scenes of the rite 'hitting (skr) the ball (hm, hm, etc.)'. It seems advisable to deal with them now, in order to complete the dossier about the eye of Apopis, as far as the 'evil eye' in texts is connected with him. After this, the picture will be complete enough to add other data, especially with regard to the glance of the snake in general (§§ 30-1), of demons (§ 32), gods and men (§§ 33 ff.).

One of the first to pay attention to this rite was A. Erman, who in his *Die Religion der Ägypter*¹ briefly characterized these scenes as an anti-Apopis ritual. Because the rite has also the appearance of a ball-game, it was shortly discussed by S. Mendner in his *Das Ballspiel im Leben der Völker*.² Apart from short references by Ph. Derchain and F. Daumas,³ the most recent discussion of them is by C. De Vries in an article in *Studies in Honor of John Wilson*⁴ where, however, the stress is laid on the sportive, not on the religious aspect.

The rite can be briefly summarized as follows: the king hits a ball⁵ before a goddess, usually Hathor. From the legends it appears that the ball represents the eye of Apopis which is hit away and thus debased. This conclusion is, however, only afforded by the Ptolemaic examples, where the legends are more explicit. At present nineteen examples are known to me from various temples (Deir el-Baḥari, Luxor, Edfu, Dendera, Philae), the earliest of which date from the Eighteenth Dynasty. For the sake of convenience, the Ptolemaic texts are given here not in their chronological order, but in the order of the volumes in which they have been published.

§ 11. No. 1: Deir el-Bahari = E. Naville, *The Temple of Deir el-Bahari*, IV (London, 1901), pl. 100; p. 4. Discussed by C. De Vries, op. cit. 27, 31, 33. Cf. also Porter-Moss, *Top. Bibl.* II (Oxford, 1972²), 351 (38) where the scene is now mentioned as such (not in the first edition, p. 121 (46)).

King Tuthmosis III before Hathor.

Title: 'Hitting the ball (hm3) for Hathor, chief of Thebes.'

Hathor: 'Words' spoken by Hathor, chief of Thebes: O beloved son, much desired, / lord of the Two Lands ($Mn-hpr-k_3-Rc$). How well is this land since you received the White Crown, / since

- 13 Ddhr Statue, 170-1 = Metternich Stela, 21-2.
- 14 See n. 148 of my The Magical Texts of Papyrus Leiden I 348.
- ¹ (Berlin, 1934), 449 n. 2, referring to our nos. 1, 2, 12, and 20. Dr. B. H. Stricker refers me to ZÄS 48 (1910), 76, where H. Junker quotes Seth's eyes being played with as a ball in the Horus-myth of Edfu. I have been unable to find the passage.
- ² (Münster, 1956), 43-5 ('Ägypten'). The scenes are not mentioned in S. Wenig and A. Touny, *Der Sport im Alten Ägypten* (Leipzig, 1969).
- ³ Ph. Derchain, Rites égyptiens, I. Le Sacrifice de l'oryx (Brussels, 1962), 28; F. Daumas, Dendara et le temple d'Hathor (Cairo, 1969), 76, 78. The latter shares the opinion of H. Junker (see n. 1) and associates the ball with the eyes, not of Apopis, but of Seth.
- ⁴ C. De Vries, 'A Ritual Ball Game?' Studies in Honor of John A. Wilson (Chicago, 1969 [SAOC 35]), 25-35.
 - ⁵ For the word, see Wb. III, 93, 10-11 (hm3); 12 (hm3·t).
 - ⁶ Text of this legend in *Urk*. IV, 292, 12-293, 2.
- ⁷ The text gives sit, not si, but the t appears to have been deleted (cf. Urk. IV, 292 n. c). Was the left portion of the scene originally intended for Ḥatshepsut? The representation of the king on the right portion is certainly not carved over an earlier figure. But there are more mistakes, see next note.

you established¹ the Red Crown on / your forehead, since you lifted up / the Two Ladies, since you appeared with them, living² eternally!'

King Tuthmosis III: no legends. Legends of welfare (etc.) behind king: 'Wedjoyet, mistress of heaven. May she give life and well-being $\langle to \rangle$ the King of Upper and Lower Egypt, lord of giving offerings (Mn-hpr-ks-Rc), the bodily son of Re^{c} ($\underline{D}hwty-msw-nfr-hprw$), appearing³ as King of Upper Egypt in the Boat of Millions as the chief of the throne of Atum, like Re^{c} .'

Two men below, each having a ball in hand: 'fetching (hnp) by a god's servant, after he has hit them away'.4

§ 12. No. 2: Luxor temple = A. Gayet, Le Temple de Louxor, 1er fascicule (Paris, 1894 = MMF, 25), pl. 68 (no. 74), fig. 213.5 Mentioned by C. De Vries, op. cit. 28, note 13;6 see now also Porter-Moss, Top. Bibl. 11 (1972²), 327 (153).

King Amenophis III before goddess with Hathor crown, therefore probably Hathor.⁷

Title: 'Hitting the ball $(hm \cdot t)$, in order that he may be given life.'

King: 'The King of Upper and Lower Egypt $(Nb-m_3c\cdot t-Rc)$, the son of Re^{ζ} (Imn-htpw), . . . [destroyed] . . . living eternally.'

Hathor: 'Beloved's of Amen-Rē', lord of the thrones of the Two Lands, given all life; all stability and well-being is with her . . . [destroyed] . . .'

§ 13. No. 3: Luxor = Wb. III, 93, 12, quoted in the Belegstellen (III, handwritten pages, 26). Mentioned by C. De Vries, op. cit. 28, note 12;9 see now also Porter-Moss, op. cit. II (1972²), 319 (111). Unpublished inscription in the chapel of Mut, here quoted from a copy made by Sethe for the Wb. 10

King Amenophis III before lioness-headed Sakhmet.

Title and Formula: 'Hitting the ball (hm3.t), in order that he may be given life.'

King: 'Making glad the heart of her, who created his beauty.'

Sakhmet: 'May she give all life, stability and well-being, all sanity, all gladness and the passing of millions of years.'

- ^I The text has $grg \cdot f$, which cannot refer to the White Crown ($h\underline{d} \cdot t$).
- ² ₹.
- ³ From here on in *Urk*. IV, 291, 9-10.
- ⁵ Also published in R. Campbell, *The Miraculous Birth of King Amon-hotep III and other Egyptological Studies* (Edinburgh, 1912) in a photograph facing p. 74, but the very bad quality makes it useless.
- ⁶ Referring to H. Nelson, Key Plans Showing Locations of Theban Temple Decorations (Chicago, 1941 [OIP 56]), pl. 23, section G, room 13, no. 298 (like Gayet).
- ⁷ The legends establishing the identity of the goddess are destroyed; for Mut as Hathor, see Bonnet, Reallexikon, 492, 493.
 - 8 Mry, not mryt.
- 9 Referring to H. Nelson, Key Plans, pl. 23, section D, room II, no. 206 (west wall); opposite the next Luxor scene.
- ¹⁰ Kindly communicated to me by Dr. W.-F. Reineke of the Berlin Wörterbuch in a letter dated July 8, 1970. Full publication of the two Luxor scenes has been promised by C. De Vries, op. cit. 28 n. 12.

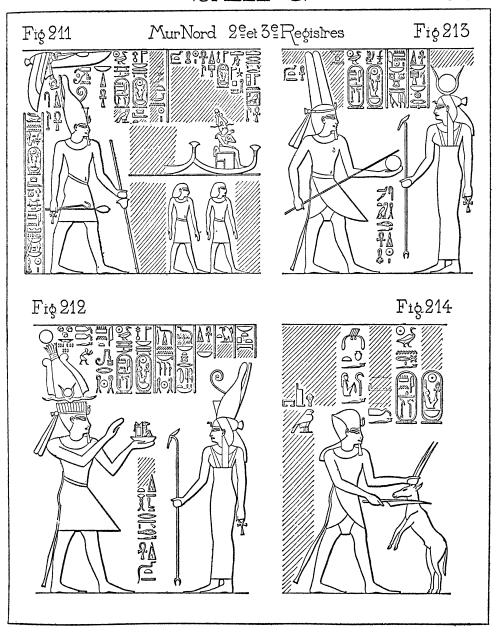


Fig. 1. Gayet, Le Temple de Louxor, pl. 68 (no. 2, § 12).

§ 14. No. 4: Luxor = Wb. III, 93, 12, partly quoted in the Belegstellen as a variant of the former. Unpublished; quoted by C. De Vries, op. cit. 28, n. 12. Legends are here translated from a copy made by Sethe which apparently only refers to the differences from the preceding scene.

King Amenophis III before lioness-headed Sakhmet.

Title and formula: 'Hitting the ball (hm) in order that he may be given life.'

King: eventual legend unknown, perhaps the same as in former scene.

Sakhmet: legend unknown.

§ 15. No. 5: *Edfu*, 1, 62, 5–13; pl. 16; Porter-Moss, *Top. Bibl.*, vI (1939), 146 (under 219–20). Mentioned by C. De Vries, op. cit. 29 n. 14.

King Ptolemy IV before Hathor.

Title and formula: 'Hitting the ball (hmw). Words spoken: I have bent down $(sdh)^2$ the pupil (im) of the rebel, /N(i)k, I have stricken (hwi) it with the b_ik (-staff) before you. The iris (df) of the Sound Eye (wdit) is safe on its place, it / is flourishing again ($whm \cdot f rnpi$) like Khepri.'

King: 'The son of Rec (Heir of Euergetes), lord of diadems (Ptolemy, living eternally, beloved of Isis), the son of the Noble Lady ($\S pst$), the boy ($\S s$), the youngster (id), the child (im), who tears up ($n\S d$, the iris (dfd) / of Wimmty. Words spoken: take for yourself the b:k(-staff) which has grown from the eye of Rec (and) the ball (hmw), the iris (df) of He-who-is-in-his-fire. I have hit (skr) it in order to make / your heart rejoice; (as for) the Sound Eyes, their rage is no more.'

Hathor: 'I give you your eyes while bringing you joy, so that you illuminate that which is hidden in the darkness.8 Words spoken by Hathor, the Great One, / Lady of Dendera, the Eye of Re, who sojourns in Edfu, the Eye-which-bestows-brightness $(sb_{i}k_{i}t)^{0}$ of the Majesty of the King, the Living Eye $(cnh_{i}t)$ which is bright $(b_{i}k)$ and safe on its place. Those who have rebelled against it, are no longer in existence. Your Words spoken: I grant you that you see $(m_{i}t)^{2}k$ n) the eye of Re, / that you

- ¹ Referring to H. Nelson, Key Plans, ibid., no. 218 (east wall), opposite the former scene.
- ² Wb. IV, 371, 7.
- ³ Wb. 11, 205, 14; J. Zandee, Death, 295.
- ⁴ So similarly *Edfu*, 11, 228, 11; 111, 140, 5; IV, 113, 13; 305, 13 (here no. 8); *Dendera*, IV, 193, 13 (here no. 10).
- ⁵ Wb. II, 342, 13-16; also in Edfu, IV, 149, 5 (here no. 7); VI, 313, 7 (no. 9): Dendera, VI, 134, 3 (no. 12; damaged); Dendera = no. 16 (formula: Brugsch, Thes. 1398). Other, similar terms used for the destruction of the inimical eye are, for instance, wnp (Dendera, V, 67, I [no. 11]); ptpt (Edfu, IV, 305, 9 [no. 8]; G. Bénédite, Philae, 81, 13 [no. 18]); npd (Edfu, III, 146, 6; IV, 305, 7 [no. 8]); sft, (Edfu, IV, 149, 7 [no. 7]; Dendera, IV, 193, 14 [no. 10]; Dendera, unpubl. [no. 16, king]); skr (Edfu, IV, 149, 8 [no. 7]; Dendera, unpubl. [no. 15, king]); tštš (Edfu, IV, 305, 8 [no. 8]; Dendera, V, 66, 10 [no. 11]; G. Bénédite, op. cit., 81, 13 [no. 18]); dn (Dendera, unpubl. [no. 16, Ḥarsomtus]).
- ⁶ Something similar is said about the b_1k -oil—not the club or staff, k—in the laboratory text of the Edfu temple. Edfu, II, 202, 5: 'I bring you the moringa-oil (b_1k) , pleasant of smell, from the drops (dfdw) of the eye of Re.'.' There are other passages in which the divine origin of certain perfumes or oils is explained in a similar way, see for instance P. Salt 825, 2, 2 ff.; Edfu, III, 185, 15. For the opposition between the club of b_1k -wood and the ball (also made of wood?), see § 29.
- ⁷ For *imy nsrrf*, determined by W., cf. the snake name *imy nsrsrf* in *Urk*. VI, 63, 21-2 and the prototypes of that passage where the name is different, discussed above p. 114 n. 7.
 - 8 Compare Edfu, 1, 233, 14; 11, 69, 8; 83, 12.
- 9 Sbik·t, Wb. IV, 13-14. Derived from sbik, 'to see', ibid. 94, 16-17. For the simplex bik (Wb. I, 426, I, found already in CT VII, 196e) see S. Sauneron, 'Le prêtre astronome d'Esna', Kêmi 15 (1959), 36-41, especially p. 40. Perhaps compare the many derivatives of a root bk 'to see', common to several Semito-Hamitic languages, discussed by A. B. Dolgopol'sky, Yazyki Afriki (Moscow, 1966), 57. Perhaps connected with the verb sbik, 'to make clear' (Wb. IV, 86) whereas I have translated the word sbikt as 'the eye which bestows brightness'. See also above, p. 117 n. 2.
 - 10 Cf. Edfu, IV, 149, 6 (no. 7): m n wnf. For m n wn, see also Edfu, III, 286, 12.

behold $(p\langle t\rangle r\cdot k n)$ the eye of Horus, that which the sun encircles and that which the moon perceives (dg_2) . Their lord is embodied in you, you are their ruler.

§ 16. No. 6: Edfu, III, 348, 10–14; pl. 82 (here fig. 2). Cited by C. De Vries, op. cit. 29 n. 15; see also Porter-Moss, Top. Bibl. vi, 135 (97, i).

King Ptolemy VII before Hathor.

Title and formula: 'Hitting the ball (hms) for his mother, the Mighty One, making that the mistress (hmwt) enjoys herself (shee) with her enemy.'

King: 'The King of Upper and Lower Egypt (Heir of the Epiphaneis, whom Ptah has selected, who does the justice of Rec, the living image of Amūn), the son of Rec (Ptolemy, living eternally, beloved of Ptah), / Euergetes.' (There follow legends of protection.)

Hathor: 'Words spoken by Hathor, Lady of Dendera, the Eye of Rec, who sojourns in Edfu, lady of heaven, mistress of all the gods, Sflit-chwy, lady of writing, / the mistress of the library: I grant you your Sound Eyes, being safe on their place.'

§ 17. No. 7: *Edfu*, IV, 149, 4–150, 2; IX, pl. 87. King Ptolemy VII before Hathor.

Title and Formula: 'Hitting the ball $(hm \cdot w)$. Words spoken: take for yourself the iris (\underline{dfd}) / of Wbr⁴ which is torn up $(n\check{s}d)$. Enjoy yourself $(hkn r \cdot \underline{t})$, O Lady of Dendera: / the burn-snake $(? r - \underline{d} \cdot f)^5$ is burnt $(\underline{d} \cdot f)$, his being shall be no more! The slaughter-snake $(? sf\underline{t})$, 6 / his gleaming eyes $(? s\underline{t}r \cdot ty \cdot fy)^7$ are cut up $(sf\underline{t})$. He-whose-character-is-evil⁸ has been driven away, his pupil $(im \cdot f)$ / has been hit (skr). Rejoice, you $(hc \cdot r - ir \cdot \underline{t})$, O Eye of $R\bar{e}$?'

- ¹ Similarly: Edfu, 1, 233, 7-9; 449, 6; 111, 140, 3; 238, 5-6; 268, 16-17; 316, 8; IV, 81, 12-13; 139, 6; 389, 5; VII, 163, 13; 311, 11; Edfu Mammisi, 28, 4; Dendera, III, 142, 6-7; V, 63, 11; Philae, II, 287, 21-2; A. Blackman, The Temple of Bîgeh, 23.
 - ² Nb·sn ; understand im·k.
- ³ So similarly in scenes of killing the hippopotamus or the crocodile: *Edfu*, III, 257, 13, and 287, 6-7. For the joy which the goddess derives from the playful rite, compare *Edfu*, III, 348, 10 (no. 6); IV, 149, 5 (no. 7); 149, 8 (id.); *Dendera*, IV, 193, 10-II (no. 10); cf. *Dendera*, V, 66, 10 (no. 11) and G. Bénédite, *Philae*, 81, 13 (no. 18).
- ⁴ A common name for Apopis (Wb. I, 295, 11), abbreviated from wbn-r², 'he whose mouth is widely opened'.
- 5 Probably so, on the strength of Edfu, VI, 179, 17 (r-dif determined by the brazier) and VIII, 21, 15 ('I bring you r-dif [determined, like here, only by the snake] as a burnt-offering'). For some other examples of alliteration between verbs of destruction and their object, see, for instance, wbd...wbr (Edfu, VI, 179, 17-18; VII, 157, 8-9); ptpt...ptr·ty·fy (G. Bénédite, Philae, 81, 13 [no. 18]); npd...nbd (Dendera, II, 192, 5); nk...nik (Dendera, IV, 81, 8); nk...ng; (Edfu, VI, 141, 10); ngi...ng; (Edfu, VII, 310, 1); hnp...hnp (Edfu, IV, 284, 5; V, 87, 2); hnty...hnty (Edfu, IV, 213, 2; 305, 10-11; V, 56, 1-2; VII, 173, 9; VIII, 77, 7); hbt...hbty (Edfu, I, 573, 15); sft...sfty (Edfu, IV, 149, 6-7); sft...sft-h (Edfu, VI, 313, 16; VII, 175, 14-15); snt...snty (Edfu, II, 75, 4).
 - 6 Perhaps compare Edfu, VII, 112, 14 (a ritual of killing Apopis): ; read dsty or sftty?
- Written Perhaps a spelling of styty, cited in Wb. IV, 332, II as a word for 'eyes', referring to Edfu, I, 233, which is incorrect. Urk. IV, 1466, 7, seems to contain a word stwty f(y), but the parallel passage in 937, 15 clearly has stwt irty f(y), 'the rays of his eyes'. Perhaps our substantive is connected with the verb sty (ibid. 332, 4-6) which perhaps means 'to shoot' (a glance; for 'shooting', sty, with the eyes, see 327, 13-14). Another spelling of 'eyes' in which the radicals interchange is in Edfu, IV, 136, 15. Cf. also P. Chester Beatty VIII, vs. 3, 4 (context damaged). Or is our word to be connected with a noun probably meaning 'enemies, written strty w () in Edfu, II, 75, 6?
- ⁸ Dw-kd, a common name for Apopis (Wb. v, 547, 22), already from the Middle Kingdom on (CT vII, 466b), or for Seth (e.g. Edfu, I, 483, 8; VII, 265, 15).

BIBLIOTHÈQUE

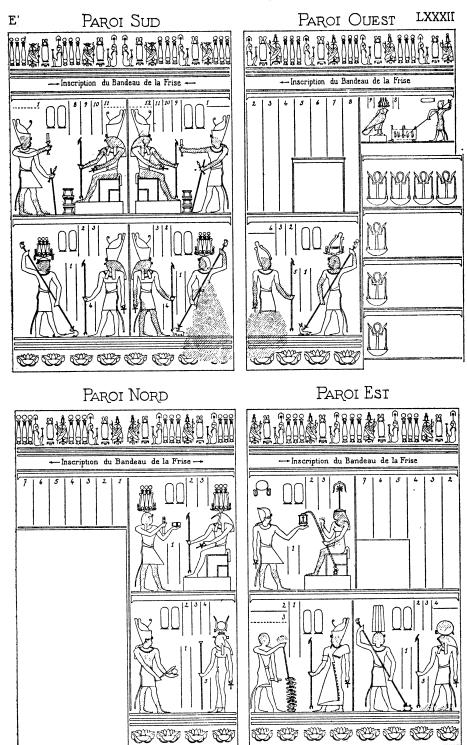


Fig. 2. Chassinat, Le Temple d'Edfou, III, pl. 82 (no. 6, § 16).

King: 'The King of Upper and Lower Egypt (Heir of the Epiphaneis, whom Ptah has selected, who does the justice of Re^{ζ} , the living image of $Am\bar{u}n$, Euergetes, Thy who bestows water (?), whom the uraeus-goddess praises, the dancer of the Lady of the Hill-of-Giving. Words spoken: I come to you, Hathor, the Great One, mistress of the sistra, / of the mnit-collar, of the rattle! I bring you the ball (hm) as the eye-which-bestows-brightness (sbikt) of Wimmty which nevertheless has been crushed through handling the club (m smit ht). You are the uraeus, the iris (dft) / of the Sound Eye, the Eye of Re^{ζ} , Pre-eminent in the Land-of-Atum!' (There follow other legends.)

Hathor: 'I give you your rebels, fallen into your slaughter-block.' I burn the enemy of Your Majesty. / Words spoken by Hathor, the Great One, Lady of Dendera, the Eye of Rēc, who sojourns in Edfu, the Uraeus, Pre-eminent in the Dendera nome (tr rrt), great of strength—she has driven away the one-whose-character-is-evil, / repelling the rebels with her spells. Words spoken: be welcome in peace and stability, protector of the gods, / defender of the great ennead! I have accepted your (act of) strength (phty·k), 2 you being mighty over N(t)k, as one fierce of face (m hsr hr), who cuts down the enemies. I slaughter your rebels, / I drive back those who violated your paths, I slay the company (tt) of him who trespasses your road.'

§ 18. No. 8: Edfu, IV, 305, 6-306, 4; x, 1, pl. 93.

King Ptolemy VII before Hathor.

Title and formula: 'Hitting the ball (hmw). Words spoken: / take for yourself the divine eye ($n\underline{t}rt$) of $N(i)k^4$ as something cut out ($m np\underline{d}$), its iris ($\underline{d}f$) / and its pupil (im) as something battered ($m t\check{s}t\check{s}$). I have kicked (khb, with direct object) the ball (hmt), while protecting / your Majesty, I have

- Written The ; or read ntr 0, etc.? For iwh, 'to bestow', see Wb. 1, 57, 8.
- 2 Hsw n hryt-tp; cf. hew n hryt-tp in Dendera, IV, 193, 12-13 (no. 10).
- ³ For *Ist-di* as a name of the Denderah nome, see Gauthier, *Dict.* 1, 35, 50, 124. For the various writings of the name, see Daumas, *Les Mammisis des temples égyptiens* (Paris, 1958), 197–8 n. 4.
- 4 For the sbikt-eye owned by Apopis, see Dendera, IV, 193, 14 (no. 10); Dendera = no. 16 (Brugsch, Thes. 1398). Other terms for his eye are: wdit (G. Bénédite, Philae, 81, 12 [no. 18]); mrt (Dendera = no. 16); ntrt (Edfu, IV, 305, 7 [no. 8]; Dendera, V, 66, 9; 67, I [no. 11]; Dendera = no. 15; Dendera = no. 16 [Brugsch, Thes. 1398]). These (and other) terms are mostly used for the eye of Re (but for Seth's wdit-eye, see § 33). The fact of their being employed for the eyes of both opponents, Re and Apopis, is a testimony of the belief that both eyes, inimical and opposed to each other, were of equal terrific power.
 - 5 Hbhbti ir:f; so similarly Edfu, VI, 313, 12 (no. 9).
- 6 M smsc ht. For the pregnant meaning of smsc, cf. especially P. Bremner-Rhind, 32, 1: smscnf cb·f m hsb·k, 'he has thrust his horn into your neck'; see also Wb. IV, 125, 1 ('to handle'). The ht, 'club', is the ht n bsk, thus found in Edfu, IV, 305, 13 (no. 8); Dendera, V, 67, 1 (no. 11); VI, 134, 5 (no. 12) and Dendera Mammisi, 175, 4 (no. 17).
- ⁷ For Hathor as the iris (df, also written dft and dfd) of the wd^3t -eye, see Edfu, IV, 149, II (no. 7); V, 228, 5; VI, 313, 15 (no. 9); Dendera, II, 48, 5-6; III, 138, 8; 146, 4; 184, 2; IV, 77, 9; 252, 5; 267, 8-9; Dendera = no. 15; Dendera = no. 16 (Brugsch, Thes. 1398). For Wedjoyet, see Dendera, V, 86, I.
 - 8 A very frequent name for the Dendera temple in Ptolemaic texts, see Gauthier, Dict. VI, 19.
 - 9 So similarly Dendera, VI, 134, 10 (no. 12); G. Bénédite, Philae, 81, 12 (no. 18).
- ¹⁰ For Hathor driving away Apopis by means of her spells, see e.g. Edfu, IV, 305, 17 (no. 8); V, 57, 10; VII, 157, 9; Dendera, IV, 193, 17 (no. 10); Dendera = no. 16; G. Bénédite, Philae, 20, 6; 51, 8; H. Junker and E. Winter, Philae, I, 248, 15; II, 7, 20. So similarly of Isis, see Amduat [7] 117, 7; 118, 6; 123, I, 2; 125, 5; Edfu, III, 220, 10; H. Junker and E. Winter, Philae, I, 169, 12; G. Bénédite, op. cit., 84, 19-85, I; Philae-Kalabsha hymn edited by H. Junker, Ein Preis der Isis aus den Tempeln von Philä und Kalabša (Anzeiger Wien, 1957, Nr. 18), 269; 271 (line 4); P. Bremner-Rhind 23, 19; 30, 9; 31, 17.
- ¹¹ So similarly *Edfu*, VI, 313, 15 (no. 9); *Dendera*, IV, 193, 14 (no. 10).

hacked up (ptpt) the eyes $(pt\langle r\rangle ty)^T$ of that / one (pfy). Praise to you (hnw $n\cdot t$), O lady of rejoicing (hy), lady of praise (hnw)! The slaughter-snake (hnty) has been slaughtered (hnt) / with my knife $(s_3h\cdot t)!^3$

King: 'The King of Upper and Lower Egypt (Heir of the Epiphaneis, whom Ptah has selected, who does the justice of Re, living image of Amun), Euergetes, the son of Re (Ptolemy, living eternally, / beloved of Ptah), Euergetes, who has taken (t;i) the club (ht) of b;k-wood together with (hnr) the ball (hm) in his hand, $\frac{1}{2}$ [who enjoys himself (?)] as a boy (s), a youngster (id), a child (im). Words spoken: I have come / to you, who guide the Two Lands of (?) him who is in the horizon (?), you, horizon-dweller (?) [.....] you [...] that one (pfy); strong (? rwd?) is the fury (dndn) of him, whose nature is punitive (? hsf ki);7 the enemy / is butchered8 before you. You are the foster-child of her father Rec, you, about whose life one rejoices—because of her son. '9 (There follow other legends.)

Hathor: 'I ensnare (rth) for you the rebel[s] with the magical spells / on my mouth. 10 I slay (shr) those there (nfy) / who conspire against you $(nty \ w \neq w \ im \cdot k)$. Words spoken by Hathor, the Lady of Dendera, the Eye of Rec, who sojourns in Edfu, the sovereign who bestows brightness (sbikt) with her form (irw), the daughter / of the Lord-of-All, who came forth from his body, it great of magic, pre-eminent in the day-bark. Words spoken: be welcome in peace, you who execute the rebels, / who are bright of eyes with the rays of your disk. I have accepted the slaughter (cd) which you have made with Apopis, the massacre (hypt) with the children of the inert ones (msw bdšw). 12 / I execute (hbi) Nubia for you, I hack up (hbi) the Bedawin (mntyw), I give you the four (quarters) as your slaves.'

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§ 19. No. 9: Edfu, VI, 313, 6-17; IX, pl. 151.
King Ptolemy XI before Hathor.
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- For ptrty, not as 'eyes' in Wb. (but cf. 1, 565, 1-2 and 3) in Ptolemaic texts, see e.g. Edfu, 1, 572, 2; IV, 239, 8; 265, 3; V, 228, 4; G. Bénédite, Philae, 81, 13 (no. 18). Gardiner, RdE 11 (1957), 52 n. 10, translated the word 'beholding eyes'.
- ² For the play on words, see above, p. 126 n. 5. *Hnty* determined by the snake is unknown to Wb. which has, however, an entry as a term for 'enemies', as crocodiles (III, 121, 14). A snake hnwty occurs already in the Book of Caverns [1] 3, 5. In Edfu, VII, 173, 9, the determinative is Sec, and here, as elsewhere (e.g. Edfu, IV, 213, 2) the word simply means 'enemy'.
- For this word, given by Wb. IV, 24, 13 for the Graeco-Roman period, compare the masculine s3h, 'knife', in CT II, 61e; 107b; VI, 333n; VII, 485l; 487h.
- ⁴ The same phraseology in *Dendera*, VI, 134, 5 (no. 12); Dendera = no. 15; *Dendera Mammisi*, 175, 3-4 (no. 17; damaged); Dendera, v, 67, 1 (iti).
 - ⁵ Restore [hcm] si id im; compare Dendera, VI, 134, 7 (no. 12).
- Unrecht wehren", quoting Urk. VIII, 11, f and 78, i (Khons); Kom Ombo [76] 10 (context deficient). Ki possibly refers to the nature of the god in question: 'whose nature is punitive'. For hsf in this sense, see Wb. III, 336, 13-18. A somewhat similar sense would be conveyed by the participle hsf in the god's name Hsf-hr, 'whose face (= glance?) repels', in CT vII, 428a; 483n. In P. Bremner-Rhind, 32, 31 it is a name of Apopis. In our no. 16 (Dendera) Hathor's epithet hsf hnt may be translated 'punitive (repelling, terrifying) of front'. In all these cases, hsf would be qualified by ki, hr, or hnt, the noun not being its object.
 - ⁸ \bigcirc ; read hnb (| for \wedge), Wb. III, 113, 4. 9 I.e. the king or Thy. 10 See p. 128 n. 10.
- ¹¹ Compare Edfu, VI, 313, 14 (no. 9); Dendera, IV, 193, 16-17 (no. 10); VI, 134, 8 (no. 12).
- ¹² Ptolemaic texts always suggest 'children of the inert ones', as if the bdšw were a class apart. Earlier, Bdšt is a goddess, occurring as early as Pyr. 558a. The 'children of Bdšt' are found in CT 1, 253f (as protectors!); IV [335] 290/291a = BD 17, Budge 61, 3; 17, 71, Naville 11, 59, CT v, 233g; v1, 350. From the New Kingdom on, writings in many manuscripts suggest 'children of the $bd\check{s}w(t)$ ('inert ones')', next to 'children of $Bd\check{s}t$ ', see Introductory Hymn, Budge 2, 8 (Ani); BD 17, 5, Naville 11, 33; 18, 24, Naville 11, 80 and Budge 74, 13; 140, Budge 316, 8; Book of Gates [10] 77.

Title and Formula: 'Hitting the ball (hm). Words spoken: O Golden One, Lady of Dendera, I hit for you the ball (hm), I tear up (nšd) the eyeball (br) of Wbr, / the Snake (r), so that Apopis is done away with (rwi) in a slaughtering. Appear / as the Golden One, as a triumphant one!'

King: 'The King of Upper and Lower Egypt, lord of the Two Lands (Heir of the Euergeteis, whom Ptaḥ has selected, who does the justice of Rē^c, the living image of Amūn), the son of Rē^c, lord of diadems (Ptolemy, living eternally, / beloved of Isis): I have come to you, the one about whose life one rejoices, ruler (hhit) without equal. I bring you the eye (irt) of him-whose-eye-isviolent (? khb irt),² / which nevertheless has been crushed (hbhbtì irf)³ before you. You are the Noble Lady (špst), the Mistress (hnwt), Racet, pre-eminent in the Land of Atum.' (There follow legends of protection.)

Hathor: 'Words spoken by Hathor, the great lady, lady of Dendera, the Eye of $R\bar{e}$ ', lady of heaven, mistress of all the gods, the daughter of $R\bar{e}$ ', who came forth from his body, the Eye-which-bestows-brightness $(sb\bar{s}kt)$, / as⁴ the iris $(\underline{d}f\underline{d})$ of the Sound Eye: be welcome in peace, O strong one (kn), hero (pry-r), champion (nh) of the gods [and goddesses]. I have accepted your (act of) victory (nht); joyful for $(me)^5$ is your power (wsr) since you have slaughtered $(sf\underline{t})$ $Sft\underline{h}^6$ with your victory $(mnht\cdot k)$. I grant you strength (phty) in the Place-of-Trampling $(bw\ titi)$; the watchers $(phrtyw)^9$ assure / your protection.'

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§ 20. No. 10: Dendera, IV, 193, 9—194, 2; pl. 301. Unnamed King before Hathor.
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Title and formula: 'Hitting the ball (hmwy). Words spoken: / take for yourself the iris (dfd) of Wbr, in order that it may give abundant pleasure / to you, 10 O Eye of Rec, beautiful of face, sweet of loveliness. May your heart become appeared (htp ib·t), while slaying your enemies!'

King: 'The King of Upper and Lower Egypt ([not inscribed]), the son of Rēc ([not inscribed]), the great god, one over whom / the uraeus rejoices! The King of Upper and Lower Egypt ([not inscribed]), is on his seat as a boy (st), a youngster (id), a child (im) while chasing away Nr (?), while / repelling $Nh^{3}-h^{2}r$, while cutting up (sft) the eye-which-bestows-brightness (sbik(t))¹³ of

- ¹ For this indication of Apopis, see e.g. *Edfu*, vi, 160, 13; vii, 113, 2; 200, 12. No doubt the snake, r, who tried to destroy the work of the creator in the cosmogonic myths of Edfu, is Apopis; for refs. see E. Reymond, *The Mythical Origin of the Egyptian Temple* (Manchester, 1969), 19 n. 1; 34; 195, where the identity apparently goes unnoticed.
- ² Khb irt, followed by **WM**. An alternative translation would be: 'he whose eye should be kicked (away).' The passage Edfu, v, 72, 8 (translated in § 8) would accordingly run 'who bends down (and) kicks (away) the eye', or 'who bends down the one whose eye is to be kicked (away)'. In Edfu, IV, 305, 8 (no. 8) the 'ball' (hmt) is the direct object of khb (for khb, see Blackman and Fairman, JEA 29 [1943], 33 (n. 21); 30 [1944], 19 (n. 40)). Nowhere has irt a suffix pronoun.
 - 4 \odot ; n for m.

⁵ hntš $n\langle \cdot i \rangle$.

- ⁶ For the play on the words sft ... sft-h, see p. 126 n. 5. Sft-h as a name for Apopis is so far only known to me from Edfu texts: Edfu, III, 8, 13; 33, 13; IV, 128, 7; 359, 2; V, 243, 14; VI, 160, 12; 332, II-I2; VII, 18, 9; 107, 10; 175, 15; 269, 9; VIII, 76, 7; Edfu Mammisi, 148, 13. Could it mean something like 'he whose figure (??) is to be cut up'? A concrete meaning of h seems not to be attested.
 - ⁷ Compare Dendera, v, 67, 4-5 (no. 11): hwi·n·k / hftyw·k m nht·k.
 - ⁸ For the bw titi, 'Place of Crushing' (trampling), see E. Reymond, op. cit. 34 (with refs.) and 107–8.
- 9 For phrty, see Wb. I, 548, 18 ('Reisender o. ä.'). In Ptolemaic texts, a meaning 'watcher', 'guardian' (cf. phrt, Wb. I, 548, 17 and phr hi, ibid. 545, 11 and Gardiner, WZKM 54 [1957], 45 n. 7) is often suitable. See for instance Edfu, v, 56, 6 (Horus as the hnty phrtyw); 141, 6 (sim.); 181, 8 (the 14 ka's hnty Wtst-Hr); 190, 8 (king as hnty phrtyw [determined by [1]]); 192, 14 (Onuris as hnty phrtyw); vI, 237, 7 (the gods of the nome of Pe are the phrtyw wrw hnt P-n-Rc); 277, 11 (Shu).
- 11 (?) (the terrible one'? See Wb. II, 277, 9–10; CT II, 120f; VI, 320i (next to Hu and Sia); BD 145, Budge 334, 14; 146, Budge 350, 4 (the latter two are names of gate-watchers); nrwty (not in Wb): CT VI, 377b; Book of Caverns [2] 19, 2.

 12 See p. 121 n. 1.

 13 See p. 128 n. 4.

Wimmty. He is the protector who fills the heart of the Powers, a god who defends the great Ennead.' (There follow legends of protection.)

Hathor: 'Words spoken by Hathor, lady of Dendera, the cobra-snake of Rec, the min-snake of Herakhty, the daughter of the Lord-of-All / who came forth from him, who repels the rebels with her words, who burns the enemy of Rec with her heat, who fills his heart [on the day] which is fixed. The Unique One, flourishing of appearances, is / on her place; the Eye of Rec, pre-eminent in the Land of Atum, is protecting her father, while chasing away his enemies, while burning the body of Wbr. She is the flaming goddess (nsrt), the great one who is powerful / through her strength, who beholds the slaughtering of Apopis.'

§ 21. No. 11: *Dendera*, v, 66, 9-67, 10; pl. 369 (survey of wall); 370 (details); Mariette, *Dendérah*, III (Paris, 1871), 22, C'. Quoted by C. De Vries, op. cit. 29-30 n. 16; cf. Porter-Moss, *Top. Bibl.* vI, 84 (41-2).

Unnamed King before Hathor and Harsomtus.

Title: missing.

Formula: 'Take for yourself the divine eye $(n\underline{t}rt)$ of the rebels of your father. Its iris $(\underline{d}f)$, its pupil (im) / is battered $(t\underline{s}t\underline{s})$. I bring it before you in order to appease your heart, so that Your Majesty enjoys herself with / what approaches your ka.'3

King: 'The King of Upper and Lower Egypt ([not inscribed]), the son of $R\bar{e}^{\zeta}$ ([not inscribed]). Long live the good god, the foster-child of the Eye of $R\bar{e}^{\zeta}$, / who stabs (wnp) the divine eye (ntrt) in Wbr, who fetches (ini) the club (ht) of bik(-wood) in order to hit (skr) the ball (hmwy), who strikes (hwi) her enemies before her, who makes a merry dancing and music-making / just as she likes it—the lord of strength, the son of $R\bar{e}^{\zeta}$ ([not inscribed]).' (There follow legends of protection.)

Hathor: 'Words spoken by Hathor, lady of Dendera, the Eye of Rec, lady of heaven, the mighty one, pre-eminent in the Dendera nome (trrt)—that is, the uraeus, / pre-eminent in the Land of Atum—who punishes the rebels as the flaming goddess (nsrt): I give you your divine eyes (ntrty), their divine nature prevailing over (ntrty r)⁴ the polluted one (rb).⁵ May you strike / your enemies with your victory (ntty)!'

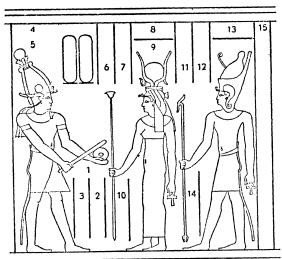
Harsomtus: 'Words spoken by Harsomtus, the child, the son of Hathor, the great and big one (1) wr), the first-born child of Horus the Behdetite, the great god... [lacu/na]... beautiful, sweet of loveliness, the youthful son of the uraeus-goddess in Dendera: I give you your eyes (1) they being sound (snbti) in their place, without evil / assembling itself in their interior.'6

Legend referring to Hathor: 'The Queen of Upper and Lower Egypt, the Eye of $R\bar{e}^{\zeta}$, the mistress of the Two Lands, who slays the enemies of her father $R\bar{e}^{\zeta}$; she is the lady-of-all, the mistress (hn[wt?]) of all the gods, who punishes / Apopis in heaven (?). It is the Unique One on the head of the Horizon-dweller, Hathor, the great one, lady of Dendera, the Eye of $R\bar{e}^{\zeta}$.

- ¹ Read [hrw] dmdyt; for the meaning, cf. Wb. v, 461, 13.
- ² Wrt (as a name of the uraeus): see Wb. 1, 279, 11.
- ³ Mfk hm·t m hsf n k··t, lit. 'your majesty is turquoise-bright with what approaches your ka'.
- ⁵ For cb in this sense, compare Wb. 1, 174, 14 (as an indication of the crocodile). For a snake cb, see Ddir Statue, 66.

 6 N dw / dmd m k·b·sn.
 - ⁷ Read śśwn (as on the photograph and in Mariette, Dendérah, III, 22, C'), not śwn, as in the printed text.
 - 8 \Leftrightarrow \uparrow \uparrow probably the word $\underline{t}s \cdot t$ of Wb. v, 407, 19-20.

§ 22. No. 12: Dendera, VI, 134, 2-13; pl. 562 (general survey of wall); 563 (details; here reproduced in fig. 3).



vi, pl. 563 (no. 12, § 22).

Unnamed king before Hathor and Thy.

Title and formula: 'Hit[ting] the ball (hm). Words spoken: / take for yourself the iris (dfd) of Wbr [which is tor]n up. Be praised, lady of Dendera!

King: 'The King of Upper and Lower Egypt ([uninscribed]), the son of Rec ([uninscribed]), who has taken (t;i) the club (ht) of b;k(-wood)together with (hnc) the ball (hm) in his hand, who enjoys himself as a boy (s_i) , a youngster (id), a child (im).' |...|

Hathor: 'Words spoken by Hathor, the great one, lady of Dendera, the Eye of Rec, lady of heaven, mistress of all the gods, who first came forth [from] his [bod]y(?),2 / [out of] Nun for the first(?) time (?),3 the Eye of Ret which illuminates the Two Lands with her rays since(?) the child4 opened his eye within the lotus-flower (m-hnw Fig. 3. Chassinat and Daumas, Le Temple de Dendara, nhb), / as the one who first came into being long ago —and she came forth as his living eye ((nht)) on the earth: I give you the rebel, [fallen] on to your

slaughter-block, (while) Rec. . . [lacuna] . . . 5 against your enemies.'

Thy: 'Words spoken by Thy,6 the great one, the son of Hathor, the noble child of the Eve of Rē', the foster-child, beautiful / of appearance and bright of ornaments, at whose sight the gods rejoice: I grant you that your eyes (3hty) remain in their place.'

Legend referring to Hathor: 'The Queen of Upper and Lower Egypt, the noble lady, the mistress beautiful of face, sweet of loveliness, the gold (nbw) of the gods, the electrum (dem) of the goddesses, the lapis lazuli among the Ennead. / Everybody turns himself to see her,7 Hathor, the great one, the lady of Dendera, the Eye of Rec, lady of heaven!

§ 23. Nos. 13-15: Dendera, unpublished. According to information kindly supplied by Professor Daumas,8 two of them are in the interior of the temple: No. 13: 'au troisième registre de la paroi

- ¹ Restore probably [, compare Edfu, 1, 62, 8 (no. 5) and vi, 313, 7 (no. 9).

 ² Pri m hv·t ; restore [aaa]? Compare Edfu, vi, 313, 14 (no. 9): ss·t Re pri m voo; Dendera, iv, 193, 16−17 (no. 10): ss·t nb-r-dr / pri im·f.

 ³ [voo]?; read sp [t]py([voo])?

 ⁴ Rē^c.

 ⁵ [voo]; nšn, 'to rage'?
- 6 Thy's presence in the scene is explained by his being represented as the pupil of the wdst-eye, like his mother Hathor (see above, p. 128 n. 7) and Ḥarsomtus (no. 11) or Horus the Behdetite (no. 17), e.g. Dendera 11, 167, 2; VI, 10, 7.
- 7 (n (n to be beautiful', but probably 'to turn (oneself)' is meant; compare Edfu, vi, 318, 11: $(n(\frac{1}{C_0}))$ hr nb r m3: s. On the other hand, in Dendera, iv, 169, 2, it is said: $(n:t(\frac{1}{C_0}))$ pw, (n:tw)(a c ?) n ptri·s, with the same ambiguous spelling; or does on here mean 'to be kind' (cf. Wb. 1, 190, 11), so that the latter passage might be translated 'it is the kind one, being kind to the one who looks at her (ptr sy)'? Perhaps a reading 'n'tw of _____ in Medinet Habu I, pl. 27, col. 13 (now Kitchen, Ramesside Inscriptions, v, 21, 15) would explain away the otherwise unattested noun (nwt, 'beauty', the latter supposed by J. Wilson (SAOC 12, 22 n. 15a): hr sn (nti itn hr sn, 'their faces are turned away, the sun being (thus) near to them'?
- 8 In a letter, dated 2 July 1970. I am greatly indebted to Professor Daumas for the extensive information given to me.

ouest de la salle F' de Chassinat'; No. 14: 'au deuxième registre de la paroi est de la salle hypostyle G' de Chassinat'. No. 15: 'extérieur façade ouest, quatrième registre du dernier tableau', corresponding to no. 16. Here translated from a photograph (see pl. XXXIX, 1).¹

The emperor Augustus before Thy, Hathor, and Horus of Behdet.

Title and formula: $//^2$ 'Hitting the ball (hm) for his mother, the Mighty Eye,³ in order that life may be given to him.'

King: || 'The King of Upper and Lower Egypt, lord of the Two Lands (Ruler of Rulers, whom Ptaḥ has selected)|, || the son of Rē', lord of diadems (Caesar, living eternally, beloved of Ptaḥ and Isis)|, || who has taken $(\underline{t};i)$ the club $(\underline{h}t)$ of $b_i \underline{k}$ (-wood) (and) the ball $(\underline{h}mwy)$ in his hand, appeasing the Eye of Rē' in her land (?).4 || Words spoken: I have come to you, O Gold of the gods, Eye of Rē', pre-eminent in the Land of Atum. I have brought you the ball $(\underline{h}m)$, the divine eye $(\underline{n}\underline{t}rt)^5$ of N(i)k. I have hit (skr) it in front of your person. You are the uraeus . . . (?) . . . the living eye of the front of Atum.'

Thy: // 'Thy, the great one, the son of Hathor. // I have accepted your performance (irw·k).6 My heart rejoices by it; and glad is the heart of my mother because of seeing it'.

Hathor: || 'Words spoken by Hathor, the great one, lady of Dendera, the Eye of Rec, || lady of heaven, mistress of the goddesses, the right iris (df) of the iris(-pair [?])⁷ of the Sound Eye, || the eye-which-bestows-brightness (sbikt) of the great beetle (?),8 the protectress of her father, sheltering || . . . [lacuna] . . . him-whose-character-is-bad with her rays.'

Horus of Beḥdet: // 'Words spoken by Horus the Beḥdetite, the great god, the lord of heaven, the lord of Dendera (Int),9 // him of the dappled plumage, who came forth from the horizon, the beautiful disc of // gold, flourishing of appearance. He is Rēc, who kills // his opponents (rkyw·f). // Words spoken: be welcome in peace, (you) hero (pry-c) in his (?)10 work, power (shm) who overpowers (shm m) Wbr. I have accepted your exploit (?),11 because you have cut up Apopis (and) the enemies of the Sound Eye with . . . (?) 12 I have given you valour among the living (and) the strength of the great god for your arms.'

§ 24. No. 16: Dendera, partly published in Brugsch, *Thesaurus Inscriptionum Aegyptiacarum*, vI (Leipzig, 1891¹/Graz, 1968²), 1397–8. Quoted by C. De Vries, op. cit. 30, note 16. Brugsch is rather vague about the exact place of the scene¹³ and so is the *Top. Bibl.* of Porter and Moss (vI, 76). According to Professor Daumas—who kindly sent me a photograph of the scene—it is on the 'extérieur de la façade est, 4° registre, dernier tableau'. Corresponding to no. 15. See pl. XXXIX, 2.

The Emperor Augustus before Thy, Hathor, and Harsomtus.

Title: // 'Hitting the ball (hm). Words spoken:'

- ¹ This and the next scene (no. 16) are translated from two photographs for which I am indebted to Professor Daumas. However, their small size and the fact that the right part of no. 15 (utmost right vertical column) is partly overshadowed, did not always allow an immaculate translation.
 - ² // indicates a new line or column in the original (so far unpublished) text.
 - ³ Wsrt, determined by the eye (Wb. 1, 363, 17).
 - 4 One expects some word for 'rage', 'fury', but the photograph seems to give $\sqrt{2}$.
 - ⁵ See p. 128 n. 4.

- ⁶ See p. 128 n. 12.
- ⁷ Df wnmy nt (= n) df n wdt. The second df is perhaps to be interpreted as a dual. There is a similar problem in text no. 16 (see p. 134 n. 1).
 - ⁸ $\Omega \stackrel{\triangle}{\Omega} \stackrel{\wedge}{\eta}_{1}$; read hpr wr? For $\Omega = h$, see Fairman, ASAE 43 (1943), 252-3 (no. 227).
 - 9 For this writing, see Fairman, op. cit. 252-3 (no. XV).
- 10 Read m wnwt f or m k/t f?

- ¹¹ Read $f_{i}y$ - $f_{i}k$?
- 12 Read imy..., the compound perhaps denoting an instrument (imy-ck?) or wnm > wm...(wmt-ib?).
- 13 Ibid., p. 1397: 'an einer anderen Stelle derselben Wand' (= 'südliche Außenmauer' (?), p. 1397).
- 14 'Scenes from this wall (= exterior, east side, see p. 75), exact position unknown.'

Formula: || 'Take for yourself these irises (\underline{dfd} nn) of Wbr, the divine eye ($\underline{ntr} \cdot t$) of Nik, which is torn up (\underline{nsd})!'

King: || 'The King of Upper and Lower Egypt, lord of the Two Lands (Autocrator)|, || the son of Re, lord of diadems (Caesar, living eternally, beloved of Ptaḥ and Isis)|. [Above King: || 'Nekhbet, the White One of Nekhen']. || Words spoken: I have come to you, protectress (ndt) of the Winged Disc (py), the leader (simt), the living eye (pt). . . [lacuna] . . . I have brought to you the ball (pt), the eye-which-bestows-brightness of pt with pt which I have hacked up (pt) exactly before you. You are the iris (pt) of the iris (pt) of the Sound Eye, the divine eye (pt) of Herakhty.'

Thy: // 'Words spoken by Thy, the snake(?),2 the son of Re\(\text{inself}, \text{ pre-eminent in the place of Re\(\text{inself}, \text{ // the right eye of his mother(?)}^3 \tag{2} \tag{3} \tag{5} \tag{5} \tag{5} \tag{6} \text{ the son of Re\(\text{inself}, \text{ pre-eminent in the place of Dendera.}^4

Hathor: // 'Words spoken by Hathor, the great one, Lady of Dendera, the eye of Re^{ς} , // lady of heaven, mistress of the gods, great of strength, // when she has driven away $(dr \cdot n \cdot s)$ him-whose-character-is-bad $(\underline{dw} \cdot \underline{kd})$, when she has warded off $(\underline{hsf} \cdot n \cdot s)$ the rebels // with her spells,⁵ the mighty one (wsrt), punitive of front,⁶ who originated at first, // the fire-spreading goddess who spreads fire on the enemies $(n\underline{tstyw})$.'⁷

Harsomtus: || 'Words spoken by Harsomtus, the lord of H3-dit,8 the great god who sojourns in || Dendera, Rēc himself, foremost one of Hwt..., the divine snake, who shines || as the eye of Rēc, who glitters as gold, foremost one of the Dendera nome (t3 rrt). || Words spoken: be welcome in peace, great godo of the Golden One, who does the wish of the eye of Rēc! I have accepted your act of strength (phty·k), 10 you being powerful over Nik, because you have cut up the mrt-eye of the rebel. I make your body strong in driving away him, who trespasses your path; the rebels are no more.'

§ 25. No. 17: *Dendera Mammisi*, 175, 2–11; pl. 49, a (details); 68 (general survey). The Emperor Trajan before Hathor and Horus the Behdetite. *Title and formula*: missing.

King: 'The King of Upper and Lower Egypt, lord of the Two Lands (Autocrator, Caesar), the son of Re, lord of diadems (Trajan, Augustus, living eternally): / [all] protection, [life and prosperity] is behind him as (behind) Re in eternity. (Words spoken:) I have come to you, O Noble Lady (spst) in Dendera, ruler . . . [lacuna] . . .; I have taken¹² / the club (ht) of bsk(-wood) and I have fetched the ball (hmmw) with my hands. I have hit (skr) the Evil One (nbd)¹³ . . . [lacuna]¹⁴ . . .;

- Twt dfd nt (= n) dfd n wdst; has wnmy been omitted after the first dfd? The parallel text no. 15 has df, and wnmy. Or does the genitive connection point to a superlative meaning: 'the iris of iris(es)'? Dfd n dfd is also found in Dendera, II, 48, 5-6; III, 138, 8; IV, 252, 5; 267, 8-9. Nowhere is the second dfd written as a dual or plural.

 2 Read 2 so-ts?

 3 I diffidently read iri mr mwtf.
- 4 In fact, Thy does not say anything. Or is he the one who pronounces the formula $m \, n \cdot k$, 'take for yourself...' etc.?

 5 See p. 128 n. 10.

 6 Hsft-hnt; see p. 129 n. 7 for parallels.
 - ⁷ For this word, see Blackman and Fairman, Misc. Greg. (Rome, 1941), 415 n. 58 (spelling as here: n. 34).
 - ⁸ Wb. III, 220, 10; Gauthier, Dict. IV, 164-5.
 - 9 of ; or Thy. 10 See p. 128 n. 12. 11 See p. 128 n. 4.
- Read [5], compare Dendera, VI, 134, 5 (no. 12) and Dendera = no. 15.
- ¹³ In some of the Coffin Texts, nbd is almost certainly a denomination of Apopis, see VII [1099] 414c = BD 130, Budge 284, 6; J. Zandee, *Death as an Enemy*, 208, expresses himself cautiously ('the nbd plays a part like Apophis') and gives some other instances. See also BD 39, 16, Naville, II, 109 (only Lb, other manuscripts different) and P. Ryerson, 28, 32; 28, 35 (T. Allen, *The Egyptian Book of the Dead* [Chicago, 1960], 122, pl. 20); BD 125, Budge 286, 13; *Socle Behague* [6] g, 11 (B, C₅). Cf. the nbd ncw, 'the evil one, lord of smooth snakes' in CT III, 394 l.
- The text gives $\stackrel{h}{\bigcirc} \uparrow \stackrel{h}{\bigcirc} \stackrel{h}{\rightarrow} \stackrel{h$

I have erased / his name; his companions $(smsw \cdot f)$ are non-existent. I have hit (skr) for you the ball (hmm), I have slaughtered $(?)^1$ the victim, I have shot his / brood $(?)^2$ I have blinded his eye!

Hathor: 'Words spoken by Hathor, lady of Dendera, the Eye of Rec, lady of heaven, mistress of all the gods, the sovereigness, the po[werful (?)]³ goddess, whose ba is powerful, beautiful of face, sweet of loveliness, splendid of appearance among the gods: be welcome in peace, my beloved son, image of the Living One ($snn \ n \ cnhy$), protector of his father. You are the image of the clubbearer (hry-ht), who kills his enemies . . . [lacuna . . . ba]ll, you shoot at him—and the member (ct) of he-whose-character-is-debased is slaughtered ($m \ sc t$).'

Horus of Behdet: 'Words spoken by Horus the Behdetite, the great god, lord of heaven, the falcon of dappled plumage, [great] sun-beetle [who comes forth from (?)]⁸ the horizon, great sun-beetle, / the foremost one of the sanctuary of [his] fat[her, who separates the two heavens (?)⁹ with his] wings, who wards off the enemy¹⁰ when coming (imy ii·f).'

§ 26. No. 18: Philae = G. Bénédite, Le Temple de Philae (Paris, 1893-5 [= MMF 13], 81, with printed hieroglyphic text ('tableau X') and pl. 29 (general survey of wall). In the translation given below the lines are rearranged. Mentioned by Porter-Moss, Top. Bibl. VI, 246 (382-3) and by C. De Vries, op. cit. 30 n. 17.

The Emperor Augustus appears before Sakhmet.

Title and Formula: '(81, 12) Hitting the ball (hm [?]).¹¹ Words spoken: take for yourself the sound eye ($wd_{i}t$)¹² of Apopis in his slaughter-block. (81, 13) Its pupil (im)¹¹ in him ($im \cdot f$) is battered ($t \dot{s} t \dot{s}$); I have cut out (ptpt) his eyes ($ptrty \cdot fy$) in order to make your heart glad (with)¹³ that enemy of your father.'

King: '(81, 10) The King of Upper and Lower Egypt, Lord of the Two Lands (Autocrator), the son of Re^c, lord of diadems (Caesar). The son of Re^c (Caesar), is in the House of the Sound

- I 17 17 the translation is based on the first determinative.
- 2 ; or 'I have shed his seed'? A meaning 'blood' for mw is unattested. Cf. also Edfu, VIII, 121, 16: $c:p\langle p\rangle$ n wn mw f (as for) Apopis, his mw shall not be', where perhaps the water of the Nile is meant (in which he swims? Or which he is ready to drink?). In our passage, one expects some mutilation done to Apopis.
- 3 The text gives $\begin{pmatrix} 1 & 0 & 0 \\ 1 & 0 & 0 \end{pmatrix}$; are the two signs following $hk^{2}\langle \cdot t \rangle$ to be read $ws \dots$? But wsr follows next in a 'normal' spelling.
- 4 $\stackrel{?}{\rightleftharpoons}$ $\stackrel{1}{\&}$ For $\stackrel{1}{\&} = b(i)$, see Blackman, $\mathcal{J}EA$ 31 (1945), 63 n. 27; Fairman, ASAE 43 (1943), 225 (no. 170a). For 0 = s, see e.g. Dendera Mammisi, 97, 13 ($i\underline{t}i$:n·s); 145, 5 (dryns); 175, 9 ($\underline{h}s$); Urk. VIII, 142, line 5 ($spd\cdot ti$).
- 5 ib im·k n Da. The first sign is probably to be read hr (T 28) rather than ns·t or g (W 11). This would bring us to the god's name or epithet hry-ht, 'club-bearer', for which Wb. (III, 395, 12) cites Philae (1175) Photo 879 and Urk. VIII, 2g. In both instances it is an epithet of a warrior-god and since the latter passage uses (like ours) the word ibw, 'image' ('the King..., image of [the?] hry-ht, holy form [tit] of the Golden Horus, who fetches the club [miwd]—he is similar to Montu'), it may be supposed that in the present passage the king is represented as a mythical hry-ht, some warrior-god whose special weapon is a club. One might think of Month or of one of the forms of Horus, for instance Horus of Letopolis (see my The Magical Texts of Papyrus Leiden I 348, 201-2).
 - 6 Perhaps read wn [skr·k h]mm, 'when [you hit the ba]ll'?
 - ⁷ Hs-kd, a name like dw-kd; see Wb. III, 399, 19 (Seth).
 - 8 h t. Perhaps restore [P] or [P] = pri m, see Fairman, BIFAO 43 (1945), 129.
- 9 Perhaps restore [wpi tiwy] m dnhwy fy? For similar expressions in which dnh or dmit, 'wing', is used, see Edfu, IV, 229, 16-230, 1; 313, 2; VI, 103, 8; VIII, 37, 4-5. For the words hm or hm spsy, 'noble falcon' which precede in all these parallel passages, there is no room in the present text.
 - 10 $\hat{k} = ti(r)$, see Wb. v, 233, 4-7. As a name of Apopis in Edfu, iv, 27, 6.
 - ¹² See p. 128 n. 4.

 ¹³ Insert (m); compare Edfu, III, 348, 10 (no. 6): shee hnwt m hfty.s.

Eye¹ as a leader $(\underline{t}_{i}y-\epsilon)^{2}$ in (81, 11) the place of battle, while cutting up $(wd\epsilon)$ Wbr, while slaughtering Apopis, while making a massacre (hypt) among the children of Bdst. He is like a strong bull when he attacks (81, 12) his enemies (hrww f), while making a slaughter (cd) with the enemy according to his wish.'

Sakhmet: '(81, 13) Words spoken by (81, 14) Sakhmet, the great one, mistress of the fire in Bigeh, the flaming one, mistress of the burning flame, mistress of the House of Flame, who burns him-whose-character-is-evil with her flaming eye,5 the great (81, 15) flaming goddess, who scorches the rebels while the fire breaks out against them in a quick leap.'6

Legend referring to Sakhmet: '(81, 15) Sakhmet, the strong one (wsrt), is in Bigeh in her form (81, 16) as the Eye of Horus, the living [eye (cnht) . . .] while [spreading fire (?)] with the flame when she goes round, while scorching the rebels with the heat of her mouth. She is the primeval snake (krht), (81, 16) the noble lady who stands up while smashing (?) and sending out her heat against the rebels of her father.'

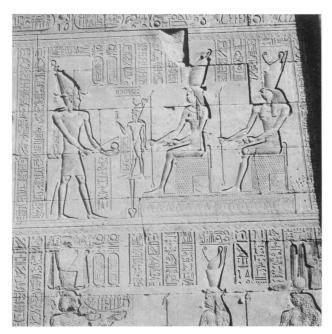
§ 27. No. 19: Philae, Hathor Temple, unpublished. Here translated from a photograph (pl. XXXIX, 3).8 Not mentioned as a skr-hms-scene in Porter-Moss, Top. Bibl. VI, 251 (9); quoted by C. De Vries, op. cit. 30 n. 18.

The Emperor Augustus before lioness-headed Tefnut.

Title and formula: || 'Hitting the ball (hm). Words spoken: || (take for yourself) the eye (irt) of Apopis which is crushed (npd) before you; the iris (dfd) of him-whose-character-is-bad is smashed (ng) to the ground (?). '10

- Also in 87, 12; for pr wdit, compare perhaps Oracular Amuletic Decree L. 6, rt. 59; T. 2, rt. 42; C. 1, 38, cited below, p. 145 n. 9; or is pr here p, the article? There is also a hwt-wdrt: Philae, 1, 50, 9; 105, 5 (Thoth in the hwt-wd/t; a parallel passage in Edfu, VIII, 136, 9, gives s·t-R(); 115, 3; Edfu, V, 186, 4; VII, 326, 7; P. Jumilhac, 7, 3; 19, 11; 19, vignette; Kom Ombo, no. 463.
- ² Not in the Wb., but cf. 1, 159, 5 (as a title). Try with cas its object occurs in Metternich Stela, 51 (trisn $n \cdot i$ (), translated by A. Klasens (A Magical Statue Base, 52) as 'they led me'; on pp. 70-1 other conclusive examples are adduced for this meaning (esp. Urk. VI, 135, 11 = sšm, 'to lead', in 135, 10). The passage is misunderstood by C. Sander-Hansen, who (Die Texte der Metternichstele [Copenhagen, 1956], 42) read bh, 'to render service', and interprets the sign of the arm as the pause-sign (followed by H. Brunner, Hieroglyphische Chrestomathie [Wiesbaden, 1965] pl. 27, left). For the substantive try-c in our text, which I have translated 'leader', see also Edfu, III, 43, 15; 106, 8 (\underline{t}) \underline{r} -(wy); 132, 6; 135, 18; 243, 11; \underline{v} , 151, 14; 169, 8; \underline{v} I, 184, 7; 184, 8; 184, 9; 278, 12 (preceded by m); 297, 17 (sim.); 304, 11; VII, 73, 11; 106, 7; 143, 5; 149, 9; 154, 8; 162, 3; 164, 13; VIII, 143, 8; H. Gauthier, Le Temple de Kalabchah, 143, 3 (preceded by m). Fairman, ASAE 43 (1943), 220, reads $tm^{3-\epsilon}$ (Wb. v, 367) on the basis of Edfu, vi, 297, 17, where m precedes, supposing $m\underline{t}$: c > (by metathesis $)\underline{t}$ m: c < (cf. also the same in BIFAO 43 [1945], 112). Though even without the m (which in the few instances might be the m of identity) the sign of the phallus may have the value $m\underline{t}^{j}$ (cf. Wb. 11, 175, 5), I prefer to read t3, a value likewise owned by the phallus-sign.
- ³ R-dt is translated by Wb. (II, 399, 7) as 'battle, fight'; so also H. Junker, $Z\ddot{A}S$ 77 (1942), 5 (no. 3). Both quote examples where the word is determined by the striking man or the striking arm. When the determinative is (moreover) a shere, one would rather be inclined to render 'battlefield'. So also E. Winter in *Philae*, I (Der große Pylon), 29 n. 7. This is especially clear after the verb hb, 'to tread on', as in Edfu, V, 151, 14. Examples known to me are Philae, 1, 29, 17; Edfu, V, 151, 14; 169, 9; 296, 16; VII, 157, 10; VIII, 27, 12; 143, 11; Dendera, V, 70, 2.
 - * Wb. 1, 404, 7 = Belegstellen, handwritten pages, 51, right column, gives (dm, or mds?) opp.

 The printed text gives (m, or mds?) opp., wnmyt's.
- 6 M tp h(s)h; the Wb. (v, 291, 12) quotes only Edfu, 1, 74, 12. Add moreover P. Geneva MAH 15274, rt. 6, 6 (A. Massart, MDAIK 15 [1957], pl. 33).
- you in that name of hers, $\langle\langle \text{fire}\rangle\rangle'$.
 - ⁸ This photograph I owe to the kindness of Professor Derchain. Wb. cites from Philae (1143) Photo 95.
 - 9 Perhaps to be supplied, after the analogy of the other formulations in the scenes.
 - 10 Perhaps rather r ti $(\frac{2}{6})$ than $im \cdot sn$; Wb. II, 348, 19 = Belegstellen, II, 505 (right) gives a lacuna after $ng \cdot ti$.



1. Dendera (no. 15, § 23)

Courtesy Prof. F Daumas



2. Dendera (no. 16, § 24)
Courtesy Prof. F. Daumas



3. Philae, temple of Hathor (no. 19, § 27)

Courtesy Prof. Ph. Derchain

THE EVIL EYE OF APOPIS

King: // 'The King of Upper and Lower Egypt, lord of the Two Lands (Autocrator), // the son of Re, lord of the Two Lands (Caesar, living eternally, beloved of Ptah and Isis).' [Legends of protection behind king].

Tefnut: // 'Words spoken by Tefnut, the daughter of Re^c , lady of the abaton, // who slays ($s\check{s}r = shr$) Apopis through her flame.'

§ 28. That the environment of a ritual scene in a Ptolemaic temple is of primary importance for its deeper understanding has been pointed out several times. In this way, smaller units can be viewed in their proper setting; what their function is in the great mass of ritual scenes, is often less clear. The Ritual of Hitting the Ball is often found in scenes concerned with killing the oryx, Apopis (or the crocodile, or the tortoise), and the offering of pieces of a slaughtered enemy. On the other hand, it may be found 'to correspond' to—i.e., is sometimes found face to face with—scenes of offering the wdst-eye or the wnšb-symbol (the 'clepsydra'). In 15 of the 19 examples of our rite, the beneficiary or beneficiaries can be identified. In 13 cases this is Hathor, in 3 cases Sakhmet, and once Tefnut occurs. Hathor may be accompanied by Harsomtus (nos. 11, 16), Thy (nos. 12, 15, 16) or Horus the Behdetite (nos. 15, 17). Often the king wears the double crown or the atef-crown, sometimes the double plumes in an elaborated form (see Tables 2-3).

That the beneficiaries are Hathor, Sakhmet, or Tefnut, means that the rite was enacted before those goddesses who are hypostases of the divine eye. The king mockingly plays a game with the eye of the greatest opponent of the eye which is the source of light, life, and order, the eye of the sun-god. That most serious conflict, with possible catastrophic consequences, is brought to victory by the king by hitting a ball, which stands for the eye of Apopis—but even this eye is indicated with terms which also serve for the divine eye, viz. wdst, mrt, ntrt, and sbskt. If one looks for a comparable instance, one might think of the Ptolemaic scenes of offering the mnit-collar, which is often compared to the testicles of Seth. An additional reason for Hathor's prominence among the beneficiaries may be her own character, which would best suit the playfulness of the ritual game.

The earliest examples (nos. 1-4) have no legends which explain the meaning of the rite, but in no. 1 (Deir el-Baḥari) the ritual aspect is moreover stressed by the fact that the king is assisted by two 'prophets'. The ball game is, however, not only a sacral act, but also a child-game. The king 'amuses himself as a child'. No reference to the game or to the rite outside this group of Egyptian texts is known to me. 8

¹ Derchain, CdE 37 (1962), 31; id. Rites égyptiens, I (Brussels, 1962), 23 ff. 38; id. RdE 15 (1963), 12.

² Cf. E. Winter, Untersuchungen zu den ägyptischen Tempelreliefs der griechisch-römischen Zeit (Vienna, 1968), 15.

³ Dealt with by Derchain, Rites égyptiens, 1.

⁴ For the connection with the eye which is clear, but still uninvestigated, see H. Junker, *Die Onurislegende* (Vienna, 1917), 147 ff. A study of this rite has been envisaged by Derchain, op. cit. 27 n. 3.

⁵ See p. 128 n. 4.

⁶ Some examples: *Edfu*, III, 185, 1-2; 282, 8; IV, 255, 13; 383, 3; V, 76, 12; VII, 320, 12; *Philae*, II, 321, 1; 4; 22; etc.

⁷ See p. 125 n. 4.

⁸ In Edfu, IV, 27, 6, it is said about the king: 'You are the one who thrusts (wdi) his stick (ht) in order to slay Wbr, so that obstruction is put (hwi sdbw) before the tir-snake', but it is far from certain that this refers to the enactment of a skr-hmi-rite.

Apart from the opposition of the two eyes, one text conveys another opposition. The ball, which stands for the eye of Apopis, is hit away with a club said to be of $b_i k_j$ -wood, 'moringa-wood'. The $b_i k_j$ -tree is identified by R. Caminos with the moringa-tree (following Gardiner), while C. De Vries thinks of the olive-tree. Whatever the exact nature of the wood may be is of less importance for our argumentation, since it is purely textual. Important is only the fact that the reason for which a $b_i k_j$ -staff is used, is that it has sprung from the eye of Re^{c} himself (Edfu, I, 62, 9 [no. 5]), an origin which is also ascribed to the $b_i k_j$ -oil, thus emphasizing its divine character.

§ 29. The material of the ball used in the ritual game is unknown. The *Topographical Bibliography*, when mentioning our rite, sometimes calls it a 'clay-ball'4 and C. De Vries thinks that in one of the Edfu scenes, the material is actually referred to as clay.⁵ This is not so. Round, clay-formed objects in the form of a disc, pierced by a hole in the middle have indeed been found in various places in the desert,⁶ but they seem to be of prehistoric origin and any connection with our rite seems excluded. Besides, a clay-ball would easily pulverize and if our interpretation of the function of the two priestly assistants in no. I (Deir el-Baḥari) is correct,⁷ it could be caught, probably in order to be used anew. This is not contradicted by the terms which indicate the rough handling of the eye, iris, or pupil of Apopis.⁸ In order to be an adequate reproduction of the latter, the ritual substitute-object must indeed have been something round like a ball, rather than a disc. In our no. 12 (*Dendera*, vi, pl. 562) the ball has a small circle in the middle. Is this the iris, or the pupil?

There may be another way to establish the material of the ball, but it is a rather speculative one. For this, the writings of the word itself must be taken into account (see Table 1). The word may be transliterated hms, hms, hm, hmt, hmw, or hmmw, but

- ¹ R. Caminos, Late-Egyptian Miscellanies (Oxford, 1954), 80; C. De Vries, op. cit. 32, with n. 21. For the forms of the club (which is generally straight, except in no. 1 [Deir el-Baḥari] where it has a wavy form), see ibid. 31-2. When the actor is to the left and the beneficiary, facing him, to the right, the ball is carried in the left hand, the club in the right one, and vice versa.

 ² See p. 125 n. 6.
- ³ Dr. B. H. Stricker remarks that the stick carried by the king in one of the rituals of driving the calves (hwt bhsw), at one end shows the head of a snake; see Blackman and Fairman, $\mathcal{J}EA$ 39 (1949), pl. 7 and Stricker, De oorsprong van het romeinse circus (Amsterdam, 1970 [Verhandelingen Amsterdam, Nieuwe Reeks 33, 6]), pl. 1 and p. 7. The stick is used to drive the calves which tread the grain, and at the same time to chase away certain snakes, hidden in the field. If this snake-stick is intended to represent Apopis, the opposition (if intended) stick / calves, or stick / snakes, is of a wholly different character.
 - 4 VI, 146 (ad our no. 5); 135 (97, i) (no. 6); 84 (no. 11); 246 (no. 18).

 5 Op. cit. 33.
- ⁶ See G. Murray, 'Perforated Disks and Pot-stands', Bull. de l'Inst. Fouad I^{er} du Désert, Heliopolis 1 (1951), 157-60. The summary in the Annual Egyptological Bibliography, 1951, p. 576 (no. 1965) refers to the more accessible illustrations in JEA 19 (1933), pl. 20, 1 and 25 (1939), pl. 9. Somewhat similar objects—some decorated—of stone, copper, wood, horn, and ivory (none of clay) have been found in the tomb of Hemaka; through some of them, short sticks had been put. See W. Emery, The Tomb of Hemaka (Cairo, 1938), 28.

Another ritual ball-game is that of hitting away bnnt-balls with a stick (cf. Wb. 1, 460, 12), best known from the representation in the Karnak sanctuary of king Taharqa; see J. Leclant, Recherches sur les monuments thébains de la XXV^e dynastie dite éthiopienne (Cairo, 1965), vol. of plates, 47, lower; text-volume, pp. 68-9 (§ 17). V. Vikentiev thinks this rite can already be found on protodynastic tablets (BIE 37 [session 1954-5], 1956, 146 and n. 1). S. Schott connects this particular ritual with spells in two unpublished papyri, viz. B.M. 10288 (2, 14 ff.) and New York (MMA) 35921 (26, 1 ff.), see Beiträge zur ägyptischen Bauforschung und Altertumskunde, 10 (Wiesbaden, 1970), 60. These spells seem partly to be directed against Seth.

⁷ See p. 123 n. 4. ⁸ See p. 125 n. 5.

TABLE 1. The writing of the word for 'ball'

Scene no.	Publication	
I	Naville, Deir el B. IV, pl. 100	·AA
2	Gayet, MMF xv, fig. 213	
3	Luxor = Wb. Belegst. III, 93, 12	
4	Luxor = Wb . Belegst. III, 93, 12	}_
5	Edfu, 1, 62, 5	
5 6	Edfu, 1, 62, 9	
6	<i>Edfu</i> , 111, 348, 10	<i>}</i>
7	<i>Edfu</i> , IV, 149, 4	
7	<i>Edfu</i> , IV, 149, 11	D
8	<i>Edfu</i> , IV, 305, 6	D W
8	Edfu, IV, 305, 8	٥(غ) ي
8	Edfu, IV, 305, 13	T TO
9	Edfu, VI, 313, 6	ē.
9	Edfu, VI, 313, 7	<u> </u>
10	Dendera, IV, 193, 9	<u> </u>
II	Dendera, v, 67, 1	₩°.
12	Dendera, VI, 134, 2	ë
12	Dendera, VI, 134, 6	اه \$\@اامالهالهاله *% % المالهالهالهالهالهالهالهالهالهالهالهالهالها
13-14	Dendera, unknown	
15	Dendera, unpublished	
15	Dendera, unpublished	© "
15	Dendera, unpublished	
16	Dendera = Brugsch, Th. 1397	
16	Dendera = Brugsch, Th. 1398	യ ≃∘
17	Dendera Mammisi, 175, 4	
17	Dendera Mammisi, 175, 5	
18	Bénédite, Philae, 81, 12	0
19	Philae (Hathor t.), unpublished	<u>D</u>

the plural signs need hardly be taken seriously. The Ptolemaic writings are especially interesting. For here, the determinatives of the ball and those of the plant (Gardiner M 2), wood-branch (M 3), or tree (M 34) seem to be mutually exclusive. Of the first category there are 12 Ptolemaic examples, of the second there are 10. The assumption is perhaps not too far-fetched that in the Ptolemaic scenes the ball seems to be considered to consist of a wood-species, which may be hm or hmm. There is a hm-plant as well as a hmm-plant which have as yet not been determined. Now it is typical that a certain connection between the hmm-plant (which reminds one of the writings in

¹ Wb. 111, 81, 20-1. ² Ibid. 95, 10.

no. 17) and the eye of Horus seems to be implied in a magical spell in the Nineteenth-Dynasty P. Leiden 1 348, rt. 4, 5-6. Here it is said: 'Horus is fighting with / Seth for the Unique Bush (bit w(t), a hmm-plant which Geb had created. O Reg, listen to Horus! That he has kept silent $(tmm \cdot f)$ is because of Geb! (But) Horus suffers from his head . . . ', etc. In the next passage, Isis is invoked in aid of her son. The passage about the bush may be understood in the light of others, where Horus' eye is said to be dripping from a bush,² evidently because it has been wounded after a fight. Since in this spell Horus and Seth, both equal opponents, are fighting for a bush in this special mythological context, it is not improbable that Seth had hidden the eye of Horus in it. This would be a new element in the numerous mythical allusions to Seth's robbing or damaging the eye of Horus.³ The speculative element in the argumentation consists of connecting this *hmm*-bush with the Ptolemaic writings of the word for 'ball'. At the same time one might argue that the hmm-bush, when serving as a hiding place for the particular object robbed by Seth, might be well fit for this purpose. Perhaps the tree-species was sacred to him, though nothing is known about this; that Geb had created it may be less important, for all plants and trees are said to spring from him. Perhaps the hmm-wood was regarded by the Egyptians as a Sethian, i.e., inimical tree-species,4 and therefore it might have served with good reason to fabricate an object out of it which represents the eye of Apopis, the enemy of the sun-god's eye, who in the late period was often put on a par with Seth.5 Whether there was also a connection with a certain hm3- or hm-plant, which likewise has a magical connotation, is not clear. To return to our problem: if the above-mentioned assumptions are not too unlikely, a further subtlety would be revealed: on the mythical plane, the fight really is between the eye of the sun-god and that of Apopis, on the symbolic plane the conflict might be borne out by the use of two different materials, the hmm-ball for the eye and the bik-club to hit it away. They also form an antithesis.

The evil eye of the snake in general

§ 30. Already in the anti-snake spells in the *Pyramid Texts* there are allusions to the dangerous glance of the snake, countered in some passages by the eye of the charmer. Such snakes form a threat to the king or to his tomb.⁶ Relevant passages are:

Pyr. [228] 228a: hr hr r hr m: n hr hr, 'One face' falls on the other—a face sees (another) face!' Part of the spell is also found in CT VII, [885] 98d.8 For hr r hr, cf. Pyr. 431 a-b; CT VII, 94r and 98d.9

- ¹ See my The Magical Texts of Papyrus Leiden I 348, 19 (translation) and 77 ff. (commentary).
- ² The <u>dnw</u> or <u>tnw</u>-plant (Wb. v, 575, 5), still unidentified, found in Pyr. 133a, 695a, and BD 174, Budge 466, 10.

 ³ Cf. J. Gwyn Griffiths, The Conflict of Horus and Seth, 28 ff.
 - 4 Cf. n. 117 of my commentary.
 - ⁵ E.g. Edfu, 1, 441, 11-12; VII, 22, 9; 41, 8; 105, 15; 107, 10; Urk. VI, 65, 11 (Apopis) and 12 (Seth).
- ⁶ Spells 226-44; 276-99; 375-401; 727-33. The last group is given and numbered by Faulkner, *Pyramid Texts*, II (Supplement), 76-8. Measures are also taken against harmful snakes when the foundations of a temple are laid: *Edfu*, III, 106, 9-10; IV, 352, 14.
 - ⁷ In this and other passages, hr, 'face', evidently denotes the glance.
 - 8 Cf. also Pyr. [226] 226b (end of a spell): hfive pre mi tw Re, 'O snake, turn round—Re sees you!'
- 9 In a friendly sense, hr r hr is found in CT III [170] 39d. Similar expressions of an inimical character are, for instance, $ibh \langle r \rangle ibh$, P. Turin 1993, vs. 4, 4 (Pleyte-Rossi, 136, 4); rrr, ibh r ibh, P. Chester Beatty VII, rt. 7, 5; db r db / kch r kch, P. Med. London [45] 14, 6-7; cf. nnrnn, ibid. [43] 14, 3.

Pyr. [230] 232 a-c: 'He^I is the one who came against NN; NN did not go against him! / At the second instant of his seeing NN (ssp snnw n mss·f NN), at the second instant of his looking at $(n dgg \cdot f n)$ NN!'

Pyr. [234] 238a: $hr hr k hr \langle y \rangle rit f$, $hsi hr \langle y \rangle \underline{ts k}$, imy nswt f, 'A face is on your face,² O you on your coil(?)! Come down on your back, O you in your bush!'³ Cf. [389], cited below.

Pyr. [240] 245a: hr hr·k imy nswt·f, stiss·ti imy tpht·f, 'A face is on you,2 O you in your bush—you are laid down, O you in your hole!'

Pyr. [280] 421 a-b: ir·ti, ir·ti, ss·ti, ss·ti, hr·k hs·k, ss tw r wr, 'O evil-doer, (?),4 evildoer, creeper, creeper! (Put) your face behind you5—beware of the great door!'6

Pyr. [288] 429b: hr hr wit irt NN m dgiw nif, '(direct) the face to the road?—eye of NN, don't look at him!'

In Pyr. [297] 440d, the goddess Mafdet strikes the snake's face and scratches its eyes. It is said that its (the snake's) mother Nut sees him; in CT vii [885], 95u, this is coupled with 'the blind one guards you'. Here the blind god of Letopolis is meant, whose role in fighting snakes is well known in mythology.8

Pyr. [389] 682 a-f: 'a face is on you (hr hr·h)², O you in your hole! / Lay yourself down,9 O god who is in it, 10 before NN! / NN is the great maiden. 11 / When NN looks (ms), he does not live; / when the face of NN falls on him, his (the snake's) head is not raised. / O sriw-snake, glide away; bush-inhabitant (imy nswt), turn yourself!'

Similar passages are found in Coffin Texts spells directed against the rrk-snake:

CT v [376], 39a: hr ir-ty wr, hti hr-k, 'The eyes of the great one¹² fall down; your view is obscured.'13

- ¹ The snake.
- ² In this and other cases one might translate 'on your face', but probably hr hr k is elliptical for hr hr hr k, 'a face falls down on you'. Cf. Sethe, Übersetzung und Komm. I, 210 ('Ein Gesicht ist auf dir'); Faulkner, Pyramid Texts, 56 ('my eye is on you'); discussion in Klasens, A Magical Statue Base, 81 ('a face is on you').
- ³ Cf. Pyr. 245a (sim.); 679e (imy n_i wt); P. Turin 54003, rt. 9 (imy n_i yt·f). Comparable expressions are CT VII, 97t (tpy b_i t·f) and v, 39d; 40h (imy sm^c ·f).
- ⁴ For this word—not in Wb.—see Pyr. 668a; 1099ab (and E. Edel, Gr. § 247); CT VII, 95c (nowhere determined). Cf. also ir (determined [?] by the snake) in Neith, 4 = Pyr. 1761c (Faulkner, Pyramid Texts, 11, 15; but translated as a suffix f in 1, 258).
 - ⁵ Pyr. [380] 668b has: rd·k h·k, '(put) your leg behind you!'
- 6 R wr is not determined in the four extant Old-Kingdom versions (W [dual: ry wr(wy)], T, P, and N, 1055+61). The same phrase occurs in CT vII, 95y; here the ideogram-stroke following r suggests a substantive. In Pyr. [553] 1266c, in a spell for the king's tomb, the door—ries said to be sealed with two eyes which evidently must ward off evil intruders, like snakes. Therefore, r may here mean 'door'. Cf. also Sethe, Übersetzung und Komm. II, 185. In [380] 668b, one finds, however, siw www., 'beware of the twice great!'
- ⁷ Said to the snake (= look down, not at the king—so also Sethe, op. cit. 202) or to the king (keep to the road, don't look sideways)? Cf. P. Mag. Harris, vs. 1, 9–10, cited below, p. 143.
 - ⁸ See my The Magical Texts of Papyrus Leiden I 348, Excursus II.
 - 9 Read stis tw, cf. Sethe, op. cit. III, 248 and Faulkner, Pyramid Texts, I, 128.
 - 10 Im·s; in the hole, tpht.
- III Sethe, op. cit. III, 249, points to the hwnt wrt hryt-ib Iwnw (Pyr. 728a = 2002a); here it might be Hathor, Nut, or perhaps rather Mafdet. Cf. P. Bremner-Rhind, 28, 10: 'you (Rē') have slain them (the brood of Apopis) with the striking-power (m it; or 'in the moment'?) of the great maiden (hwnt wrt)'. In Dendera, 1, 96, 6, hwnt wrt means 'great lioness' (Wb. III, 56, 2) and this is exactly the form (sšti) in which Hathor kills Apopis.
- ¹² Wr is here determined by the sitting bearded man (A 40). In CT IV, 117a two versions have wrw (determined in the same manner), 'great ones', as against n'ww, 'smooth snakes', of the third version. For the substantive wr as a term for a snake—not in Wb.—see also Book of Caverns [3] 32, 7; 33, 1; 33, 6; cf. [4] 42, I (wr [determined by the snake]-ib, incorrectly for wrd-ib).
 - 13 *Ḥṣty*, Wb. 111, 35, 4.

CT v [379], 43 a-b: 'You go out and you enter with human eyes (*m irty rhyt*);¹ / you look at me with your face as a leopard.'²

An obscure passage in a spell, directed against the rrk-snake, in CT VII [885], 97e, runs: $rpwt \cdot k$ biht k is phr, 'your pupil(?)³ is the white of your eye(?)⁴—and vice versa.'

It is surprising that magical spells directed against scorpions and snakes have very few references to the eye of the latter (cf. above, p. 119 n. 4 and 6). It would be interesting to know whether and how the professional ancient Egyptian snake-charmers took measures against the dangerous glance of the snake; that they did so, might be inferred from some of the passages cited above. Pending the publication by S. Sauneron of a papyrus in the Brooklyn Museum which may prove to be a snake-charmer's manual,⁵ the only possible reference to such a person known to me is on the Turin Stela 48, and here the text is hardly explicit and does not mention the glance of the snake at all.⁶

§ 31. The power of the glance of the snake is also reflected in short descriptions and in special names. There is, for instance, a snake named y (determined by the eye) in Pyr. [285] 426b. In Pyr. [731] (N 1055+65 = Nt 720)⁸ = CT VII [885], 95g, a snake iggw, 'starer', is mentioned. In the Book of Caverns [2] 11, 5 a snake, called $N\check{s}_iy$, is qualified as htm irty, 'whose eyes are destroying'. The rrk-snake who in BD 149, 9 (44), Naville II, 403 = Budge 372, 14, 'lames with its eyes' (gbs m irty-fy) has already been mentioned (§ 6), as well as the ptry-snake in Amduat [11] 180, 2. II Ddhr Statue, 66, a snake mis, 'seer', occurs. 12

The evil eye of other beings

- § 32. All the material presented so far bears on the malevolent glance of the snake and the snake par excellence, Apopis. The evil character of the eye or glance in ancient Egypt is, however, also attested with demons, gods, and human beings. This is sometimes the
 - ¹ For the rhyt, see § 33.
- 2 M; bw in two versions; m s; bw in the third version, all words determined by the skin (F 27). The leopard is an often cited example of fury (Wb. 1, 7, 13).
- ³ Perhaps rpwt, 'lady' or 'woman's statue' is here used in the same way as hwnt (Wb. III, 53, 21-4) and twt (ibid. v, 256, 13-14). In Edfu, I, 394, 10, rpwt is the name of the wdit-eye.
- ⁴ The substantive b₁ht—not in Wb.—is also found in Ḥeḥanakhte Document [2] rt. 3 and in P. Turin 54003, rt. 21; vs. 13. I have followed A. Roccati's proposal 'bianco degli occhi'.
 - ⁵ See Brooklyn Museum Annual 8 (1966-7), 102; 10 (1968-9), 111-12.
- ⁶ See A. Erman, Denksteine aus der thebanischen Gräberstadt (Berlin, 1911), 1106; B. Gunn, JEA 3 (1916), 90-1; L. Keimer, Histoire des serpents dans l'Égypte ancienne et moderne (Cairo, 1947), 22.
 - ⁷ Wb. 1, 36, 16; cf. also A. Roccati, Papiro ieratico n. 54003, 31 note d.
 - 8 See Faulkner, Pyramid Texts, II (Supplement), 78.
 - ⁹ For the meaning, see E. Edel, ZÄS 81 (1956), 17–18.
- ¹⁰ As an alternative to Piankoff's 'Nechaï dont les yeux sont détruits' (p. 17). But perhaps this qualification of the snake's eyes points to the flames which issue from them. This is probably the case with the being sty m irt, n mintwf, 'who shoots with his eyes, without being seen' in CT IV [335], 307 b-c = BD 17, Budge 63, 7 (Wb. IV, 327, 14); cf. the verb sty (Wb. IV, 332, 4-6).
- 11 See p. 121 n. 4.
- ¹² E. Jelínková-Reymond, *Djed-Her-le-Sauveur*, 29 and 34.

'real' evil eye which plays an important role in everyday life, but it is also attested with beings in the nether world. Thus a demon with an evil glance is mentioned in CT v [454], 324 c-i (partly cited in § 5): 'You shall not see me with your eyes / by means of which you see from your knees.1 / Turn your face backwards / and look at the evildoers of Shu / who come after you / in order to chop off your head, in order to cut off your neck / as an order of him-who-turns-with-his-eye.' So the demons of Shu will overpower the demon whose evil glance threatens the speaker²—Shu himself may be in the possession of the evil eye, see the next section. In P. Leiden 1 348, rt. 7, 3, a demon endangering a patient is qualified as dw-hr, 'bad of face'. This entails the meaning of hr in such passages, but because protection is afforded by the eye of Re^c (rt. 6, 6; 7, 7), we are probably right in taking <u>dw-hr</u> as a reference to the evil glance, not to the repulsiveness of the face.³ In an earlier passage in that same papyrus, a smh-demon is mentioned (rt. 2, 3); the exact meaning of the word is unknown, but it is determined by the eye (D 6) and there is some chance that a verb with similar meaning is found in Urk. VI, 133, 5.4 In P. Mag. Harris, vs. 1, 9-10 it is said to a wolf: 'Don't put your face (hr) on me—but on the desert-cattle should you put your face! Don't / put your face to my path—but on another (path) should you put you face!'5 There are many other isolated passages with allusions to demons with a piercing glance,6 even trying to hide their face.7

§ 33. Among the gods whose eye is feared, Seth seems to be the most prominent. Yet, from the passages in which his eye or his manner of looking is mentioned, one cannot always infer that he possesses the 'evil eye' in its usual sense of a permanent dread, terrible for human persons; Seth's eye is bent upon evil among the gods, as may appear from the following passages. In the Ritual of Protecting the Neshmet-bark, the earliest version of which dates from the Ramesside period,⁸ it is said: hr hr hr.k, m nw r ht, 'Fall down on your face—don't look at the corpse' (of Osiris).⁹ In P. Louvre 3239,¹⁰ In 5, it is said about a demon: 'He is like Seth, the disturber, / the snake, the bad worm, the water in whose mouth / is fire, the one who comes with a furious face, / his eyes marked (?) with deceit,¹¹ in order to do / great mischief...' This fits an irreverent rather than an evil glance. In Urk. vi, 133, 5-6, Seth's look and intention are likewise

- ¹ J. Zandee, who has commented on the passage in *Nederlands Theologisch Tijdschrift*, Wageningen 7 (1953), 195, points to the god Hormerti who has eyes in his knees (ibid. n. 11).
 - ² See p. 118 n. 1. ³ Cf. <u>dwdw-hr</u> and <u>dwdw-tp</u>, said of Apopis (§ 5).
 - 4 Srh or smh, see n. 29 of the commentary of my The Magical Texts of Papyrus Leiden I 348.
- ⁵ H. Lange, *Der magische Papyrus Harris* (Copenhagen, 1927), 85. For the terrible glance of the wolf in the Harris passage, cf. *Amemenope*, 12, 18-19.
- ⁶ Cf. for instance the demons who are *mds irty*, 'piercing of eyes', in *Edfu*, I, 166, 16; 176, 12; 189, 9 (guardians of Osiris); P. Leiden T 32, 6, 9 (*OMRO* 37 [1956], 56); J. Lieblein, *Le Livre égyptien* 'Que mon nom fleurisse' (Leipzig, 1895), IV, 14; LXVIII, 5, etc.
 - ⁷ See n. 436 of the commentary of my The Magical Texts of Papyrus Leiden I 348.
- 8 Theban Tomb no. 7 (Ramose), included in the recent edition by J.-Cl. Goyon, 'Textes mythologiques 1. Le Livre de protéger la barque du dieu', Kêmi 19 (1970), 23-65.
- 9 J.-Cl. Goyon, op. cit. 29, 6-8 = [152], 6-8. In P. Turin 1993, vs. 11, 8-9 (not in Pleyte-Rossi) a demon (Seth?) is addressed as follows: 'or will you relate (certain) matters $(m-r)-pw \, dd \cdot k \, s \, s \, mw$), after you have raised yourself, have uncovered yourself, have gone out, have looked $(m) \cdot n \cdot k$, and smelled $(hmn \cdot n \cdot k)$ to the detriment of the life, well-being and sanity of Osiris . . .'.
 - ¹⁰ E. Chassinat, 'Les papyrus magiques 3237 et 3239 du Louvre', Rec. Trav. 14 (1893), 10-17.
 - ii iw irty fy inh n = m grg; so also a parallel in the Hibis Temple.

characterized by the word grg: 'you have glanced (?) at the god's mother / while promising her a service in a deceitful manner.' On the other hand, the eye of Seth is spoken of as something bad in Edfu, 11, 206, 14; 207, 13; 208, 1, and in Ostracon Deir el Medineh 1213,2 rt. 6-7, the eye of Seth occurs in a threat: 'and I shall cut off the hand of Horus, and I shall blind the eye / of Seth'; part of this also in P. Chester Beatty V, vs. 6, 2-3.3 In Urk. vi, 137, 3, Seth is menaced: 'Your eyes (wdsty-ky!)4 are blinded, your arms are broken.' It is a pity that the description of the Sethian man in P. Chester Beatty III is so lacunose; but Seth is called dšr irt, 'red of eye's and the manspecies itself belongs to the rhyt, originally a non-Egyptian stock of people⁶ which is sometimes associated with Seth.⁷ This reminds one of the rhyt-like eyes with which a demon is credited in the Coffin-Texts passage cited in § 30. The eye of Seth is always irreverent or malevolent, and, as far as the evidence goes, nowhere used to avert dangerous influences.8 This is not the case with other divine eyes to be feared; many of them occur in proper names, and they tend to protect its owner against (r=, ir=)'them', i.e., the enemies. That the eye of Horus has a destructive force appears from the proper name irt-n(t)-Hr-irw. Similar names attest the power of the eye of Amūn: irty-Imn-irw¹¹ and 3ht-Imn-rw, ¹² of Amen-Rē^c: irt-Imn-r^c-ir·w¹³ or of Amenemope: 3ht-Imn-(m)-ipt-irw.14 Similar names mentioning an (anonymous) divine eye are

- ¹ See note 4 on page 143.
- ² G. Posener, Ostraca hiératiques littéraires de Deir El Médineh, 11, 2 (Cairo, 1952 [DFIFAO 18]), pl. 48.
- ³ In the latter text, Gardiner restores not 'hand', but 'testicles of Horus', so that an antithesis is formed to the blinding of the eye of Seth. This is followed by H. Te Velde, who (Seth, God of Confusion [Leiden, 1967], 57 n. 3) arrives at the conclusion that in this passage 'the symbols have changed owners'. The solution may be simpler.
 - For the occurrence of the term wdit with reference to the eye of Apopis, see above, p. 128 n. 4.
- ⁵ Ibid., rt. 11, 7: dšr irt hdt hcti m htf. If the arrangement of the words is correct in this way, one might translate 'being red of eye, the white (eye?) rising in his belly'. Could this refer to Seth's eating the seed of Horus which, when called up, left his ear as a disc (P. Chester Beatty I, rt. 12, 11 ff.)? Perhaps a similar redness is ascribed to the Sethian man: ir s dšr [...] in rt. 11, 5. Or is he red-haired? According to Posener (JEA 35 [1949], 81 n. 2) the 'red eye' always means the evil eye.
 - ⁶ For a discussion, see Gardiner, Ancient Egyptian Onomastica, 1 (Oxford, 1947¹), 98* ff.
- ⁷ P. Chester Beatty III, rt. 11, 3 and 11, 8 (cf. H. Te Velde, Seth, 112); cf. also Hekanakhte Document [10] vs. 8. Perhaps also in CT v, 129b, where certain parts of the boat and the hpš of the nb rhyt are associated; for the hpš of Seth, see H. Te Velde, op. cit. 86 ff. Gardiner (Hieratic Papyri in the British Museum, IIIrd Series, I [London, 1935], 20 n. 4) cites an earlier opinion of V. Loret about Seth and his association with the rhyt, but I have been unable to trace this.
- ⁸ Unless one takes Seth's standing vis-à-vis Apopis in the sun-boat as an indirect example of the power of his eye (see § 1). Cf. moreover *Medinet Habu*, 11, pl. 82, col. 36 (= now K. Kitchen, *Ramesside Inscriptions*, v, 63, 13-14): iwf m-si-n mi Sth hr si pi sbi (determined by the snake), 'he is after us like Seth seeing the enemy'.
 - 9 For these, see M. Guentch-Ogloeff, 'Noms propres imprécatoires', BIFAO 40 (1941), 117-33.
- ¹⁰ H. Ranke, *Die ägyptischen Personennamen*, I (Glückstadt, 1935), 42, 11; 42, 12; also frequently in Demotic, cf. W. Spiegelberg, 'Der Name Inaros in ägyptischen Texten', *Rec. Trav.* 28 (1906), 197–201.
- 11 H. Ranke, op. cit. 1, 42, 14.
- 12 Ibid. 3, 10. Especially was Amūn of Napata renowned for his fierce glance: in BD 163 suppl., 10, Pleyte, Chapitres supplémentaires, pl. 56 (= Budge 413, 1-2) he is called pr kr hprr nb widty hsr dfd, 'the bull, the beetle, lord of the wdrt-eyes, fierce of iris'; perhaps cf. also P. Brooklyn 47.218.156, 5, 5 (S. Sauneron, Le Papyrus magique illustré de Brooklyn [New York, 1970], pl. v; p. 28, note nn).
 - 13 H. Ranke, op. cit. 1, 42, 9.
 - 14 Ibid. 3, 11.

cnht-rw¹ and the many names containing the wdst-eye, where the verb sts is used: sts-wdst, sts-ts-wdst. In P. Turin 1993, vs. 4, 125 a demon finds himself provided with the name wdst-r·k. More evidence comes, however, from the Oracular Amuletic Decrees. Here protection is often afforded against the wdst-eye, 'during one's whole lifetime'. The ominous wdst-eye is 'controlled' (sip)8 by the 'baboon' (icnw)9 who is connected in some way with 'the place of the wdst-eye'. But next to the baboon, there is also mention of an 'ape' (gyf) who 'controls' (again sip) the wdst-eye, 11 and in one instance is also connected with its place. This may be an accidental error, for elsewhere the 'ape', gyf, controls or is connected with a mound or sanctuary (ist, iyt). So the two are interchangeable to a certain degree, but their identity is a problem. The baboon

- ¹ H. Ranke, op. cit. 1, 62, 25, reading (nh irt r·w, 'es lebt das Auge gegen sie (?)'.
- ² See Gardiner, 'A Shawabti-figure with Interesting Names. The Evil Eye in Egypt', (PSBA 38 [1916], 129–30), 130; W. Spiegelberg, 'Der böse Blick im altägyptischen Glauben', (ZÄS 59 [1924], 149–54), 152.
 - ³ H. Ranke, op. cit. 1, 322, 26, reading sti-irt, following W. Spiegelberg, op. cit. 151.
 - 4 Ibid. 1, 323, 5.
 - ⁵ Pleyte-Rossi, Papyrus de Turin, 136, 12.
- ⁶ I. E. S. Edwards, *Hieratic Papyri in the British Museum*, IVth Series: Oracular Amuletic Decrees of the Late New Kingdom, 2 vols. (London, 1960).
- ⁷ L. 1, rt. 11; L. 6, vs. 14; L. 7, 16; T. 1, rt. 68; T. 2, rt. 75-6; T. 3, rt. 36; P. 2, rt. 24; P. 3, rt. 25; C. 1, 29; Ph., D, 12. The determinative is or 0. It is only found in the form *irt wdit*, in which *irt* is undetermined; for a discussion of the expression, see vol. 1, 2 n. 9 (11). One must reckon with the possibility that *irt wdit* is some particular eye-disease and has no connection with the evil eye at all.
- ⁸ For a discussion of this term, which elsewhere mostly means 'to inspect', see Edwards, op. cit. I, 54-5 n. 49, who translates 'assign'. I have rendered 'to control' (which *may* imply the sense of assigning), 'to avail over' (cf. *Wb*. IV, 35, 16).
- o T. 1, rt. 102-3; T. 2, rt. 41-2; T. 3, rt. 55-6; C. 1, 37-8. In T. 1, the determinative is again . In T. 2 and C. 1 the word wdit is, remarkably enough, determined by the article pi. This may be for pr, 'house' and since this is actually found in L. 6, rt. 59 (see n. 12, below) Edwards translates pi accordingly. On the other hand, certain nouns may be feminine or masculine in Late Egyptian (and earlier), e.g. cki, 'boat' (fem.: Wb. 1, 234, 15; masc.: Late Ramesside Letters, 46, 6); tht, 'plot' (masc.: P. Valençay I, vs. 3; P. Anastasi v, 27, 4; Late Ramesside Letters, 11, 1; 11, 3); twrt, 'gravity' (masc. in Ramesside Administrative Documents, 81, 11—or rather infinitive?). Thirdly, certain feminine words in the dual are sometimes treated as masculines, e.g. trt, 'eye', in Late Ramesside Letters, 11, 1 and 11, 3, as well as drt, 'hand', in Horus and Seth, 11, 7 (cf. B. Stricker, 'Une orthographie méconnue', AcOr 15 [1937], 21-5). Though all these examples involve cross-reference, they could perhaps serve to support a third possibility—to translate pi wdit: 'the pair of wdit-eyes'?
 - 10 St n wdst, P. 3, rt. 30; Ch. 82.
 - II T. 3, rt. 54-5; but after this, the icnw follows, with the same function.
- 12 Pi gyf n ti sit n pr wdit, L. 6, rt. 59. If pr = pr, 'house' (and not the article pi, as often; see above, n. 9), one may compare the pr wdit (and hwt wdit) cited above, p. 136 n. 1.
- 13 For a discussion of this difficulty, see Edwards, op. cit. 1, 54-5 n. 49. 'Sanctuary' seems to have been meant in T. 1, rt. 101-2; P. 2, rt. 18; P. 3, rt. 29-30, but 'mound' in T. 2, rt. 41; C. 1, 36; Ch. 81 and Ph., D, 4. If my assumption that the gyf is another form of Thoth (see below, p. 146 n. 2) is right, the sanctuaries or mounds could be those assigned by Thoth to different gods—while they would be protected by different demons. In Edfu, VI, 181, 10-11 there is mention of a 'copy of the writing which Thoth made according / to the saying of the sages (disw) of the Mht-wrt, a summing up (ssr) of the mounds (iswt) of the primeval times, it is called' (the same book is quoted in Edfu, VI, 326, 1-2). 'Gods of the mounds' are, for instance, mentioned in BD 141/2, Budge 319, 12 (among field-gods and other typically local numina) and in P. B.M. 10569 (R. Faulkner, An Ancient Egyptian Book of Hours [Oxford, 1958]), 14, 18. The material concerning the list is very rich. The fearful aspect of the mounds for the common Egyptian was probably caused by the demons defending sacred places like mounds and sanctuaries (for a few references, cf. my The Magical Texts of Papyru Leiden I 348, 54 n. 48). In this way, controlling the wdit-eye would be comparable to a certain degree with controlling the evil powers in sacred places—all against the background of popular imagination.

might be Thoth,¹ which leaves his colleague unaccounted for.² They can hardly be identical with the 'two baboons' (*icnw*), namely Khons-wn-nhnw ('who is youthful') and Khons p3-iri-shrw ('who fixes the destination') who are sitting to the right and to the left of Khons-in-Thebes-Neferhotpe.³

As has been seen, in CT v, 324f (see § 32) the evil eye of the executioners of Shu is mentioned. The eye of Shu himself occurs in BD 154, Budge 401, 10: 'I shall not perish because of the eye of Shu.'

On the south wall of the sanctuary of Taharqa at Karnak⁴ there is a representation of the four gods Dedwen, Sopdu, Sobk, and Horus being lifted on a *tst*, 'knot', by a priest and the Divine Votaress.⁵ Each of them is accompanied by a legend saying that 'he makes his slaughter (*cdt·f*) and brings misery about (*iry·f šnw*) with the two eyes(?)'. The absence of a suffix pronoun which is at least clear in the published copies of the texts⁶ is noticeable, and this casts some doubts upon the meaning of the last words.⁷ Translators generally hesitate,⁸ but at least Sopdu is adduced in this sense by H. Bonnet.⁹ Less specific is a passage in the so-called Israel stela where the protection of Egypt is assured by the power of the eye of all gods: 'the eye (*irt*) of every god is after her (Egypt's) robber. It is she who shall carry away the end of her enemies.'¹⁰

- § 34. Protection against the evil eye could be afforded by several gods. Some of them also 'assign' the evil eye. In P. Anastasi III, rt. 5, 4, it is said in a hymn to Thoth: 'O Thoth, you shall be my companion, and I shall not fear the eye' (*irt*). II According to a stela in the Musée Guimet Sakhmet affords her protection against the evil eye. The proper names it appears also that Neïth 'kills' (*hdb*) the evil eye, as well as Amūn, 15
 - ¹ So Edwards, op. cit. 1, 54 n. 49.
- ² Could the gyf be another form of Thoth? This might appear from a single passage in P. B.M. 10569 (R. Faulkner, op. cit.), where (in 22, 4) Thoth is called irnw gyf, 'the baboon and ape'. Irnw and gyf are named next to each other in an incomprehensible spell in Ddhr Statue, 91. In the Demotic Mythus vom Sonnenauge (ed. W. Spiegelberg, 1917), 22, 12, the gyf is perhaps the son of Thoth, while throughout the text he occurs as a personification of Thoth himself (as p; šm n wnš n kwf or simply p; kwf).
- ³ L. 1, rt. 2 ff.; L. 6, rt. 63 ff.; T. 1, rt. 54 ff.; T. 2, vs. 86 ff.; P. 3, rt. 90 ff. See G. Posener, 'Recherches sur le dieu Khonsu (suite)', pp. 401-7 in Annuaire du Collège de France 68 (1968-9).
 - ⁴ See Porter-Moss, Top. Bibl. II² (1972), 220 (15).
- ⁵ See recently J. Leclant, Recherches sur les monuments thébains de la XXV^e dynastie dite éthiopienne (Cairo, 1965), vol. of plates: 48, text-volume: 69-70, with bibliography.
- ⁶ E. Prisse d'Avennes, *Monuments égyptiens*..., etc. (Paris, 1847), pl. 32, 1 (reproduced in J. Leclant, op. cit.); partly on a photograph in W. von Bissing, *Denkmäler ägyptischer Skulptur*, Text (Munich, 1914), § 100 (p. 113).
- ⁸ No translation of the words in question is given by H. Gauthier, *Rev. égyptol.* 2, 1-2 (1921), 30 or by C. Sander-Hansen, *Das Gottesweib des Amun* (Copenhagen, 1940), 27.
- ⁹ H. Bonnet, Reallexikon, 122: 'Sopdu macht Schade mit seinen beiden Augen', following R. Lanzone, Dizionario di mitologia egizia (Turin, 1881-5), 1, 1054, and 11, pl. 358.
- ¹⁰ Israel Stela, Cairo version (CCG 34025), 13; see now K. Kitchen, Ramesside Inscriptions, IV, 16, 2-3.
- ¹¹ Gardiner, Late-Egyptian Miscellanies, 25, 16; for comment see R. Caminos, Late-Egyptian Miscellanies, 91, with earlier literature.
- ¹² A. Moret, Catalogue du Musée Guimet, pl. 64 (no. 72) = Annales du Musée Guimet, 32 (Paris, 1909).
- ¹³ For the reading of the difficult lines in question, see Spiegelberg, ZÄS 59 (1924), 153; S. Schott, ZÄS 67 (1931), 109 n. 9.
 - 14 Spiegelberg, op. cit. 152.

and Khons.¹ In *Dendera Mammisi*, 250, 1, *Thy*-Ḥarsomtus saves from the evil eye. Both these gods appear in the ritual of hitting the ball. The eye of Rē^c which rescues in P. Leiden 1 348 has already been mentioned (§ 32). Careful search might reveal more allusions to such protectors.²

§ 35. The evil eye, mostly found as *irt bint*³ as in the proper name st3-irt-bint,⁴ seems to be an anonymous evil power in itself, whether it derives from gods, demons, or human beings. Sometimes only *irt* is found, as in P. Anastasi III, rt. 5, 4 (§ 34) or in names like *irt-irw*,⁵ t3(y)-irt-irw,⁶ or irty-r-t3i.⁷

Allusions to human persons who 'possess' the evil eye, are rare.⁸ Perhaps they belong to the Sethian species, a sub-category of which were perhaps the *rhyt* (see § 33). In P. Mag. Harris, vs. 2, 7, the mouth is closed of 'all men, evil of face' (pr bin-hr drw)'.⁹ The irt bint, however, in Sarpot, 2, 38¹⁰ and in the Story of the Armour of Inaros, 17, 18¹¹ refers rather to a glance of scorn than to the actual 'evil eye'.¹² In the same way can the expression irt bint be understood on a naos from Saft el Henne.¹³

Again, the eye of dead persons can be feared. This appears from another passage in P. Leiden I 348, where (in rt. I3, 7–9) the speaker says: 'I go out / in the night, I go out in the darkness. I find Horus before me (and Seth (?)) to the right of me; I am (charged) with a mission of the great gods! Oh dead ones (mtyw), [I] keep you in check $(kh[\cdot i]tn)$, [I] cut off / a hand, (I) blind $(khm(\cdot i))$ an eye, (I) close a mouth—

- ¹ See p. 146 n. 14.
- ² In the Berlin Tablet 23308, Sakhmet, Thoth, Isis, Nephthys, Horus, and Horus-imy-šnwt (?) are invoked. Some of these gods are known as protectors in general (Thoth as magician, Sakhmet as the arrow-shooting goddess), and therefore it is somewhat doubtful whether the whole group is a company of special protectors against the evil eye (cf. G. Posener, $\mathcal{J}EA$ 35 [1949], 81 n. 6). Only of Horus-imy-šnwt (?) is it said that 'he blinds your (= the enemies') eyes'.
- ³ Oracular Amuletic Decrees: L. 1, rt. 29; L. 5, vs. 17-18; L. 6, rt. 69; T. 1, rt. 92-3; T. 2, vs. 90; P. 3, vs. 2; NY, rt. 44-5; Ch. 32-3. Next to this, one finds often the term kdm or ktm (sometimes followed by bin), determined by the eye. For a discussion, see Edwards, op. cit. 1, 3-4 n. 21: 'glance', 'threat', 'vision'?
- 4 Ranke, Personennamen, I, 323, I. For the name che-misc-irt-bint (I, 70, 23), see Spiegelberg, ZÄS 59 (1924), 138; 153: 'the just one stands up (against) the evil eye'?
 - ⁵ Ranke, op. cit. 1, 42, 10; 11, 266, 7.
 - 6 Ibid. I, 354, I. Or always ti-irt-irw, the y forming part of irt (cf. above, p. 146 n. 7)?
 - ⁷ Ibid. 1, 42, 17.
 - 8 From the Oracular Amuletic Decrees: irt rmt in L. 2, rt. 83; vs. 28.
- 9 H. Lange, Der magische Papyrus Harris, 93; 97. It is tempting to restore the damaged passage in Oracular Amuletic Decrees L. 2, rt. 83, in a similar manner: (82) . . . iw i \langle r \geq id \langle t \rangle \side sd/(83) \cdots r irt rmt p; bi[n-hr dr-w].
- ¹⁰ A. Volten, Ägypter und Amazonen (Vienna, 1962), 28-9.
- 11 E. Bresciani, Der Kampf um den Panzer des Inaros (Papyrus Krall, Vienna, 1964), 81; 123.
- 12 A. Volten, op. cit. 74.
- 13 G. Roeder, Naos (Leipzig, 1914, CCG), pl. 19, upper register, left, cited by S. Schott, $Z\ddot{A}S$ 67 (1931), 109, 10 (reading $bin\langle t \rangle$, as against Roeder's Hr). Sometimes a passage in Amenemope (8, 4) is interpreted as a reference to the evil eye, but such a sense can only be obtained after emendation: $iw\langle f \rangle$ nhm (nh m irt.f, 'while $\langle he \rangle$ takes life away with his eye'; thus, for instance, H. Lange, Das Weisheitsbuch des Amenemope (Copenhagen, 1925), 48; 50–1 and somewhat differently F. Ll. Griffith, JEA 12 (1926), 204. As it stands, nhm seems to be a passive sdm f: 'while life has been taken away from his eye.' Thus has the passage been recently translated by I. Grumach, Untersuchungen zur Lebenslehre des Amenope (Munich, 1972), 56; very different proposals in A. Marzal, La enseñanza de Amenemope (Madrid, 1965), 102. Perhaps compare a late proper name in which the contrary of the lifeless glance of the man in the Amenemope passage is expressed: (nh m irty, 'life (is) in the eyes' (H. Ranke, op. cit. II, 270, 27).

I am Horus-Seth!' Protection against the 'eye of a dead one' is given in some of the Oracular Amuletic Decrees.¹

§ 36. In actual practice, protection against the evil eye could be obtained by beseeching the various gods mentioned in § 34, as in the Thoth-hymn. It is mentioned among the various forms of protection given by gods in the Oracular Amuletic Decrees. Spells against the evil eye are referred to in the magical P. Brooklyn 47.218.138 (Saïte-Persian period)² and in several Ptolemaic temple inscriptions,³ but only one certain example of such a spell is at present known, the Berlin wooden tablet 23308.4 On this tablet, seven wdst-eyes are pictured, which may have served as a counter-force.5 Perhaps this is to a large extent the meaning of the many wdst-eyes worn as amulets; they are also found on some magical papyri, rolled up and worn as amulets, which often consist of nearly only 'vignettes'.6 They are also prominent on sarcophagi, doors, false doors, stelae, tomb-walls, and model boats; they may have partly served as 'lookouts' for the deceased, but an apotropaic function can hardly be denied to them.7 Painting the eyes with ladanum (ibr) is, according to a passage in Edfu, II, 43, 9-10, a means of scaring enemies 'when they look at you with an evil intention' (m3-sn twk $m \, dw$). For superstitious reasons, the hieratic sign of the eye was sometimes drawn with red ink.9

Postscript

No attempt has been made to trace possible survivals of the particular rite called skr hms. Dr. B. H. Stricker, for whose readiness to read critically through this article the author feels most grateful, makes the following remark. Evidently, there is no survival of this ritual in western traditions, but there may be a trace of it in a Persian ceremonial game, called gūy-u-čawgān, 'ball and stick', the same as the modern polo game. The fifteenth-century poet 'Arifī of Herāt had devoted a treatise to the mystical meaning of this game, which was of a royal and sacral character.

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<sup>1</sup> L. 2, rt. 50; 76–7; P. 4, 23.

<sup>2</sup> Col. x+11, 11, see J.-Cl. Goyon, \mathcal{J}EA 57 (1971), 155 n. 5.
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³ Edfu, III, 351, 9; VI, 263, 5; 300, 6-7.

⁴ See n. 5 below. In Ostracon Deir El Medineh 1062 (G. Posener, *DFIFAO* 1 [Cairo, 1938], pl. 34) there is often mention of the eyes of the patient which should not be maltreated by a dead person, but the spell is rather a sort of headache-spell than one for the protection of the eyes. It is the 'beginning of a book of warding off the stroke (skr) of a dead male or dead female' (rt. 2).

⁵ S. Schott, ZÄS 67 (1931), 109-10.

⁶ e.g. in P. Leiden I 354 (C. Leemans, Monumens, pl. 169) and in some papyri found at Deir el Medineh (B. Bruyère, Rapport sur les fouilles de Deir El Médineh, années 1948 à 1951 [Cairo, 1953 [FIFAO 26], 72, nos. 2 and 3]; P. Deir El Medineh 36, 5 [S. Sauneron, Kêmi 20 (1970), pl. 1]). Cf. also the group of three wditeyes among other magical signs in P. Leiden I 348, rt. 13, 3.

⁷ For a short survey of objects on which wdit-eyes may be found, see W. Hayes, Royal Sarcophagi of the XVIII Dynasty (Princeton, 1935), 64 n. 12; cf. also A. Hermann, Die Stelen der thebanischen Felsgräber (Glückstadt, 1940), 54-5 (especially on stelae). The wdit-eyes on bows or on model funerary boats and oars are also found in the illustrated 'Mythological Papyri'. Cf. also Blackman, 'The Ka-House and the Serdab', (JEA 3 [1916], 250-4), 252-4, who adduces inscriptional evidence for the eyes enabling the deceased to see the light of the day or the visitors to the chapel. Hermann, quoting inter alia Pyr. 1266c (see above, p. 141 n. 6) also thinks of an apotropaic function in some cases; so too J. Capart, 'Les yeux magiques', CdE 21, (1946), 32-3.

⁸ Prescriptions with ointments against demoniac influences are grouped together in H. Grapow, Grundriβ der Medizin der alten Ägypter, v (Berlin, 1958), 448-52. Among these, the heading of P. Med. Berlin [99] 8, 8 (ibid. 450) is particularly interesting: 'an anointment used in order to annihilate an enemy, in order to dispel an inimical being (hrwy) when coming at a man with a fierce face (m hs hr).'

⁹ See G. Posener, JEA 35 (1949), 80-1.

Table 2. The environment of the scenes: nos. 1-9

No.	Temple	Publication	Actor	Beneficiary	Location	Environment
I	Deir el- Baḥari	Naville, <i>DeB</i> , IV, p. 4; pl. 100	Tuthmosis III← with itf-crown; two priests	Hathor→	Shrine of Hathor, Entrance hall, eastern wall	••
2	Luxor	Gayet, MMF, xv, pl. 68 (no. 74), fig. 213	Amenophis III→ with <i>šwty</i> -plumes	Hathor←	Room G (Gayet), east end north wall, 2nd reg. = Nelson, KP, sect. G, room 13, no. 298	Below (3rd reg.): killing oryx; this is bordered on left by offering clepsydra to Mut
3	Luxor	Cf. Wb., Belegst. III, 93, 12	Amenophis III	Sakhmet	Nelson, KP, sect. D, room II, no. 206 (west wall), opp. no. 4	Opposite no. 4
4	Luxor	Cf. Wb., Belegst. III, 93, 12	Amenophis III	Sakhmet	Nelson, KP, sect. D, room II, no. 218 (east wall), opp. no. 3	Opposite no. 3
5	Edfu	E. 1, 62, 5-13; pl. 16	Ptolemy IV-with double crown	Hathor→	Exterior of Sanctuary, west wall	On east wall, same reg., there is a scene of killing oryx (not exactly on same axis as no. 5)
6	Edfu	E. 111, 348, 10–14; pl. 82	Ptolemy VII→ with double crown	Hathor←	Library, north wall, lower reg., bordered on left by entrance	Opp. (south) wall, exactly facing: scene of killing crocodile; this is bordered on right by killing hipp. Other walls have similar killing scenes
7	Edfu	E. IV, 149, 4-150, 2; X, 1, pl. 87	Ptolemy VII← with double crown	Hathor→	Ext. of naos, west wall, 4th sect., 4th reg., 2nd scene from left	To the left: killing tortoise. Exactly corr. on east wall: no. 8 ('back-to-back' op- position)
8	Edfu	E. IV, 305, 6-306, 4; X, I, pl. 93	Ptolemy VII→ with double crown	Hathor←	Ext. of naos, east wall, 4th sect., 4th reg., 2nd scene from right	To the right: killing tortoise; corr. ('back-to-back') to no. 7.
9	Edfu	E. VI, 313, 6-17; X, 2, pl. 151	Ptolemy XI← with plumes	Hathor→	Outer wall, inner face, east wall, 2nd sect., 3rd reg., on right corner	To the right: offering of chosen pieces of enemy to <i>Mnhyt</i>

TABLE 3. The environment of the scenes: nos. 10-19

No.	Temple	Publication	Actor	Beneficiary	Location	Environment
10	Dendera	D. IV, 193, 9-194, 2; pl. 301	Unnamed king→ with <i>iff</i> -crown	Hathor←	New year's court, east wall, 2nd reg., on corner	Bordered on right by killing crocodile. Opposite on west wall: killing oryx (on corner); this is bordered on left by killing tortoise
11	Dendera	D. v, 66, 9-10; pl. 369	Unnamed king→ with <i>if</i> -crown	Hathor←; Ḥarsom- tus←	East crypt no. 2, room B, east wall, on left corner	Bordered on right by killing oryx; other scenes in same reg. are inter alia offering clepsydra and killing crocodile. Exactly opposite (west wall): off. wd/t-eye; this is further adjoined by sim. killing and offering scenes
12	Dendera	D. vi, 134, 2-13; pl. 562, upper; 563	Unnamed king→ with iff-crown	Hathor←; Thy←	West crypt no. 2, room B, east wall, 2nd from left	Bordered on left by scene of putting choice pieces of enemy to fire; on left by similar scenes (inter alia offering clepsydra, killing tortoise). Opposite (west wall): off. w@t-eye. This is bordered on right by putting choice pieces of enemies to fire; on left by killing oryx
13	Dendera	••	}	?	Room F', west wall, 3rd reg.	?
14	Dendera	••	?	?	Hypostyle room G', east wall, 2nd reg.	?
15	Dendera		Augustus→ with	<i>Tḥy</i> ←; Hathor←; Horus of Beḥdet←	Ext. west façade, 4th reg., last section	Unknown. But corresp. to no. 16 ('back-to-back' opposition)
16	Dendera	Brugsch, Thes. 1397-8 (partly)	Augustus← with double crown	<i>Tḥy→</i> ; Hathor→; Ḥarsom- tus→	Ext. east façade, 4th reg., last section	To the right: scene of killing rebels. Corr. to no. 15 ('back-to-back' opposition, like nos. 7-8)
17	Dendera Mammisi	Dend. Mamm. 175, 2-11; pl. 68	Trajan→ with white crown between plumes	Hathor←; Horus of Beḥdet←	Ennead room, east wall, 4th reg., 1st sc. from left	Bordered on right by scene of killing enemies with staff
18	Philae, Isis temple	Bénédite, Philae, 81; pl. 29	Augustus→ with double crown	Sakhmet←	Exterior of naos, east wall, 2nd (mid) reg., mid scene	Below (pl. 29), inferior reg. ('1st'), sc. IX: offering of slaughtered enemies to Isis (p. 86)
19	Philae, Hathor temple		Augustus→ with double crown	Tefnut←	Outer hall, façade, left	Right part of façade: corr. scene of offering clepsydra to Sakhmet (cf. <i>Top. Bibl.</i> VI, p. 248, 2 [plan])

EXCAVATIONS EAST OF THE SERAPEUM AT SAQQÂRA

By ALY EL-KHOULY

The terrain of Saqqâra is honeycombed with subterranean passages and shafts, and the sudden appearance of depressions in the surface sand is so common as rarely to give cause for interest or alarm. Such a depression was noticed early in March 1971 some 200 metres to the east of the entrance to the Serapeum, and only a few metres to the east of the area on which stood the house of Auguste Mariette, long familiar to visitors to Saqqâra. Evidently the cause of the depression was the constant movement of vehicular traffic bringing visitors to the site of the Serapeum. The hole quickly widened and it was apparent that investigations would quickly have to be made in order to prevent any danger to visitors and further subsidence. Accordingly, I carried out excavations from 1 May until 17 June 1971 for the Egyptian Department of Antiquities in the area, which is situated at a high level with a considerable deposit of wind-blown sand and other debris, and surrounded by deep valleys to the north, south, and west.

I began the work in a square 40×40 metres. The first level, c. $75 \cdot 0$ cm. in thickness, was found to contain ashes, straw, wood fragments, pottery sherds of poor quality, Graeco-Roman and Coptic in date, pieces of faience, some faience beads, four large blocks of limestone ($125 \times 48 \times 77$ cm.), and, most important, a large number of papyrus fragments, some ostraca, and a few inscribed stones, as well as fragments of small, roughly-made shabtis.

The papyrus documents are in Greek, Aramaic, and Demotic. These have been examined by Professor H. S. Smith and Professor E. G. Turner, whose help is gratefully acknowledged, and whose report on some of them is here abstracted. The numbers are those allocated to the documents as they were recorded in the field.

Papyrus No. 51 (10.0×7.0 cm.)

Papyrus No. 52 (18.0×6.3 cm.) = pl. XL, 1

Fifteen short horizontal lines of demotic text along the fibres. Undated. A request (hrw bik) of the Scribe of the Treasury, Hor, who appears to have been responsible for

petitioning the priests of a temple of a god whose name has not yet been read, before his master Osiris-Apis, the great god. The request begins, 'O our great Lord, you have caused us to be satisfied on your festival'. The pith of the request is obscure; if certain conditions are carried out some order is to be given to a servant of the god whom Hor served. The document ends with the formula, sh bik.

Ten horizontal lines of Greek text running along the fibres. A fragment of an account of the third century B.C., probably amounts of corn paid to individuals.

Six horizontal lines of demotic text, running along the fibres (true recto), with a margin at the bottom. Undated. Text faint and difficult to read. It is couched in the first person, and could be part of a letter. However, the last line reads sh sh N, which may indicate a lease (sh N). Again a man called Hor appears (cf. No. 52).

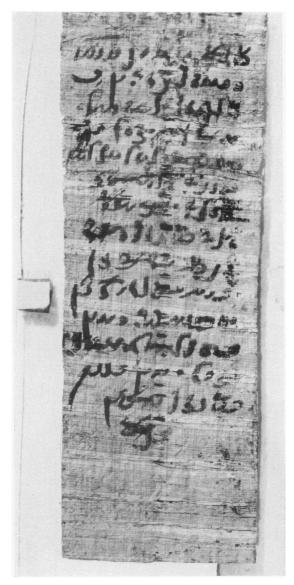
Papyrus No. 55 (
$$8.5 \times 8.0$$
 cm.) = pl. XL, 2

Five lines of demotic text written along the fibres, with margin (?) at the bottom. Dated. In the first line a royal titulary is preserved, reading pr-c; Ptlwmys p; ntr Ty;nwsys, 'Pharaoh Ptolemy, the god Dionysus', which can only well refer to Ptolemy XI Auletes, who called himself 'Neos Dionysus'. This may be the first appearance of this form of titulary in demotic. Unfortunately the year date is missing, but Auletes reigned from 80 B.C. to 58 B.C. The text contained an oath sworn by a woman named Tashefo (?), but its subject matter is missing.

Papyrus No. 56 (7.0×6.5 cm.)

Three lines of demotic text written along the fibres, with a margin at the top. A fragmentary text mentioning a temple contribution (škr). Something is stated to have occurred 'since Year 18'. Perhaps a form of account.

Twelve lines of demotic text written along the fibres. Complete except for the loss of a number of lines at the bottom, much stained. Undated. A petition (hrw bik) by a man of uncertain name before his master Osiris-Apis, the great god. He says: 'O my great Lord, you (help?) all your servants; listen to my voice, I am your servant, I plead before you. I am weak and I am distressed, my face is uncovered. May my rheumy (?) eye be opened. This miracle is my good fortune. . .' The miracle appears to be to know that a male child will be born, of whom it is said, 'It is Horus who has procreated him, having brought him to the house of Pharaoh (?) to cause . . . the business of Pharaoh (?). May he live . . .' The rest is at present obscure, but the document appears to be a plea by an aged and ailing man for a male heir, and is probably not untypical of the type of petition presented to Osiris-Apis by humble people.



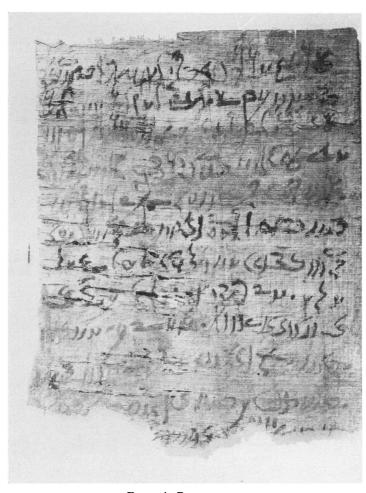
1. Demotic Papyrus no. 52



4-5. Demotic Papyrus no. 63



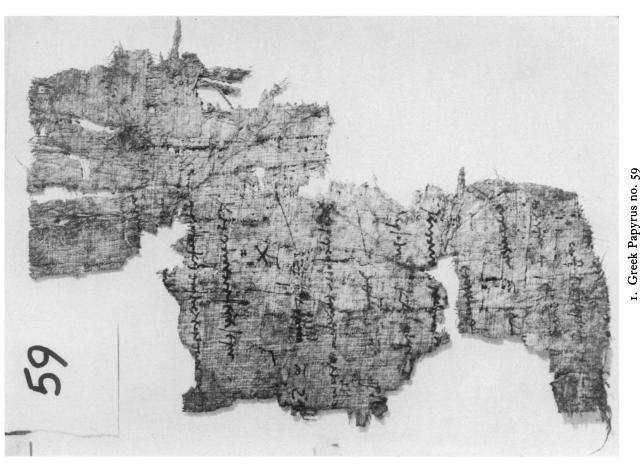
2. Demotic Papyrus no. 55



3. Demotic Papyrus no. 57



2. Fragmentary statuette of Queen or Isis



Papyrus No. 58 (22.0×9.0 cm.)

Five lines of demotic text written along the fibres (true recto) of a narrow strip of papyrus, much darkened. The contents appear to be a receipt for temple contributions (škr), paid to a lector-priest on behalf of the (.) of the City (?), for a period from Year 21 of one king to Year 5 of the next. A man named Petosiris was responsible for the reckoning. Undated.

Papyrus No. 59 (21.0
$$\times$$
11.0 cm.) = pl. XLI, 1

Thirteen lines of Greek cursive uncials written along the fibres. This document has been examined in a photograph by Professor E. G. Turner. An account of various types of corn and land. Second century B.C. The chief interest lies in the entry in line 13, which mentions 'food(?) for and burial of lions . . .' Caution is necessary here, for the group after 'lions' is broken and could perhaps conceal a place-name such as Leontopolis = 'City of Lions'. However, Leontopolis does not seem a likely reading, and the possibility cannot be excluded that there was a cult of lions (like that of the Apis bulls), and that they were ceremonially buried in a burial-place at Saqqâra. A Greek text from Leontopolis itself can be emended to mean that there was a 'sacred house of the burial of the lions' there. Professor Turner suggests that if there was such a burial cult at Saqqâra in a serdab, this is to be connected with the cult of Pharaoh as a lion. An alternative explanation of the text is that it refers to the feeding and burial of lions kept in a royal zoological garden; such a garden is known from the reign of Ptolemy II.

Papyrus No. 60 (16.5×12.5 cm.)

Two columns of nineteen and twenty lines respectively of demotic written along the fibres (true recto). The text consists of a roster of priests running from day 13 of one month to day 20 of the next, which is named as *bd 3 *smw*, Epeiph, the eleventh month of the year. Each day date is assigned a line, followed by the name and filiation of the priest designated for duty. On the verso the roster continues in the same hand and runs from day 7 to day 22 of an unknown month in column 2; the dates are lost in column 1. This document has some importance for the palaeography of the days of the month in Memphite demotic. Undated.

Papyrus No. 61 (8.0×8.0 cm.)

Six lines of demotic written along the fibres, giving a list of sacred ointments (sgn). Across the fibres on the back are written six lines of demotic all beginning iw-k, followed by a verb, and then a space. Possibly part of a dream book, or even a set of school exercises. Undated.

Papyrus No. 62 (7.0×6.0 cm.)

Six lines of demotic written along the fibres. Undated. The fragmentary text runs:

'... they being numerous, they being assembled ... she caused that a beautiful woman

M

... he being successful (mnh), she caused ... seeing that he was successful, she caused ... he seeing that he was successful ... he being (....) again ... It is possible that the first phrases in the last four lines should be translated as conditionals, and that we have here some sort of dream book, but the text seems much more likely to be part of a story; the hand conforms well with known literary hands. Across the fibres are the very beginning of five lines of demotic in a different hand. The contents are unilluminating.

Papyrus No. 63
$$(8.5 \times 4.5 \text{ cm.}) = \text{pl. XL, } 4-5$$

Six lines of demotic text written along the fibres. In the first there appears p:y(-y) š ll, 'my prayer', or 'this prayer'. The later lines appear mainly to comprise the names of minerals and other organic and inorganic materials—perhaps as ingredients in a recipe? Across the fibres are seven lines of demotic, conceivably but not necessarily part of the same text, which are too fragmentary for analysis at present. Undated.

Papyrus No. 64 (
$$7.5 \times 4.5$$
 cm.)

Six lines of demotic text written along the fibres, with (probably) a top margin. In line 2 flowers are mentioned (wny, a type of lotus). In the third appears the word swg, 'stupid'. The fourth line appears to read, 'She is like Bes (?)'. The fifth refers to 'She who is in front' and the seventh to the goddess Bastet. On the face of it, this may be a fragment of a magical text. Undated.

Papyrus No. 65
$$(3.7 \times 3.3 \text{ cm.})$$

Four lines of demotic text written along the fibres. There is perhaps a mention of the 'going-forth of Bastis', and in line 3 the words, 'I have caused . . . to see.' Across the fibres there are faint traces from which little can be made out. Again, perhaps part of a dream or some religious or magical book. Undated.

Papyrus No. 66
$$(7.8 \times 6.5 \text{ cm.})$$

Six lines of demotic written along the fibres. Undated. The text mentions 'the Lady of the Sycamore', (ts nbt nht), i.e. Hathor, in line 1; 'the great one of the sea' (sic) in line 4; 'the flowers' in line 5 and 'the princess' (ts rpyt) in line 6. Most probably a literary or mythological text. The hands, both on front and back, suggest that it may originally have formed part of the same papyrus as No. 63. Across the fibres much less is preserved, and in a less academic hand; perhaps an administrative letter or document.

Four lines of Greek uncials written across the fibres, with larger uncials used as numbers on the right. Part of an account.

Papyrus No. 68 (
$$6.5 \times 6.0$$
 cm.)

Five lines of demotic text written along the fibres, giving a list of commodities, perhaps spices or the like. Across the fibres are written six lines of demotic text, all

beginning with the word web, 'priest', qualified by a relative clause, e.g. 'he being chosen', 'he being washed'. If the text is not merely a school exercise, it was presumably used somehow in connection with temple ritual.

The ostraca from the site number forty-six in all. Of these five are figured ostraca bearing rough drawings of no great import. Three are jar-handle stamps from wine amphorae imported from Greece or the Aegean; they have not yet been examined by an expert and their exact provenance cannot be given. Two bear inscriptions in red in a Greek cursive script of the Byzantine period, and perhaps signify the jar contents. Three bear brief texts in Aramaic, one (No. 73) bearing two lines written opposite ways up. The remainder are inscribed in demotic. Nine of these bear dedications or brief pleas, mostly to Osiris-Apis. Eight are accounts or calculations of one sort or another, No. 74 mentioning 'the bank'. Ten bear only lists of names, or names and dates. Six bear inscriptions of uncertain character.

On the papyri and ostraca Professor H. S. Smith writes: 'The combined evidence of these texts, in particular the two petitions to Osiris-Apis (Papyri Nos. 52 and 57) and the dedications on ostraca to the same god (Nos. 70, 77, 88, 89, 92, 106, and 110(?)), demonstrates that the site is directly connected with the Serapeum. It is therefore of importance, and it is hoped that a special budget can soon be produced to enable the excavations to be continued. Of the texts themselves, the petitions will be of great interest when fully deciphered. Nos. 66 and 68 are of palaeographical interest, while the unique demotic titulary of Ptolemy XI Auletes (No. 55) is a most useful discovery. Most of the texts are unfortunately undated, unlike No. 55. The palaeography of Memphite demotic documents is a treacherous field at present, and it would be dangerous to rely on it, but the impression gained is that most of the documents lie around the first century B.C. But the Aramaic fragments must belong to the fifth century B.C., and one or two demotic documents (e.g. Nos. 84 and 120) may do so also. On the whole, the condition of the papyrus is good, and future work may be expected to provide an interesting series of documents in context. This preliminary review is very tentative in its nature. It has been compiled by me, but I express my gratitude for very generous help in the preliminary decipherment of the documents from Professor R. H. Pierce and Mr. J. D. Ray.'

The layer immediately under the 75.0 cm. deposit contained the remains of houses, constructed of very rough limestone blocks, with a plastering of mud surviving in places. Amongst the debris of the houses were some large blocks of limestone, apparently not part of the original construction but probably from a temple or administrative building (connected with the Serapeum?). The blocks were 125.0 × 50.0 × 50.0 cm. Of the numerous small objects found on the floor level of the houses, there may be mentioned 48 shabti-figures of a certain Psamtik, of Thirtieth-Dynasty date, and the upper part of a fine schist statue of a Queen or of Isis, c. 20.5 cm. in height (Pl. XLI, 2). Before the excavation closed down I made a sondage on the east side of the area. The most interesting discovery was a fragment of a false door bearing the name of the celebrated Kha'emwese.

THE FORM MTW·F R SDM IN LATER EGYPTIAN

By J. D. RAY

One of the most interesting characteristics of the later stages of Egyptian is its ability to form complex tenses from an accumulation of particles: forms such as $wn \cdot f$ (or $wn - n \cdot f$) $r \cdot sdm$ (negregative) 'he habitually used to hear', are quite well attested, at least in demotic texts. These tenses conform to the usual pattern, a particle or prefix accompanied by a personal suffix, and followed by either the Infinitive or Qualitative of the verb. The infinitive may in early texts be preceded by a preposition, hr (or in very rare cases m) for present time, r with reference to the future, but in demotic the former are never written and it is extremely unlikely that they were pronounced. The preposition r, on the other hand, seems always to have been present in speech, and its occasional omission from the script is probably to be explained phonetically, since it had by this period become a vowel: indeed, it is sometimes found written as iw (ϵ , δ) a clear indication of its vocalic nature.

Particularly interesting is the development of the Late-Egyptian Conjunctive. Gardiner, as early as 1928, had postulated the origin of this rather portmanteau form in the earlier hne ntf sdm.3 This construction, in which the infinitive is used independently, qualified only by a possessive pronoun ('together with hearing on his part'), clearly does not conform to the type mentioned above: the infinitive, for example, cannot be replaced by the Qualitative. The Conjunctive Tense, in other words, did not originate from the 'Pseudo-Verbal construction' of Middle Egyptian.⁴ Later writings, in which hr precedes the infinitive (mtw-f hr sdm), were explained by Černý as being purely graphic, and arising from a scribal desire, conscious or unconscious, to assimilate the Conjunctive to other narrative tenses. 5 Černý invokes the same explanation for the writing mtw-f r sdm, of which only some half dozen examples are known,6 and his argument is strengthened by the fact that two at least of his examples precede the pronominal infinitive *irt*, and are therefore explicable as phonetic writings of the later Coptic Δa . However, the fact that the element r seems always to have been pronounced, should warn us against taking its appearance in the script as graphic, the more so as the other examples quoted by Černý do not precede *irt* and cannot easily be explained phonetically. Demotic, furthermore, shows clear writings of mtw-f r sdm, and demotic has a tendency to omit the unnecessary (sometimes even, one feels, the necessary) rather than insert the unpronounced.

¹ Rather scantily treated, however, in the Grammars, cf. Spiegelberg, Gr. § 172 ff.

² Ibid. § 4 et passim.

³ JEA 14 (1928), 86-96.

⁴ Gardiner, Egn. Gr. §§ 319-34.

⁵ JEA 35 (1949), 26 ff.

⁶ Ibid. 27 n. 1 and 2. Another possible example may be added from the *Doomed Prince* (6, 15: Late-Egn. Stories, p. 5, line 15), where the princess of Naharin exclaims, 'As Prēc endures, mtw-tw r sm3-f if they are going to kill him, when the sun sets, I shall be dead.' But the text is not certain.

7 Ibid. 27 n. 1.

It is in dream-books and omen-texts that the clearest examples of $mtw \cdot f r s \underline{d}m$ are found; this is not surprising, since it is the very quality of prediction which this new tense denotes. In Papyrus Carlsberg XIV. e. 9, in a passage discussing the dreams of women, we are told that a woman will suffer a consequence, doubtless bad, as a result of a certain dream, $mtw \cdot s \cdot r \cdot mwt \cdot n \cdot t \cdot y \cdot rnpt$ 'and she shall die within this year'. A more complete example occurs in Column d, 4-5, where, if a man eats a certain kind of refuse in his dream, $[iw \cdot f \cdot r] \cdot rnh \cdot n \cdot mx \cdot r \cdot mwt \cdot r \cdot rmwt \cdot rmwt \cdot r \cdot rmwt \cdot rmwt \cdot rmwt \cdot r \cdot rmwt \cdot rmw$

All these examples hail from Tebtunis, and can be dated roughly to the end of the second century A.D.³ That the construction of $mtw \cdot f r s dm$ is not simply a by-product of the Roman Fayûm, however, is shown by a fragment of a dream-book discovered in 1966 by the Egypt Exploration Society at North Saqqâra.⁴ The date of the papyri from this site, which are as yet unpublished, remains uncertain, but it would seem difficult at present to place them later than the Second Persian Period. The dream-book fragment, again dealing with the dreams of women (line x+6), gives as the prognosis,

]p₃y₃ šr mtw₃ r mwt [i·ir·hr] p₃y₃ šr '... her son, and she shall die before her son'.

The parallel with the later Carlsberg text is clear, but the present example antedates it by at least five centuries. A further occurrence from the same group (also unpublished), gives in a broken context $[m]tw\cdot w \ r \ ir - w$ 'and they shall make them', but this fails the 'Černý test' (it could be a writing of * $\overline{n}\tau\circ\gamma$ asy) and should not be counted independently.⁵ Other examples of this phrase may also reveal themselves in time; but one should also mention, if only to eliminate, the clause found in Papyrus Berlin 3108 5/6: pi nkt $mtw\cdot f$ r hws $n-im\cdot w$ 'the thing among them which will be missing (?)'. Here it would seem best to regard $mtw\cdot f$ as a writing of nty $iw\cdot f$, and the tense correspondingly as Third Future in a relative clause.⁶

These few passages may show that there existed, as early as the fourth century B.C.

- ¹ A. Volten, Demotische Traumdeutung (Copenhagen, 1942), 98, and pl. 6 (rather faint).
- ² Ibid. 96 and pl. 5.
- ³ Cf. ibid. 3: the identification of Pap. Carlsberg 94 rests on general similarity of hand, and unpublished manuscript notes, also by Volten, in the Egyptological Institute, Copenhagen. For this and much other information, I am indebted to Professor J. R. Harris.
- 4 Preliminary Report in $\mathcal{J}EA$ 53 (1967), 144. The dream-book bears the excavator's number S. H6. D. 485 (Verso). Permission to study this document has been granted by Professor H. S. Smith, and for this I am very grateful: right of publication is vested in the Society.
 - ⁵ S. H₅—122, Recto (1720), line (x+1).
- ⁶ Spiegelberg, Demotische Papyrus aus den Königlichen Museen zu Berlin (1902), 17 and pl. 33. The papyrus is a contract of 98 B.C.

in demotic, a form of the Conjunctive with inserted r: this tense persisted until well into the Roman Period, and indeed may well have been present in the language of the Late New Kingdom. Its meaning is, naturally, future: since, however, the Conjunctive itself by necessity refers to a following event, this meaning probably differs little from that of the parent tense. Perhaps the very timelessness of the Conjunctive prompted the creation of a specific future. It is also possible to see in many of the examples the nuance 'and he is bound to hear', but whether this is an intrinsic property of mtw f r sdm, or whether it is one imposed by the context, is difficult to decide. The latter is perhaps a sounder conclusion.

The final question must be whether the existence of $mtw \cdot f r \cdot sdm$ will lead us to revise our theories of the origin of the Conjunctive. There is perhaps little need for this: it is clear that in such Late-Egyptian texts as Papyrus d'Orbiney, which habitually writes $mtw \cdot f \cdot [hr] \cdot sdm$, the Conjunctive was thought to be no different from other tenses which had their origins in the Pseudo-Verbal construction. Once this had happened, there is no reason why it should not form a future with r, as did $iw \cdot f \cdot sdm$ and $wn \cdot f \cdot sdm$. The obvious name for this hybrid is thus the Future Conjunctive, although regrettably this term is sometimes used in Coptic for an entirely different formation, and it may be that it will be left to pursue its career under its native appellation $mtw \cdot f \cdot r \cdot sdm$.

Additional note

As explained above, the evidence of a form mtw f r sdm in demotic texts need not greatly affect our theories of the origin of the Conjunctive. Alternative theories, such as the attempt by Mattha (BIFAO 1947) to derive the form from an earlier *ntt iwf hr sdm, would gain little support from the existence of the new form with r, and must stand or fall by their own inherent plausibility. This is particularly true of the attempt by A. Volten in Studies in Egyptology and Linguistics in Honour of H. J. Polotsky (Jerusalem, 1964, although the article in question was concluded in 1955), pp. 55-80, where the evidence of an apparently similar form, $\delta SC-(m)tw \cdot f sdm$ (wa(n) require), is reviewed: this tense is traced back to *syc irt·f sdm, which employs the sdmt·f form of *iri* as an auxiliary. This seems very plausible, particularly now in view of the remarks by H. Satzinger in the 1971 issue of this Journal, where the essentially final nature of the sdmt·f ('he eventually hears') is convincingly demonstrated. However, there seems little compelling reason to postulate the same origin for the Late-Egyptian Conjunctive: dialect forms in Coptic (such as the 'Nitrian' τεψεωτω quoted by Volten) are capable of other interpretations, and the very fact that $\delta = (m)tw \cdot f \cdot sdm$ is written so often, both in Late Egyptian and demotic, as šic-tw-f sdm without the nasal element,3 should warn us against thinking of it as a twin of the Conjunctive. Whatever the truth of the matter, the form $mtw \cdot f r s dm$ is perhaps best to be explained as a secondary formation from a Conjunctive no longer felt to be different in its origin from other narrative tenses.

¹ Except, presumably, that it was never followed by the Qualitative (Černý, JEA 35 [1949], 27). Such an observation, however, might not readily have occurred to the scribe, or may not have been thought significant.

² The tense did not apparently survive into Coptic, but in this it is not unique. Its negative counterpart may perhaps have been *mtwf r tm sdm, but I know of no examples of this.

³ Could this be caused by the near presence of cayin? Cf. the Greek renderings of Rc in $X \in \phi \rho \hat{\eta} \nu$, $M \nu \kappa \in \rho \hat{\iota} \nu \circ S$, etc.

HECATAEUS OF ABDERA AND THEOPHRASTUS ON JEWS AND EGYPTIANS

By M. STERN and OSWYN MURRAY

In JEA 56 (1970), 141 ff. I published an article on Hecataeus of Abdera, in which I dated his work on Egypt to 'between about 320 B.C. and 315 B.C., or before 305 B.C. at the latest' (p. 144), and made some attempt to assess its significance and its impact on contemporary philosophical and historical writings in relation to that date. Simultaneously M. Stern published an article in Hebrew on 'The Chronological Sequence of the First References to Jews in Greek Literature' in Zion for 1970, where he offered a very different account of the relationship of Hecataeus to other Greek writers, and in particular to Theophrastus. The question is important for various reasons: Hecataeus' book marked a turning-point in Greek understanding of both Jewish and Egyptian civilization; and, more generally, the problem of its date involves the interdependence of the various works on foreign cultures in the early Hellenistic period, and so the Greek attitude to all these cultures. Since Stern's arguments were both clear and concise, whereas my own arguments had been presented elliptically and in passing, it seemed best to us to publish a translation of Stern's article, together with a fuller exposition of my views. Each of us is responsible only for the section which appears under our respective names; for the translation of Stern's article, we wish to thank OSWYN MURRAY Mrs. Tessa Rajak.

1. The Chronological Sequence of the First References to Jews in Greek Literature

by MENAHEM STERN (translated by Tessa Rajak)

The question of the relative chronology of the first references to the Jews and Judaism in Greek literature has been much considered by scholars, and is undoubtedly important for a clearer understanding of the first contacts between Jews and Greeks in the ancient world. Among the many achievements in Jacob Bernays' work on antiquity is the discovery of fragments of the work on piety, $\pi \epsilon \rho i \, E \dot{v} \sigma \epsilon \beta \epsilon i as$, by Theophrastus, Aristotle's greatest pupil. These fragments, which are embedded in Porphyry's De abstinentia, ii, include one about the Jews, describing them as part of the Syrian people. The Jews offer sacrifices in a way different from the Greeks: they make whole burnt offerings only. These are offered at night, and upon them they pour libations of honey

¹ J. Bernays, Theophrastos' Schrift über Frömmigkeit (Berlin, 1866). The fragments are conveniently assembled in W. Pötscher, Theophrastos, $\pi\epsilon\rho$ ì E \dot{v} o ϵ β \dot{e} ias (Leiden, 1964).

² Porphyry, De abstinentia, ii. 26; Pötscher, op. cit. F 13.

and wine. Since the Jews are philosophers, they discuss the Deity, and watch the stars at night. In his last surviving sentence on the subject of the Jews, Theophrastus states that they were the first to sacrifice animals and human beings, but that they did this under compulsion.

These remarks of Theophrastus were elucidated in detail by Bernays himself, and his successors have added many points. Bernays did not try to establish the precise date of Theophrastus' book; but he did express the view that the section on the Jews is particularly interesting, because it is the first certain mention of the Jewish people in Greek literature. After Bernays, other scholars took up this question, and Reinach put the passage fifth in his collection of Greek and Roman texts relating to Judaism. He put it before the extracts from Clearchus, Megasthenes, and Hecataeus, and in front of it put only four passages, two from Herodotus, one from Choerilus, and one from Aristotle. Since these four have no precise information on the Jews, it emerges that Reinach fully accepted the view of Bernays as to the priority of Theophrastus among the Greek authors who discussed the Jews. Reinach, like Bernays, made no attempt to date the passage.

The situation was reversed only in 1938, when Werner Jaeger published his importtant book on Diocles of Carystos, one of the great figures in the history of Greek medicine. Here Jaeger reached the conclusion,⁴ among others, that Theophrastus took his information on the Jews from Hecataeus, part of whose description of the Jews survives in Book XI of Diodorus Siculus' *Bibliotheca Historica*; though we must assume Hecataeus' discussion to have been wider in scope.⁵ Jaeger also repeated his conclusions about the dependence of Theophrastus on Hecataeus in the English article in which he reviews the earliest knowledge of Jews among the Greeks.⁶ Jaeger's view fixed automatically the chronology of the first passages on Jews in Greek literature, since Hecataeus did not write his book on Egypt before 305 B.C.,⁷ and Theophrastus' remarks must, on Jaeger's interpretation, be later than those of Hecataeus. This view gained the acceptance of distinguished scholars, including Regenbogen, Jacoby, Nock, and Bickerman.⁸ Joshua Gutman, in his history of Hellenistic Jewish literature, also joined

¹ Bernays, op. cit. 108 ff; A. Büchler, ZAW 22 (1902), 202 ff.; M. Radin, The Jews among the Greeks and Romans (Philadelphia, 1915), 81 ff.; J. Gutman, Tarbiz 18 (1947), 157 ff. (Hebrew).

² Th. Reinach, Textes d'auteurs grecs et romains etc. (Paris, 1895), 7 ff.

³ Hdt. ii. 104, only talks of the Syrians in Palestine as people who learnt circumcision from the Egyptians. In Hdt. ii. 159, there is perhaps an allusion to the battle by Megiddo where Josiah King of Judah fell: see Ed. Schwartz, Gesammelte Schriften, II (Berlin, 1956), 255 n. 1; A. Malamat, JNES 9 (1950), 221. However, Herodotus nowhere explicitly uses the term 'Jews'. The poet Choerilus' reference to the Solymian hills (Josephus, Contra Apionem, i. 173) was already in the ancient world connected with Judaea by the Jews themselves. The remarks on Choerilus by Isidore Lévy in Latomus 5 (1946), 334 ff. are not very convincing. Aristotle (Meteorologica ii. 359a) talks only of a lake in Palestine (the Dead Sea).

⁴ W. Jaeger, Diokles von Karystos (Berlin, 1938), 134 ff.

⁵ On the authenticity of the fragments of Hecateus in Contra Apionem, i. 183-204, Jaeger adopted no definite position. See his remarks, op. cit. 150 ff. B. Schaller, ZNTW 54 (1963), 15 ff. came out with a new attack on their authenticity. It is defended by J. G. Gager, ZNTW 60 (1969), 130 ff.

W. Jaeger, Journal of Religion 18 (1938), 135 ff.
 Jaeger, Diokles von Karystos, 132.
 O. Regenbogen, PW Suppl. 7 (1940), 1515 f.; F. Jacoby, F. Gr. Hist. IIIa (Leiden 1943), 38; A. D. Nock,

HTR 37 (1944), 174; E. J. Bickerman, apud L. Finkelstein (ed.), The Jews, I (1960), 88.

4 Jaeger, op. cit. 137.

the ranks of those who downdated Theophrastus. Hengel's book of 1969, on Judaism and Hellenism, endorses the view.

It seems that all the proponents of this theory have overlooked the logical and factual problems inherent in it. Jaeger did not reach his conclusion on the date of the description of the Jews in Theophrastus through a study of the text itself, or through a comparison of the descriptions of the Jews in Theophrastus and in Hecataeus. The dating emerged in a round-about way, as a corollary of his investigation of the date of publication of Theophrastus' book on minerals ($\pi\epsilon\rho\lambda$ $\Lambda l\theta\omega\nu$). Jaeger argued that the book was composed not before 300 B.C., for several reasons:

- (a) Diocles of Carystos is spoken of in the imperfect.² In Jaeger's opinion, this usage implies that Diokles, who lived until after 300, was no longer alive at the time of writing.
- (b) In one place in the book, a list concerning Egyptian kings is spoken of (εὶ πιστεύειν ταῖς ἀναγραφαῖς δεῖ ὑπὲρ τῶν βασιλέων τῶν Αἰγυπτίων). In another place 'those who write about the kings', i.e. the kings of Egypt, are mentioned (οἱ γράφοντες τὰ περὶ τοὺς βασιλεῖς). Jaeger argues that Theophrastus could only have gained this kind of knowledge with the help of a Greek literary source, and advances the probability that this was Hecataeus' book on Egypt, which appeared, as stated, not before 305 B.C.

Here Jaeger takes an additional step, and conjectures that since it is proven that Theophrastus used Hecataeus' Aigyptiaka for one of his compositions ($\pi\epsilon\rho$ ì Λ i $\theta\omega\nu$), therefore also the passage from a different composition of Theophrastus ($\pi\epsilon\rho$ ì $E\dot{v}\sigma\epsilon\beta\epsilon\dot{\iota}\alpha\varsigma$) which discusses Jewish customs of sacrifice depends on Hecataeus.⁴ We are invited to conclude that Hecataeus must be seen as the first Greek writer to provide clear information on the Jews.

Jaeger's first, grammatical, argument concerning the date of publication of Theophrastus' $\pi\epsilon\rho i \Lambda i\theta\omega\nu$ has little independent weight. But his second, main argument, which maintains that the information on the kings of Egypt is necessarily dependent on Hecataeus and no one else, does not stand up to criticism. There is no need to assume that Theophrastus used any literary source here, as it is known that Egyptian priests were in the habit of translating Egyptian material for the benefit of visitors. At any rate, one can argue that even if Theophrastus did rely on a literary source here, that source need not be the Aigyptiaka of Hecataeus.⁵ Furthermore, there appears to be proof within Theophrastus' work itself that it was composed some time before Hecataeus' book on Egypt. Theophrastus provides an explicit chronological datum, which enables us to date the $\pi\epsilon\rho i \Lambda l \theta\omega\nu$. In connection with his account of the discovery of the process for manufacturing artificial cinnabar (a dye-stuff), Theophrastus says that the discoverer was Callias the Athenian, some ninety years before the archonship of Praxibulus.⁶ We know that Praxibulus was archon in the second year of Olympiad 116, i.e. 315/14 B.C.⁷ There was nothing remarkable about his archonship. The fact

¹ J. Gutman, Hellenistic Jewish Literature (Jerusalem, 1958), 39 ff. (Hebrew); M. Hengel, Judentum und Hellenismus (Tübingen, 1969), 466.

² De lapidibus, 28, and also Jaeger's discussion in Diokles von Karystos, 116 ff.

³ De lapidibus, 24; 55.

⁵ D. E. Eichholz, Theophrastus, De lapidibus (Oxford, 1965), 9 f.

D. E. Elemonz, Theophrasius, De inpunous (Oxioia, 1905), 9 i

⁶ De lapidibus, 59. 7 Zwicker, PW 22, 1750.

that Theophrastus finds it necessary to calculate from this archonship only makes sense on the assumption that Theophrastus wrote his work in that very year, or at any rate before 305, the first date which comes into consideration for Hecataeus' book. Had Theophrastus written his work only after 305, he would not have reckoned the date of the discovery from the year 315/14. Thus Theophrastus' $\pi\epsilon\rho\lambda \, \Lambda i\theta\omega\nu$ cannot be dependent on Hecataeus' work on Egypt, which was published at the earliest ten years later.

Furthermore, even if the attempt to show the dependence of Theophrastus' $\pi\epsilon\rho$ i $\Lambda i\theta\omega\nu$ on Hecataeus' $Ai\gamma\nu\pi\tau\iota\alpha\kappa\dot{\alpha}$ had succeeded, this would still have provided no evidence to suggest that Theophrastus' other work, the $\pi\epsilon\rho$ i $E\dot{\nu}\sigma\epsilon\beta\epsilon\dot{\iota}\alpha s$, had also to depend on Hecataeus. What is more, it is difficult to trace any similarity of detail between the accounts of the Jews in Theophrastus and in Hecataeus. Though both have the stamp of idealization, still Hecataeus is much more in keeping with the real Jewish situation,² as would befit a later composition, and an author who, it seems, knew the Jewish people better than Theophrastus. In Hecataeus, the Jewish people appears as a separate group, with a stable political order, and not as a strange sect of Syrian philosophers, as would be the impression given by the earlier account of Theophrastus.

In addition, we should note that there are decisive considerations in favour of putting Theophrastus' $\pi\epsilon\rho$ i Eioae $\beta\epsilon$ ias before the Aiyuntiaká of Hecataeus. Even Otto Regenbogen was inclined to think that the work was in fact composed early in Theophrastus' literary career, but he was convinced by Jaeger's specific argumentation about the dependence of the Jewish passage on Hecataeus. As a result of this, he downdated the whole work. However, an early date rests also on a conjecture which connects the writing of the work with known events in Theophrastus' life. He was charged with impiety, apparently in 319 B.C. It stands to reason that the book was in some measure a reply to this charge, and was therefore written not long after 319.5 At any rate, it seems that it was written between 320 and 310 B.C. Hence the remarks about the Jews embodied in it are not a few years prior to Hecataeus' remarks on this people.

In the rest of Theophrastus' works, there may be some allusions to the Jews and their country. Josephus quotes from Theophrastus only a passage which mentions $\kappa o \rho \beta \acute{a}\nu$ as a foreign vow which the Tyrians were forbidden to use.⁶ In his great work on plants, Theophrastus used many examples drawn from Eastern countries like Egypt and Syria,⁷ and also discusses Palestinian phenomena. He knows the onions of Askalon,⁸ and gives us a detailed description of the balsam of Judaea, a description which greatly influenced

¹ See too Eichholz, op. cit. 10 ff.

² The relative closeness to reality of Hecataeus' remarks is stressed by V. Tcherikover, *Hellenistic Civilization and the Jews* (transl. S. Applebaum, Philadelphia, 1959), 360.

³ Regenbogen, op. cit. ⁴ Diogenes Laertius, Vitae philosophorum, v. 37.

⁵ Pötscher, op. cit. 124 f., sees 315/14 as a reasonable date for the composition of the work. Actually his date is the same as the conjectured date of the $\pi\epsilon\rho\lambda$ $\Lambda i\theta\omega\nu$.

⁶ Contra Apionem, i, 166-7. See, too, A. v. Gutschmid, Kleine Schriften, IV (Leipzig, 1893), 561.

⁷ For Theophrastus' visit to Egypt see W. Capelle, Wiener Studien 69 (1956, FS. Albin Lesky), 173 ff.

⁸ Historia plantarum, vii. 4. 8-9.

subsequent accounts. However, he does not mention the country of Judaea, or any place in Judaea, in connection with this, but locates the balsam in the valley of Syria $(\vec{\epsilon}\nu \tau \hat{\varphi} \ a \vec{\nu} \lambda \hat{\omega} \nu \iota \tau \hat{\varphi} \ \pi \epsilon \rho \iota \ \Sigma \nu \rho \iota a \nu)$. Likewise, he does not explicitly mention Judaea in his account of the date, but confines himself to the general specification, 'Syria'.²

In conclusion, what Theophrastus says about the Jews in the περὶ Εὐσεβείας precedes not only Hecataeus' description but also the passages about the Jews which survive from the writings of Megasthenes,³ the author of the famous book on India, and from Clearchus' dialogue on sleep.⁴ In his book Megasthenes compares the position of the Jews among the Syrians with the role of the Brahmans among the Indians. He was a contemporary of Seleucus I Nicator, and visited India at the beginning of the third century B.C.⁵ and only after this composed his book. Clearchus' dialogue, too, which describes an encounter in Asia Minor between Aristotle and a Jew from Greece, dates from not before 300 B.C., whether or not it was influenced in any particular detail by Megasthenes.⁶

Therefore, Theophrastus must be fixed as the first Greek writer to speak explicitly of the Jews. The order of Greek writers who discuss the Jews and Judaism is Theophrastus, Hecataeus, Megasthenes, Clearchus—without there necessarily being any connection between them.

2. The date of Hecataeus' work on Egypt By OSWYN MURRAY

The arguments of both Stern and myself start from the impossibility of accepting the position of Jaeger, formulated in *Diokles von Karystos*. Jaeger held that Theophrastus in his work *On Stones* used Hecataeus' book on Egypt, which he dated to after 305 B.C.; and this claim, together with other arguments, led him to date Theophrastus' *On Stones* itself to after 300 B.C. But the $\pi\epsilon\rho\lambda \Lambda l\theta\omega\nu$ is dated with virtual certainty to the archonship of Praxibulus (315/14 B.C.), since it gives that archon as a date in the form 'about ninety years before the archonship of Praxibulus'; on even the most cautious estimate, it remains absolutely certain that the work was written between 315 and 305.7

There are two obvious ways out of this dilemma. The first is that taken by Stern—to accept Jaeger's date for Hecataeus, and consequently to deny that Hecataeus could have influenced Theophrastus. The other alternative is to accept Jaeger's account of the interrelationship of Hecataeus and Theophrastus, and consequently to deny his date for Hecataeus: Hecataeus must then have written before 315/14 B.C. This is the view I took in my original article, and for which I wish to argue here.⁸ Certainty is in the

- ¹ Historia plantarum, ix. 6. 1. ² Historia plantarum, ii. 6. ³ Clem. Alex., Stromata, i. 15. 72. 5. ⁴ Contra Apionem, i. 176-82; F. Wehrli, Die Schule des Aristoteles, III² (Basle, 1969), F 6.
- ⁵ On the date of Megasthenes' visit to India see A. Dahlquist, Megasthenes and Indian Religion (Stockholm, 1962), 9 (between 302 and 288 B.C.). See also O. Stein, PW 15, 232 (between 303 and 292 B.C.).
- ⁶ Clearchus' dependence on Megasthenes is prominently brought out in W. Jaeger, *Diokles von Karystos*, 140 ff.; *Journal of Religion* 18, 132 n. 4. But it should be noted that Clearchus talks of Calani, and Megasthenes of Brahmans; cf. now L. Robert, *CRAIBL* 1968, 451 ff.
 - ⁷ De lapidibus, 59; see esp. D. E. Eichholz, Theophrastus, De Lapidibus (1965), 8-12.
 - 8 Cf. P. M. Fraser, Ptolemaic Alexandria, II (1972), 719 n. 7.

nature of the evidence impossible, but it still seems to me that the indications are in favour of a very early date for Hecataeus.

Neither Jaeger nor any other writer to my knowledge gives detailed reasons for dating the work of Hecataeus on Egypt to after 305 B.C. Jaeger merely says, 'the relating of the Ptolemaic rule to the golden age of ancient Egyptian monarchy, which is the chief aim of Hecataeus' history, is in all probability to be brought into connection with the assumption of the royal title by Ptolemy I' (in 305 B.C.). Rather it is perhaps significant that Ptolemy is not in fact described as a king in the work as we have it, but merely as 'Ptolemy son of Lagus'.² It is true that in one passage Egypt itself is indirectly described as a kingdom; for, in Diodorus' words, 'in natural strength and beauty of landscape, it seems to excel in no small degree the other areas separated off into kingdoms' (δοκεῖ προέχειν τῶν εἰς βασιλείαν ἀφωρισμένων τόπων). This appears to be the only argument in favour of the later date. Yet, even supposing Diodorus has accurately rendered the sentiment of Hecataeus, the phrase is sufficiently vague to be comprehensible as a description either of the kingdom of Pharaonic Egypt, or of the uneasy situation of the independent satrapies after Alexander's death and before the official declarations of the kingdoms of the Diadochoi: it could as easily be a product of these separatist tendencies as evidence for an officially established set of monarchies.3

More generally, Hecataeus' chief aim is not to relate Ptolemaic rule to the ancient Egyptian monarchy as a form of government, but to ancient Egyptian culture in all its aspects. As I said in my article, Hecataeus' description of ancient Egyptian monarchy cannot have been intended by him to be directly applicable to the Ptolemaic situation, since no Greek courtier would have wished to see Ptolemy under the complete control of Egyptian priests.⁴ There is therefore no reason to suppose a direct chronological relationship between Ptolemy's assumption of the diadem and the work of Hecataeus—though both are doubtless products of the common anxiety of the Diadochoi to establish themselves as kings independent of any central authority.

The remaining indications of the date of Hecataeus' work on Egypt are these:

1. Diodorus' précis of Hecataeus records the funeral of an Apis bull 'after the death of Alexander when Ptolemy son of Lagus had just taken over Egypt'; Ptolemy lent fifty talents of silver for the occasion. It is known that a new Apis era began in 300 B.C., which implies the death of a bull on or shortly before 300 B.C. Since all recorded bulls lived between 20 and 24 years, only one other bull is needed to fill the gap after the known murder of a bull by the Persian Ochus in 343/2; there should therefore have been a funeral about 320 B.C., a date which would suit Diodorus' words very well. This is the latest event which Hecataeus is known to have recorded. Further the description of Diodorus seems to suggest that this was both the first and the only funeral which had happened at the time Hecataeus wrote: thus the bull which died just before 300 B.C. was still alive. Any premature deaths would, of course, only serve to raise this terminal date. The argument is not conclusive, for it depends on the apparent implications of

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<sup>1</sup> W. Jaeger, Diokles von Karystos (1938), 132.

<sup>2</sup> Diod. i. 31. 7; 46. 7-8; cf. 84. 8.
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³ Diod. i. 3c. 1; cf. JEA 56 (1970), 148,
⁴ Op. cit. 153; cf. 166.
⁵ Diod. i. 84. 8.

⁶ H. Brugsch, ZÄS 24 (1886), 39 f.; cf. M. L. Strack, Die Dynastie der Ptolemäer (1897), 154 ff.

a précis, not the actual words of Hecataeus. Nevertheless the limits indicated by it are between about 320 and 300.

- 2. Ptolemy is nowhere described as a king, though he behaves like one, and Egypt is indirectly described as a kingdom: if this apparent absence of the title $\beta a \sigma \iota \lambda \epsilon \dot{\nu} s$ is to be given any weight, it indicates a date before 305 B.C.¹
- 3. The interest of Alexandrian Judaism in Hecataeus was strong: a terracotta relief portraying him was found at the Jewish settlement of Leontopolis, and two Jewish forgeries are known to have been attributed to him. Jewish references consistently suggest a very early date for Hecataeus. Aristeas in his letter to Philocrates on the translation of the Pentateuch makes Demetrius of Phaleron refer, in his report to Philadelphus on the importance of the Jewish law, to 'Hecataeus', apparently as an earlier writer. The reference is almost certainly to the forged work On the Jews; and although Aristeas himself is mistaken in portraying Demetrius of Phaleron as having been in high favour under Philadelphus, it seems at least that he regarded Hecataeus as active earlier than Demetrius (who arrived in Egypt in 297).2 More important, Josephus makes it clear that the forged work On the Jews portrayed itself as being written on the basis of the information available after Ptolemy I's Syrian campaign of 312 B.C.³ The author of this forgery must have explained the relationship of his full-scale work on the Jews to the already existing digression in the real Hecataeus' work on Egypt. He clearly cannot have claimed that the work On the Jews was earlier than the work on Egypt; for that would be to make an author become more inaccurate and briefer as he gained knowledge; and the idea of a Ptolemaic courtier like Hecataeus writing on the Iews before he wrote on Egypt would anyway be manifestly ridiculous. The forger must then have claimed that the work On the Jews was later than the work on Egypt: the purpose of his careful chronological setting is to establish this relationship, and to explain why it is that Hecataeus has apparently changed his mind, or gained greater knowledge—as a result of the campaign of 312 B.C. It may well be that he was here following a lead given by the genuine Hecataeus, who perhaps stated that he obtained his knowledge of Judaism as a result of the first Syrian campaign of c. 320-318 B.C. But in any event it is plain that the careful dramatic date provided by pseudo-Hecataeus presupposes that he at least thought that the genuine Hecataeus had written before 312 B.C. And given his concern for establishing this date, we ought perhaps to accept that he had good grounds for his belief.
- 4. Hecataeus apparently failed to mention Alexandria in his work. In Diodorus i. 31. 2 there is a passing reference to the island of Pharos, but none to the city; and i. 50. 6-7 is an obvious insertion by Diodorus, since it refers forward to his full description of Alexandria in xvii. 52. The context is one of the eclipse of Thebes by Memphis as the capital of Egypt: it would therefore seem that for Hecataeus Memphis was still the capital. This fits well with the fact that his whole work is centred on information

¹ Above, p. 164.

² Aristeas, Ad. Phil. 31 = FGH 264 F 23; cf. Jacoby's commentary p. 65. For the terracotta, see W. M. Flinders Petrie, Hyksos and Israelite Cities (1906), pl. 19 D.

³ Jos. Contra Apionem, i. 186 = F 21; cf. JEA 56 (1970), 144; JTS 18 (1967), 342 f.

Karystos, 127 f.

from Thebes and Memphis: written under royal patronage, it was presumably largely composed at court, and before that court cut itself off from the older centres. Alexander's body was first buried at Memphis, and it is probable that this was Ptolemy's original capital. But the satrap stele of 311/10 B.C. says of Ptolemy, 'he had made his residence the fortress of King Alexander, chosen of the Sun, the son of the Sun: Alexandria it is called, on the shore of the Great Sea of the Ionians, Rakoti was its former name'; if the events on the stele are recorded in chronological order, the transfer of the capital will fall between 321 B.C. and 312 B.C.¹

5. For the general argument that the attitudes taken by Hecataeus are attitudes more appropriate to the early days of Ptolemy's control over Egypt, when he paid more attention to native traditions and native susceptibilities, I refer the reader to my earlier article.

None of these chronological indications offers certainty; but they all point to a date before 300 B.C., one perhaps (no. 2) to a date before 305 B.C., two more probably (nos. 3 and 4) to a date before 312 B.C. It is also significant against Jaeger's attempt to place the work after 305 B.C. that there is no indication of any event later than the Apis bull episode, while the upper limit for composition is within a year or two of Ptolemy's first arrival. I would indeed be inclined to argue that it is not Ptolemy's assumption of the diadem which inspired Hecataeus' work, but Ptolemy's arrival in Egypt, and his struggle with the Greek Cleomenes for control of the country: this would well explain the idealization of old Egypt and the acceptance of Egyptian nationalistic and priestly traditions in the work. If Hecataeus had practical aims, they seem to have been the somewhat contradictory ones of both placating nationalist feeling and portraying Egypt as the promised land for Greek settlers.

Any further evidence for the date of Hecataeus' work involves the problem of the sources of Theophrastus. The earliest known author who can be said certainly to have used Hecataeus is Megasthenes, whose *Indika* are modelled closely on Hecataeus, and are indeed a reply to Hecataeus' claims about the cultural supremacy of Egypt: thus by the beginning of the third century Hecataeus' work was already a standard ethnography, and a model for others. Once it is recognized that the book could in fact easily have been written early enough to have been known to Theophrastus in 315/14 B.C., the arguments against Theophrastus having used Hecataeus in the *De lapidibus* lose much of their force. There is again no certainty. The information Theophrastus gives as coming from the records of the kings of Egypt is not itself found in Diodorus' précis of Hecataeus. Yet two things are clear. Theophrastus writes of the $\partial u \alpha \gamma \rho \alpha \phi \alpha u \nu \partial u \nu \partial$

¹ For the controversy about the date of the satrap stele, cf. $\mathcal{J}EA$ 56 (1970), 142 n. 1; here all that matters is that 311/10 is the latest possible date.

² Cf. JEA 56 (1970), 166 ff.; and my paper on 'Herodotus and Hellenistic Culture', CQ 22 (1972), 207 ff.
³ Diod. i. 31. 7; 43. 6; 44. 4; 46. 7-8; 63. 1; 69. 7; 81. 4; 96. 2; cf. 73. 4; and see Jaeger, Diokles von

to have existed in the priestly king-lists of Egypt; it concerns gifts to the king from the king of Babylon and from Phoenicia, monolithic obelisks of *smaragdus*, and the name of the first king to produce artificial *cyanus*. All three types of information are typical of the interests of Hecataeus; he talks of monoliths, of foreign tribute, and often records the names of kings or god-kings as inventors. It seems a little unnecessary to suppose two Greek authors with similar interests, transmitting such information under the guise of having got it all from the priestly records. I would therefore conclude that it is probable, though not certain, that Hecataeus wrote between 320 and 315 B.C., and that his work was used by Theophrastus in the *De lapidibus*.

The question of the relationship between the description of Judaism in Hecataeus' work on Egypt (which again survives in Diodorus' précis) and Theophrastus' knowledge of Jewish practices in his work On Piety is, I believe, more problematic. Theophrastus' work cannot be dated with any certainty; but it appears to have been polemical in part, and may well therefore be connected with his trial for impiety; it has plausibly been thought to be roughly contemporary with the De lapidibus (perhaps between 320 and 314 B.C.). Here Jaeger could find nothing specific to connect the two accounts in Hecataeus and Theophrastus, except the fact that Theophrastus describes the Jews as philosophers, and a certain philosophical colouring common to the two descriptions.² These indications are scarcely enough in themselves. On the other hand, it is not significant that none of the specific practices mentioned by the two authors are the same; for Diodorus certainly heavily abbreviated Hecataeus' account. Indeed Diodorus credits Hecataeus with saying that 'the sacrifices Moses established differ from those of other nations'; in the original, Hecataeus must have gone on to say how they differed.3 A large part of Theophrastus' account is devoted precisely to sacrifices, and to the claim that the Jews were the first to practise animal and human sacrifice. Thus we can see at least that Hecataeus did discuss Jewish sacrifices, and so where Theophrastus' information might have fitted into the account of Hecataeus. It is perhaps more significant that Theophrastus goes on immediately to contrast Jewish sacrifices precisely with those of the Egyptians, 'the wisest of all men': they did not indulge in animal sacrifice, and even worshipped animals as gods; the original sacrifices were of crops. The picture Theophrastus seems to have is of Egyptian religious practices as the earliest, with Jewish practices deriving from them, and a deviation for the worse. This exactly fits the general picture of Hecataeus, according to whom the Jews are colonists driven out of Egypt, who still possess many of the admirable characteristics of Egyptian culture, with Moses introducing a number of changes for the worse. And Theophrastus' favourable description of Egyptian religion at this point corresponds closely to the views of Hecataeus in his section on the religious practices of Egypt.⁴ Thus it is possible to see not only where some of Theophrastus' information might have fitted into

¹ For this type of information in Hecataeus, cf. Diod. i. 46–7; 57. 5; 59. 4 (monoliths); 55. 10; 58. 2 (tribute); 13. 3; 14; 15. 4; 16; 43. 6 (inventions); see Jaeger op. cit. 131 f. Hecataeus' characterization of the contents of the sacred books is at 44. 5.

² Jaeger, op. cit. 142 ff.

³ Diod. xl. 3. 4 = F 6; cf. $\pi \epsilon \rho \lambda$ E $\nu \sigma \epsilon \beta \epsilon \lambda$ F 15 Pötscher; cf. Jaeger, op. cit. 145; A. D. Nock, HTR 37 (1944), 174.

⁴ Cf. Jaeger, op. cit. 149 f.

Hecataeus' account, but also that it still perhaps retains certain characteristics (the attitude to philosophy, and the relationship between Jewish and Egyptian culture), which are distinctive of Hecataeus. This might explain also the curiously ambivalent attitude of qualified approval of Judaism common to both writers.

These points have perhaps some weight against the otherwise strong argument of Professor Stern, that the account of Hecataeus is in general more accurate than the statements in Theophrastus, and is therefore likely to be later and based on better knowledge. Hecataeus certainly had a reasonably good knowledge of Judaism, which he perhaps gained as a result of Ptolemy's first Syrian campaign of c. 320–318 B.C., cross-questioning Jewish priests as he did their Egyptian counterparts. But the hazards of transmission should also be taken into account. All that survives of Hecataeus on the Jews is a bald survey of the main outlines of his section, without any of its detail. It is precisely the main outlines which Hecataeus is likely to have got right; so that the account in its present state may appear rather more accurate and less fanciful than it originally was in detail. The information in Theophrastus on the other hand is concerned with one specific point, the rituals and methods of sacrifice among the Jews; it is not necessarily surprising that Theophrastus' details are less reliable than Hecataeus' generalizations.

I would therefore conclude that the discussions of the Jews in Theophrastus and Hecataeus were probably written within the same decade. From the *De lapidibus* it seems likely that Theophrastus had read Hecataeus. But whether Hecataeus is the source of Theophrastus' knowledge of Judaism in the $\pi\epsilon\rho$ Evo $\epsilon\beta\epsilon$ is more dubious: it could be that the $\pi\epsilon\rho$ Evo $\epsilon\beta\epsilon$ is earlier than the *De lapidibus* and written before Theophrastus had read Hecataeus, or that Theophrastus did not remember to consult a work on Egypt for information on the Jews. There are certain similarities of tone between Theophrastus and Hecataeus, but a complete absence of common factual information. At the most cautious estimate, the possibility of interdependence cannot be ruled out. As for the relative priority of Theophrastus and Hecataeus on Judaism, they are probably contemporary; and, if they have to be put in order, I should myself be inclined to side with Jaeger, and put Hecataeus first.

NOTES ON PTOLEMAIC CHRONOLOGY

By T. C. SKEAT

IV. The 16th Year of Ptolemy Philopator as a Terminus ad quem

In Reigns of the Ptolemies (1954), 31-2, I mentioned the Great Revolt of the Thebaid, which broke out at the end of the 16th year of Ptolemy IV Philopator, and referred briefly to the use of this year as a terminus ad quem in documents written after the reconquest of the Thebaid, giving as an instance P. Grenf. I. 11. As this statement has not attracted much attention, it may be useful to set out the evidence in detail.

In the first place, the date of P. Grenf. I. II must be firmly established. This papyrus is a dossier, or rather a copy of a dossier, of documents concerned with the efforts of one Panas to maintain his right to certain land in the Pathyrite nome against other claimants. It was first published by Grenfell in P. Grenfell I as No. II, and was subsequently reprinted by Mitteis as *Chrest.* no. 32. The most recent edition, with bibliography, is by W. Peremans and E. Van 't Dack in *Revue internationale des droits de l'Antiquité*, I (1948), 163–72. The papyrus itself, with the exception of a small fragment in Heidelberg, is in the British Museum, numbered Papyrus 606.

One of the documents quoted in the dossier is a letter from Pechytes, apparently the $\hat{\epsilon}\pi\iota\sigma\tau\acute{a}\tau\eta s$ of the Pathyrite nome,² to Daimachos, who, though given no title here, we know from other papyri to have held the post of Strategus. This letter is dated Year 24, Epeiph 25.

Grenfell in his edition assigned the papyrus to the reign of Ptolemy VI Philometor and Cleopatra II, in which case the date of the letter of Pechytes is equivalent to

It should be mentioned that this edition is neither entirely complete nor wholly accurate. It omits a small fragment in the British Museum which bridges part of the gap between P. Heid. 1288 and the main portion of the papyrus, filling up the second lacuna in ll. 8–13 of col. I and confirming all the supplements printed in Peremans and Van 't Dack. This is of some importance, since the resultant reading in l. 8, $\tau \hat{\omega} \iota \ \dot{\epsilon} \nu \ \tau \hat{\omega} \iota \ \Pi a \theta v - \rho[i\tau \eta \iota, \text{ disposes once and for all of the possibility of reading either } \tau \hat{\omega} \iota \ \dot{\epsilon} \pi \iota \ \tau \hat{\omega} \iota \ \Pi$, or some abbreviated title such as $\tau \hat{\omega} \iota \ \dot{\epsilon} \pi (\iota \sigma \tau \sigma \tau \sigma \hat{\nu} \nu \tau \iota)$ (cf. Peremans and Van 't Dack, op. cit. 168–9).

The following corrections should also be made. In col. I, 15 read $[\sigma v]\nu\lambda\alpha\beta\acute{o}\nu\tau a$ for $[\kappa\alpha\tau]\alpha\lambda\alpha\beta\acute{o}\nu\tau a$. 25. $\epsilon\dot{\mu}\eta\hat{s}$ does not come at the end of this line but is an interlineation above l. 26, as shown in Grenfell's edition. 28. At end of line $]\eta$ as in Grenfell. In col. II, 1, Peremans and Van 't Dack print $[\pi\epsilon]\rho\acute{\iota}$ instead of the correct $[\mu\dot{\epsilon}\chi]\rho\iota$, which as Collart and Jouguet pointed out in $\acute{E}t$. de pap., II (1934), 32 n. 1, had been proposed as far back as 1903 but had 'passée obstinément inaperçue'. The reading was discussed at length by von Drüffel, Philologus 72 (1913), 199–200, who states that $[\mu\dot{\epsilon}\chi]\rho\iota$ had the support of Kenyon. Wilcken, who sponsored the reading $[\pi\epsilon]\rho\acute{\iota}$ printed by Mitteis, claimed (Berichtigungsliste I, 179) that the horizontal stroke of ϵ was visible on the papyrus, but, as pointed out by Kenyon, this is in fact the linking stroke which in this papyrus joins χ on to the following letter. 19. $\tau\hat{\omega}\iota$ is an interlineation. 20. Read $\mu\eta\delta$ ' (as in P. Heid. 1277) for $\mu\eta\theta$ '. 22. Read $L\kappa\delta$ for $K\delta$ ($\check{\epsilon}\tau o v s$). 29. Between $\beta a \sigma \iota \lambda \iota \kappa o v$ and $\delta \iota \alpha \nu \rho \alpha \phi \dot{\eta}\nu$ is a deletion (the word deleted being illegible) and not a lacuna. 30–1. The twice-written, and then deleted, $\epsilon\dot{\nu}\tau\dot{\nu}\chi\epsilon\iota$ printed by Grenfell is omitted.

² Cf. references given by Peremans and Van 't Dack, op. cit. 167. H. J. Wolff, *Das Justizwesen der Ptolemäer*, 121 n. 25, in discussing the various suggestions which have been put forward, surmises that Pechytes may have been a subordinate of the ex-oeconome Dionysios mentioned in col. II, 24.

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21 August 157 B.C. This dating seems to have remained unquestioned until 1935, when Wilcken, in reviewing the P. Baraize (to be mentioned later) quoted, apparently with approval, the opinion of J. G. Tait P. Grenf. I. 11 should be referred to the reign of Epiphanes. Wilcken did not specify the reasons underlying Tait's judgement, but Tait himself subsequently explained them in detail in a footnote in P. Adler, 63 n. 1, which I will reproduce here:

P. Grenf. I. 11 = M. Chr. 32 was assigned by Grenfell to the reign of Philometor on the evidence of handwriting, which does not seem conclusive when the difference [i.e. between the reigns of Philometor and Epiphanes] is only of one generation. Moreover, as Mitteis states, 'Der Papyrus ist blosse Kopie', and the copy may have been written somewhat later than the events which it records. My dating is based on col. II, ll. 14–16, δμόσαι ἐπὶ τοῦ Κρονείου τὰ ὅρια εἶναι ταῦτα ἔως τοῦ ις L ἐπὶ τοῦ πατρὸς τοῦ βασιλέως. This cannot be the 16th year of Epiphanes, in which that part of the country was in the hands of the rebels, but only the 16th year of Philopator, in which the rebellion began. The meaning is therefore, 'These were the boundaries before the rebellion', the oath having been rendered necessary by the loss or destruction during the rebellion of the records from which the former boundaries might have been ascertained. If the '16th year of the King's father' belongs to the reign of Philopator, the 24th year must be of Epiphanes.

Tait's arguments seem to me absolutely conclusive, and I would only add in support that had the papyrus been written during the reign of Philometor and Cleopatra II, the phrase in question should have run $\hat{\epsilon}\pi\hat{\iota}$ $\tau o\hat{v}$ $\pi a \tau \rho \delta s$ $\tau \hat{\omega} v$ $\beta a \sigma \iota \lambda \hat{\epsilon} \omega v$, not $\tau o\hat{v}$ $\beta a \sigma \iota \lambda \hat{\epsilon} \omega s$, cf. UPZ 162, col. V, 29, $\hat{\epsilon}\pi\hat{\iota}$ $\tau o\hat{v}$ $\pi a \tau \rho \delta s$ $\tau \hat{\omega} v$ $\beta a \sigma \iota \lambda \hat{\epsilon} \omega v$, $\theta \epsilon o\hat{v}$ $\epsilon \hat{v}$ $\epsilon \hat{v}$

Peremans and Van 't Dack mention Wilcken's view, reflecting that of Tait, concerning the date of the papyrus, but they do not quote Tait's detailed exposition in P. Adler, and come to no positive conclusion themselves. As a result, doubts still seem to persist concerning the date of the papyrus. For examples I will quote the dates assigned to P. Grenf. I. 11 in the various entries in the *Prosopographia Ptolemaica* in which it features:

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PP 843 ± 157.

PP 870 ± 157.

PP 1034 157 (ou 181).

PP 2056 157 (ou 181).

PP 2439 157.

PP 4574 157 (ou 181).

PP 8275 157.
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To revert to Tait's arguments, the chronology of the Theban revolt has been most recently studied by P. W. Pestman, 'Harmachis et Anchmachis, deux rois indigènes du temps des Ptolémées', Chron. d'Ég. 40 (1965), 157-70. In addition to papyri from the Thebaid dated by the native Pharaohs, Pestman mentions three Demotic documents from the region of Thebes written during the period of the revolt and dated by Epiphanes, which lead him to conclude that on two occasions, in his 7th and 15th years

¹ Archiv 11 (1935), 292-3.

² Wilcken does not say how or when he became acquainted with Tait's view, but it may well have been in the course of Tait's letter of 1927 referred to in *UPZ* 162, col. V, 24-32 n.

respectively, Epiphanes momentarily regained control of the Thebaid. Despite this, it seems inconceivable, in a document written after the suppression of the revolt, that the 16th year of Epiphanes could in any way have been regarded as a point of reference, whereas the 16th year of Philopator, in which the revolt broke out, was, as Tait pointed out, of supreme relevance.

It is thus certain that P. Grenf. I. 11 must be assigned to the reign of Epiphanes, and the date of the letter of Pechytes therefore becomes 27 August 181 B.C.

I now turn to the other texts in which the Strategus Daimachos is mentioned. The first of these is the P. Baraize, originally published by Collart and Jouguet in Études de papyrologie, II (1933), 23-40, and subsequently reprinted twice over in the Sammelbuch as nos. 7657 and 8033. This document is an undated petition, addressed $\Delta a \iota \mu \dot{a} \chi \omega \iota \delta \iota a \delta \dot{a} \chi \omega \iota \alpha \iota \alpha \tau \rho a \tau \eta \gamma \dot{\omega} \iota$, concerning the alleged wrongful occupation of certain land which had been sold $\dot{\epsilon} \nu \tau \eta \iota \nu \epsilon \nu \alpha \dot{\epsilon} \nu \tau \eta \iota \tau \alpha \rho a \chi \dot{\eta} \iota$. Collart and Jouguet based their dating of the papyrus primarily upon that of P. Grenf. I. 11, accepting Grenfell's dating of 157 B.C. On this basis they suggested that the $\tau a \rho a \chi \dot{\eta}$ in question was the revolt in the Thebaid which occurred during the joint reign of Philometor, Euergetes II, and Cleopatra II, and which is customarily assigned to c. 165, and they proposed for the P. Baraize a date within the period 165-158 B.C. Since then this dating for the P. Baraize has been widely quoted.

It is strange that although Wilcken, in his review of the P. Baraize, apparently accepted Tait's re-dating of P. Grenf. I. 11 to the reign of Epiphanes, he failed to see that if Tait's view is accepted, the whole basis for dating the P. Baraize to the reign of Philometor disappears. Far from appreciating this point, Wilcken was so embarrassed by the apparent existence of a Strategus Daimachos both in 181 B.C. and again some twenty years later that he declined to believe that they were one and the same person. The point equally eluded Peremans and Van 't Dack, who devoted a lengthy discussion to the possibility of an official remaining in office for so long a period.

This difficulty is at once removed when it is realised that the re-dating of P. Grenf. I. 11 carries with it the dating of the P. Baraize, which we can now assign to the period round about 181 B.C.³ A further immediate consequence is that the $\tau a \rho a \chi \dot{\eta}$ mentioned in the P. Baraize is the great revolt of the Thebaid which lasted from 206 to 186 B.C.

The second papyrus in which the name of Daimachos is also found is a fragmentary papyrus from the Passalacqua collection in Berlin. Wilcken, in the same review of the P. Baraize, announced his intention of publishing it in UPZ, but this was not achieved, and the text has now finally appeared as $BGU \times 1907$. The document in question is a fragmentary $\dot{v}\pi\dot{o}\mu\nu\eta\mu a$, addressed $\Delta a\iota\mu\dot{a}\chi\omega\iota$ $\delta\iota a\delta\dot{o}\chi[\omega\iota$ $\kappa a\iota$ $\sigma\tau\rho a\tau\eta\gamma\hat{\omega}\iota$, and apparently relating to some encroachment on property belonging to the complainant in Pharmouthi of Year 4. Wilcken, influenced by the supposed dating of the P. Baraize, assigned this to

¹ For this revolt see F. Uebel, Archiv 17 (1962), 159-61 and JEA 54 (1968), 206-7.

² Op. cit. 167–8.

³ The date of the P. Baraize could be more nearly fixed if we could be sure that the words crudely scrawled at the foot of the document (a) were a date and (b) related to the document. Wilcken, in his review, read them as $L\kappa\delta$, $\Theta\hat{a}v\tau$, and if this is the date of the document the reign must be that of Epiphanes, and consequently Daimachos must have been in office as early as October 182.

Year 4 of the joint reign of Philometor, Euergetes II, and Cleopatra II, viz. 167–166 B.C., and this date is given without question in *BGU*. From the foregoing discussion we can now see that the Year 4 must be that of Philometor's sole rule (178–177 B.C.), with the corollary that Daimachos was in office as strategus for at least the period 181–177 B.C.

The re-dating of the P. Baraize has another and much more far-reaching consequence. It has already been mentioned that the land in question, or at any rate 53 arouras of it, had been sold during the ταραχή (συνέβη ἐν τῆι γενομένηι ταραχῆι πραθῆναι ἀπὸ τούτων τῶι προγεγραμμένωι ἐν τοῖς ἀδεσπότοις ἀρούρας $\overline{\nu \gamma}$). Van Groningen, in his study of the papyrus, states 'sans aucun doute en vertu d'ordonnances royales, les autorités avaient vendu 53 aroures à un certain Pemsais', but this is not borne out by the papyrus, which states explicitly that the sale took place during the $\tau \alpha \rho \alpha \chi \dot{\eta}$, that is to say during the period when the Thebaid was in the hands of the rebels and consequently no royal administration existed in that part of the country. The important fact is that although the sale took place under the rebel administration, the plaintiff makes no attempt to impugn its validity. On the contary, the whole document assumes that the sale was perfectly legal and regular. After the wife of the plaintiff, who was the actual owner of the land, had apparently fled from Thebes² on the outbreak of, or during, the rebellion, the land was classed as $\delta\delta\epsilon\sigma\pi\sigma\tau a$ and was sold to a purchaser by means of a $\delta \iota \alpha \gamma \rho \alpha \phi \dot{\eta}$: in other words, the rebel administration carried on the normal bureaucratic procedures of the Ptolemaic government. It is even more significant that the plaintiff concludes by asking that the topogrammateus should be ordered to confirm the tenor of the $\delta \iota \alpha \gamma \rho \alpha \phi \dot{\eta}$, indicating that the Ptolemaic authorities took over the records kept by the rebel administration.

The only alternative to the above interpretation would seem to be to assume that the term $\tau a \rho a \chi \dot{\eta}$ covered not only the actual period of the revolt, but the subsequent period during which the Ptolemaic civil administration was being re-established. We should then have to assume that the Ptolemaic authorities, being unable to trace the owner of the land, classed it among the $\dot{a}\delta\dot{\epsilon}\sigma\pi o\tau a$ and put it up for sale by auction. This, however, is contradicted by the fact that the owner is stated to have been present on the spot at the time of the sale, and could therefore have claimed possession.

On the whole, therefore, it seems probable that the sale took place during the rebel administration. That the owner should have been unable to establish her claim at the time is not surprising if, as may be inferred from her flight, she was a royalist sympathiser. That she was allowed to return, even temporarily, to the Thebaid by the rebel government indicates that some *modus vivendi* had been reached between the rebels and the government at Alexandria.

It can now be seen that although for certain purposes the 16th Year of Philopator was employed as a point of reference, after the suppression of the rebellion the Ptolemaic authorities made no attempt to 'put the clock back' by annulling or disregarding

¹ JEA 40 (1954), 59–62.

² This seems a reasonable inference, although the papyrus only says that at the time of writing she was ἐν τοῦς κάτω τόποις.

everything that had happened during the revolt. This may explain why Demotic documents drawn up during the reigns of Harmachis and Anchmachis have been preserved.

I now turn to other possible instances of the 16th Year of Philopator being utilized as a terminus ad quem. The well-known Erbstreit papyri (BGU 992 = Wilcken, Chrest. 162 and P. gr. Wiss. Ges. 277 = SB 4512) include a receipt from the royal bank at Hermonthis, dated Year 19, Khoiak 5 (5 January 162) for payment of the first instalment of the price of some land which had been confiscated to the Crown and sold at auction. The auction is stated to have taken place in Phaophi of Year 15, and the διαγραφή recording the transaction is dated Year 15, Phaophi 29. It was long ago shown by Plaumann¹ that Year 15 ($\iota\epsilon$) is a scribal error for Year 19 ($\iota\theta$), since there is no indication in the document of a delay of four years between the sale and payment of the purchase price. What, however, interests us here is the statement that the purchaser undertakes to pay regularly every year the established dues ($\tilde{\epsilon}\kappa\phi\delta\rho\iota a$), after which the text (of BGU 992) proceeds καὶ εἰς τὰ ἱερὰ τέλων . [.] διδόμενα μέχρι τοῦ ις L κτλ. The more fragmentary SB 4512 reads καὶ εἰς τὰ ἱερὰ] $[\tau ελων......διδόμεν]a$ $\mu \not\in \chi \varrho \iota \ [\tau \circ \hat{\upsilon} \iota] s \perp$. What can this 16th Year be in a papyrus written in the reign of Philometor? Philometor's 16th year, which fell during the period of the joint reign with Euergetes, is an unlikely terminus, while the 16th year of Epiphanes falls within the period of the rebellion and is thus excluded. I would therefore suggest that the 16th year is in fact that of Philopator, the meaning being that the dues to the priesthood should be paid at the rate obtaining before the rebellion. This would be in line with the pledge given to the priesthood by Epiphanes in the Rosetta decree, that their revenues would be maintained at the same level as under his father, Philopator. Although the lacuna between τέλων and διδόμενα cannot be filled with certainty, some such supplement as $[\tau \hat{a} \pi \rho \hat{o} \tau \epsilon \rho o \nu] \delta i \delta \hat{o} \mu \epsilon \nu a$ seems plausible.

A further example of reference to the 16th year of Philopator may perhaps be identified in P. Kroll, published by L. Koenen in 1957. This papyrus consists of two very imperfect fragments of an amnesty decree containing references to Year 16 (col. I, 16) and Year 20 (col. I, 22). Koenen assigned the decree to the reign of Philometor, identifying it as the decree which Philometor is known to have issued at the end of his 19th year, after his return from his brief exile on the break-up of the joint reign. It has, however, been convincingly argued by H. Braunert that the document should be referred to the reign of Epiphanes, because the verbs are in the singular, implying a single sovereign, whereas the reign of Philometor and Cleopatra II necessitated the plural.³ Braunert's proposal would in fact fit in very well with Koenen's own later researches in which he dated the so-called 'Demotische Zivilprozessordnung' to the 20th year of Epiphanes and connected it with the amnesty decree of that year issued on the occasion of the reconquest of the Thebaid, linked perhaps with the birth of a son and heir (the future Philometor).⁴

¹ G. Plaumann, Der Idios Logos, Abh. Preuss. Akad. 1918, p. 10; P. R. Swarney, The Ptolemaic and Roman Idios Logos, 8 n. 3.

² For attempts to explain this as the 16th year of Philometor cf. Swarney, op. cit. 8 n. 4.

³ Gnomon 32 (1960), 531-3.

⁴ Archiv 17 (1960), 11-16.

On this basis, Year 20 in P. Kroll might well be Year 20 of Epiphanes. But what of Year 16? As mentioned above, there seems no reason why Year 16 of Epiphanes should have possessed any special significance. But if the decree in P. Kroll was issued in connection with the reconquest of the Thebaid, Year 16 of Philopator would be extremely apposite. Unfortunately, the fragmentary state of the papyrus makes it impossible to do more than put this forward as a possibility.

Lastly, I would draw attention to P. Lond. 223, published in P. Lond. II, pp. 3–4. This is a small fragment, apparently from a land-survey, written in a near-literary hand and containing a reference to Year 4, probably of Philometor (178–177 B.C.). In addition there occurs twice the phrase $\tilde{\epsilon}\omega s \tau o \hat{v}$ is L. Since the papyrus comes from the Thebaid, the 16th year of Epiphanes is excluded, and there seems every reason to identify the year in question as Year 16 of Philopator, in which the revolt began.

If this use of Year 16 of Philopator as a terminus is as widespread as I have suggested, it may have some bearing on the actual date of the outbreak of the revolt.² The latest Greek document from the Thebaid before the revolt known to me, and confirmed by Pestman in his above mentioned article, is dated Year 16, Mesore 4 (12 September 206). This corroborates the evidence of the Edfu inscription which states that the building of the temple continued up to the 16th year (of Philopator), after which it was occupied by the rebels. The use of year 16 as a terminus ad quem indicates that the revolt broke out either in the closing days of Year 16, or at any rate before a substantial part of Year 17 had elapsed.

Addendum

- E. Van 't Dack Ancient Society, I (1970), p. 54, points out that the earliest certain example of a πρόσταγμα issued in the joint names of two sovereigns (employing the plural verb προστετάχασι) dates from Euergetes II. The use of the singular number in P. Kroll (above, p. 171) cannot therefore be urged as an argument against attributing the papyrus to Philometor and Cleopatra II, though it does not necessarily follow that Braunert was wrong in preferring the reign of Epiphanes.
- ¹ A facsimile of the papyrus is included in the album of plates accompanying the volume. A portion is also reproduced in C. H. Roberts, *Greek Literary Hands*, 350 B.C.-A.D. 400 (1956), 7, pl. 7b; it should be noted that in the accompanying transcript Lιζ is a misprint for Lι_s.
 - ² Fully discussed by Pestman, op. cit. 161-3.

THREE MUMMY LABELS IN THE SWANSEA WELLCOME COLLECTION

By DIETER MUELLER

The three mummy labels published below were originally part of the MacGregor Collection of Egyptian Antiquities; their provenance is unknown. When a part of this collection was auctioned in 1922, the material passed with numerous other Egyptian antiquities¹ into the possession of the late Sir Henry Wellcome (1853–1936), founder of the Wellcome Historical and Medical Museum in London. In 1971, many of the Egyptian objects from this Museum were brought to Wales, and are now at the University College of Swansea. My sincere thanks go to its curator Dr. Kate Bosse-Griffiths for her kind permission to publish the three labels, and for her invaluable and patient help in providing photographs (by Mr. Roger Davies), taking measurements, and answering questions. I am also greatly indebted to Mr. Geoffrey E. Freeman (Toronto), to Dr. Jacob J. Janssen (Leiden), and especially to Mrs. Bennett of the Inter-Library Loan Service in Lethbridge for their indefatigable efforts to make several important publications available for study.

In Graeco-Roman Egypt, the transport of bodies from one place to another was by no means a rare occurrence. People who had died away from home were normally shipped back for burial in their local cemetery; invariably, the deceased had to be conveyed from his residence to his final resting-place in the necropolis at the edge of the desert. In order to facilitate the transport, the senders attached small labels which ensured proper identification en route and at the final destination. These tags, sometimes called $\tau \acute{a}\beta\lambda a\iota$, are normally of wood, and pierced at one or both ends to accommodate the piece of string with which they were attached to the corpse. A letter of the late second or early third century A.D., presumably from Thebes, provides a graphic description of such a shipment.

¹ For a brief description of the individual exhibits see the Catalogue of the MacGregor Collection of Egyptian Antiquities (Sotheby Auction Catalogue, 1922).

² See e.g. the letter of Athenagoras to the priests of the Labyrinth concerning the mummy of a certain Heracleides, in Sammelbuch griechischer Urkunden aus Ägypten (ed. F. Preisigke and F. Bilabel), No. 5216, repr. in M. David and B. A. van Groningen, Papyrological Primer⁴ (Leiden, 1965), 130; or the letter of Satornilos, P. Oxyrh. 1068. Transport costs figure prominently among the expenses for burials; examples are quoted by U. Wilcken, Grundzüge und Chrestomathie der Papyruskunde, I, I (Leipzig, 1912), 422. In one instance, the price of transport has been recorded on a mummy label: J. C. Shelton, 'Mummy Tags from the Ashmolean Museum, Oxford', Chron. d'Ég. 45 (1970), p. 347 no. 18.

³ Fifteen mummy labels made of limestone have been published by E. Bresciani ('Etichette di mummia in calcare da Dendara nella Collezione Michaelidis', *Studi classici e orientali* 10 [1961], 209–13), and a few have come to light elsewhere (ibid. 209 n. 1). They are called *wyt* 'stela' in Demotic (ibid. nos. 9 and 13), and may have done double duty as tombstones: see below, p. 176 n. 4.

Verso: To Pamonthes Moros from his sister Senpamonthes.

Recto: Senpamonthes to her brother Pamonthes greetings. I have sent you the prepared body of my mother Senyris, with a label $(\tau \acute{a}\beta \lambda a)$ around the neck, through Gales, his father being Hierax, in his own boat, the freight paid in full by me. Distinguishing mark of the mummy $(\tau a \acute{b} \acute{\eta})$: a linen shroud is around the outside, with red decoration (?), inscribed on the stomach with her name. I pray, brother, that you are well.

Year 3, Thoth II.1

The number of such mummy labels presently scattered over many collections may go into the thousands.² Written in Greek, or Demotic, or both, they give the name of the deceased, often followed by statements about age, residence, and destination, and occasionally by brief instructions to the consignee.³ For those who could not afford a proper tomb and were interred in mass graves or simply buried in the desert sand, they also did double duty as cheap substitutes for more elaborate tombstones; such labels often bear in addition the conventional blessings for the dead.⁴

Of the three labels in the Wellcome Collection, only one contains a message; the other two merely list the name, and in one instance the age, of the deceased. They have the joint Inventory No. 15396/4 (in Swansea, W548-50), and are briefly described in the Sotheby Auction Catalogue under no. 643: 'Three others,⁵ inscribed in Greek, and a fragment of a wooden tablet, inscribed in Coptic, with original string for hanging.' The Coptic tablet has much darkened with age and is now illegible to the naked eye;

- ¹ Greek text in U. Wilcken, Chrestomathie, 1, 2, 577-8 (no. 499).
- ² The first major find was made as early as 1888/9 (E. Breccia, 'Iscrizioni greche e latine', [Catalogue Général des Antiquités Égyptiennes d' Alexandrie, Cairo, 1911], 227 n. 2), and since then new pieces have constantly been coming to light. Many were subsequently published by W. Spiegelberg, Ägyptische und griechische Eigennamen auf Mumienetiketten der römischen Kaiserzeit (Demotische Studien 1, Leipzig, 1901); N. Reich, Demotische und griechische Texte auf Mumientäfelchen in der Sammlung der Papyrus Erzherzog Rainer (Studien zur Palaeographie und Papyruskunde, 7, Leipzig, 1908); G. Möller, Mumienschilder (Demotische Texte aus den Kgl. Museen zu Berlin, 1, Leipzig, 1913), and others. In addition, there are numerous publications of individual pieces and smaller collections; compare the short bibliography in J. C. Shelton, 'Mummy Tags', 336 (see above, p. 175 n. 2).
- ³ St. V. Wångstedt, 'Demotische 'Leichenbegleitzettel' mit Anweisung zur Einbalsamierung', Orientalia Suecana 5 (1956), 12-19.
- 4 Hence the designation as 'stelae' on some Demotic labels (E. Bresciani, 'Etichette di mummia', 209 and 212-13 (nos. 9 and 13)) and the execution in more durable material such as limestone. Such 'stelae' are often distinguished from proper grave tablets only by their smaller size and the presence of drill holes; compare e.g. the tablet of Heron in K. Herbert, Greek and Latin Inscriptions in the Brooklyn Museum (Wilbour Monographs IV, 1972), 31 no. 11 with some of the mummy labels in the same collection (ibid. 34-42, nos. 13-20). Good surveys of their various uses are given by W. Sherwood Fox, 'Mummy Labels in the Royal Ontario Museum', AJPh 34 (1913), 348, and E. Lüddeckens, 'Die Mumienschilder des Kestner-Museums zu Hannover', Jahrb. d. Akad. Wiss. u. Lit. Mainz, 1955, 251-8. P. W. Pestman has suggested that many labels are bilingual because some transport workers could read only one of the two languages ('Two Mummy Labels in the Museum of Antiquities in Leiden', OMRO 44 [1963], 24; accepted by P. J. Sijpesteijn, 'Eine Sammlung von Mumientäfelchen im Allard Pierson Museum zu Amsterdam', OMRO 46 [1965], 35). The fact that the religious formulas are normally in Demotic and have no Greek equivalent even on the bilingual tags makes this explanation unlikely, and suggests a religious rather than a practical motive.
- ⁵ Refers to the entry no. 642: 'Four mummy labels in wood; two inscribed in Demotic, two in Greek.' These were not bought by Sir Henry Wellcome.



THREE MUMMY LABELS IN THE SWANSEA WELLCOME COLLECTION From the top: 1. W549; 2. W548; 3. W550

the description of the three labels below follows, as far as is practicable, the pattern suggested by H. Klos.¹

1. Wooden mummy label in the shape of a tabula ansata (pl. XLII, 1; W549). Brown. Length (without ansae): 10.8 cm.; width: 8.5 cm.; thickness: 0.9-1.4 cm.

Left ansa: Length: 3.0 cm.; width: 2.7-4.5 cm.

Right ansa: Length: 2.7 cm.; width: 2.4-4.2 cm.

Four holes with a diameter of 0.5 cm., two in the ansae and two in the left-hand side of the board (0.9 cm. from the top and 0.7 cm. from the left edge; 0.9 cm. from the bottom and 0.8 cm. from the left edge).

Seven lines of text written in ink on the smoothed surface of the recto. The margins are 0.4-0.7 cm. (top), 0.1-1.5 cm. (left), 0.0-0.9 cm. (right), and 0.0-0.2 cm. (bottom).

Empty space before εὐτύχει in line 2, and between lines 2 and 3. Lines 3-7, though by the same hand, are written more cursively than lines 1-2; the *ductus* is characteristic of the Roman Period.

Provenance: Middle Egypt (?).

Text

ι 'Ερμιῦσις Κολλούθου. Εὐτύχει.

Κολλοῦθος Καλλίστω·
'Οπόταν παραγένηται
5 παρά σου ή ταφή τοῦ
παιδίου μου, τήρησον
ώς παραγένωμαι.

Translation

Hermiysis, (son) of Kollouthos, fare well! Kollouthos to Kallistos: When the mummy of my child reaches you, keep guard until I arrive.

Notes

Line 1: The uncial ε in the first word is markedly different from the cursive forms in lines 2, 4, and 7; a similar change in No. 3 (see below). The normal form of the name is Αρμιῦσις, Egn. Ḥr-mṣi-ḥsṣ (W. Spiegelberg, Eigennamen, No. 19; F. Preisigke, Namenbuch [Heidelberg, 1922], 51). The lion-god Miysis (H. Bonnet, RÄRG, 468 s.v.; H. Kees, Der Götterglaube im Alten Ägypten² [Berlin, 1956], 7 n. 13) had cult centres in Leontopolis and in the Tenth Nome of Upper Egypt (Aphroditopolites, modern Kôm Ishqaw; see Sir Alan Gardiner, Ancient Egyptian Onomastica, 11 [Oxford, 1947], 55* ff.). The latter agrees well with the Middle-Egyptian origin of many mummy labels, most of which come from the vicinity of Akhmîm (see below).

¹ 'Katalogisierung von Mumientäfelchen. Ein Vorschlag', *Libri* 1 (Copenhagen, 1951), 210–14; 'Griechische Mumientäfelchen der Papyrussammlung der Österreichischen Nationalbibliothek', *Chron. d'Ég.* 27 (1952), 282–9.

Lines 2-3: Κολλοῦθος, Demotic ql-wd, Coptic κ(ελ)λογα (Crum, Copt. Dict. 104b; id. 'Colluthus, the Martyr and his Name', Byz. Zeitschr. 30 [1929/30], 323-7). The form Κολλούθης is also attested: H. F. Allen, 'Five Greek Mummy-Labels in the Metropolitan Museum, New York', AJPh 34 (1913), 196-7; F. M. Heichelheim, 'The Greek Inscriptions in the Fitzwilliam Museum', JHS 62 (1942), 19 no. 10 (a Κολλούθης whose mother was called Σενκολλούθης); D. J. Crawford, Kerkeosiris (Cambridge, 1971), 193 and Index, p. 220; and often elsewhere. See Spiegelberg, Eigennamen, 18* nos. 120-1a; Preisigke, Namenbuch, 179; and the hieroglyphic forms in H. Ranke, Ägyptische Personennamen, 336 nos. 14-15, discussed by H. de Meulenaere, 'Quatre noms propres de Basse Époque', BIFAO 55 (1955), 144-6.

Line 4: 'Οπόταν vulg. for ὅταν.

Line 5: The wedge at the end of the lines is probably a slip of the pen; or it may be a projection of the *iota* at the end of the previous line. $Ta\phi\eta$ 'mummy' e.g. P. Oxy. 736, lines 13 and 84; U. Wilcken, *Chrestomathie*, I, 2, no. 499, line 10 (transl. above), and often on mummy labels (W. Sherwood Fox, 'Mummy-labels in the R.O.M.', 439 no. 1, 440 no. 2, 448 no. 9, etc.).

Line 6: παιδίου: δι is very cursive (ligature).

Comments

Kollouthos is apparently sending the embalmed body of his son Hermiysis with a brief message to a certain Kallistos. The relationship between these two is not quite clear. Kallistos could be a relative in the home town where the burial was to take place; or merely a $\nu \epsilon \kappa \rho o \tau \dot{a} \phi o s$ employed at the necropolis for which the mummy was destined. In either case, the cemetery would have to lie a certain distance away, as Kollouthos apparently expects some time to elapse between the delivery of the body and his own arrival. Alternatively, Kallistos could be a shipping agent or boat captain; his name certainly suggests Greek rather than Egyptian extraction. In that case, his instructions were to await the arrival of Kollouthos before proceeding with the transport.

One cannot but wonder what the bereft father must have felt when he attached his terse message to its grim bearer.

2. Wooden mummy label in the shape of a tabula ansata (pl. XLII, 2; W548). Brown. Length (without ansae): 7.5 cm.; width: 4.2 cm.; thickness: 0.8 cm.

Left ansa: Length: 1.0 cm.; width: 1.2-1.5 cm.

Right ansa: Length: 1·1 cm.; width: 1·3-1·6 cm.

Two holes in the *ansae* touching the edges of the board; diameter 0·3 cm. Both recto and verso have been smoothed; the recto has two lines of text written in ink. The margins are 0·3-0·5 cm. (top), 0·8 cm. (left), 0·0-1·2 cm. (right), and 1·8-2·1 cm. (bottom). Uncial script.

Provenance: Unknown.

¹ Compare the labels no. 1, 2, and 9 in the Royal Ontario Museum (W. Sherwood Fox, 'Mummy-labels in the R.O.M.', 439-41 and 448-50), and the explicit instructions in Sammelbuch, no. 9126.

Text

Άμμω νάρι L κε

Translation

Ammonari(on), 25 years (old).

Notes

- Line 2: The last two letters of the first word are slightly blotted, but ρι seems certain; the omission of the case endings in Egyptian names is not unusual. For the name Αμμωνάριον see F. Preisigke, Namenbuch, 25.
- 3. Wooden mummy label, right end pointed (pl. XLII, 3; W 550). Yellowish. Length: 11.2 cm.; width: 4.2 cm.; thickness: 0.9 cm.
 - One hole (diameter 0.4 cm.) in the pointed end (1.2 cm. from the end, 9.5 cm. from the left edge).
 - Both recto and verso have been smoothed; the recto has three lines of text written in ink. The margins are 0.8 cm. (top), 0.4-1.1 cm. (left), 1.2-2.2 cm. (right), and 0.7-1.0 cm. (bottom). Uncial script with some cursive forms.

Provenance: Akhmīm (?).

Text

Σενπετεμίνις Πετετρείφιος

Translation

Senpeteminis, (daughter) of Petetriphis.

Notes

Line 1: Again only the first ε is uncial; the others have the typical cursive form of the roman period (see above, No. 1). For Σενπετεμῖνις, Egn. Τζ-ἔrt-pζ-di-mnw, see H. Ranke, Ägyptische Personennamen, 368 no. 20; F. Preisigke, Namenbuch, 375; Spiegelberg, Eigennamen, 40* nos. 283–283b.

Lines 2-3: Further references for Πετετρείφις, Egn. P3-di-t3-rpyt, F. Preisigke, Namenbuch, 317; Spiegelberg, op. cit., no. 204.

Comments

The goddess Triphis was worshipped in Atripe (Ninth Nome of Upper Egypt) as mother of Kolanthes and consort of Min (Sir Alan Gardiner, 'The Supposed Athribis

of Upper Egypt', JEA 31 [1945], 108–11 and the literature cited there; for the geography of the Ninth Nome and for its deities see also, Ancient Egyptian Onomastica, 11, 36*–46*, and T. C. Skeat, Papyri from Panopolis in the Chester Beatty Library [Chester Beatty Monographs 10, Dublin, 1964], XXXI–XXXVII). Min (Greek Pan) had his cult centre in the capital Panopolis on the opposite (east) bank of the Nile near modern Akhmîm, and theophoric names formed with -triphis and -minis or pan- abound in documents from that nome. As the majority of the mummy labels published so far come from Akhmîm, it seems reasonable to assume that this piece is of the same provenance.

¹ A typical example is the Τατετριφις γυνή Πανίσκου in E. Breccia, Iscrizioni greche e latine, no. 505; see also ibid. nos. 518, 519, 521, and the names formed with -triphis in W. Spiegelberg, Eigennamen, 30*, 51*, and 62 f. The Index of Personal Names in T. C. Skeat's publication of the Panopolis Papyri gives a good idea of the incidence of theophoric names formed along these patterns; compare also V. Martin, 'Relevé topographique des immeubles d'une métropolis', Recherches de papyrologie 2 (1962), 37–73.

ATHANASIUS AND THE MELETIAN SCHISM IN EGYPT

By L. W. BARNARD

THE Meletian schism, which originated in Egypt in the early fourth century, had interesting and important ramifications, both ecclesiastical and political, which exercised a decisive influence on Athanasius. The evidence for its origin is unfortunately fragmentary and confusing. The primary sources are these: (a) The works of Athanasius; (b) a Latin translation of a letter from four Egyptian bishops to Meletius; (c) a Latin translation of a letter from Peter, bishop of Alexandria, to his flock; (d) an account of the circumstances of the schism. [(b)-(d) are found in a fragment of an anonymous ecclesiastical chronicle Codex Veronensis, lx, ed. M. J. Routh, Reliquae Sacrae, IV, 91-4; Migne, P.G. X, 1565-8, XVIII, 509-10; critical edition by F. H. Kettler in ZNTW 35 (1936), 159-63]; (e) the Canons of Peter, bishop of Alexandria. [Routh, Reliquae Sacrae, IV, 23-45; Migne, P.G. XVIII, 468 ff.]; (f) Epiphanius, Adv. Haer. 68.

Athanasius' references, found scattered throughout his writings, are often ex parte and cannot be taken at their face value except in chronological matters. On the other hand, sources (b)–(d) are of primary importance for an understanding of the origin of the schism and their authenticity is not now disputed. Epiphanius is a somewhat unreliable witness although he may preserve authentic material deriving from Egyptian bishops banished to Palestine or be referring to a different stage in the development of the schism.

The schism apparently had no doctrinal origin but arose from a dispute during the time of the Great persecution c. A.D. 305-6 concerning the treatment of the lapsi, much as Donatism had arisen in North Africa. Peter, bishop of Alexandria, represented the more liberal, and Meletius, bishop of Lycopolis, the more rigid approach to these lapsi, although neither proposed their permanent exclusion from communion; it was merely a question of the interval before readmission was allowed and the status to be accorded to it. Neither party, however, would give way, and the dispute finally ended in a schism, although this did not at first result in a complete severance of relations, as may be inferred from the letter of the four Egyptian bishops who address Meletius as dilecto et comministro in Domino. The exact order of events is not clear but it seems that Peter had previously fled from Egypt and had only returned in 305-6 after a long absence. Meletius had taken upon himself to intrude into the dioceses of four bishops, to ordain presbyters, and virtually to act as metropolitan (Letter of Peter to his flock).

¹ E. Schwartz, Nachr. Göttingen, 1905, 172-3, points out that this is rendered certain by the Canons of Peter.

² W. Telfer, Analecta Bollandiana 67 (1949), 125, suggests that Peter's flight goes far to explain the success of Meletianism.

³ The Greek fragment of Athan. Festal Ep., Brit. Mus. No. 363, is also concerned with Meletian bishops ordaining clerics in dioceses other than their own. W. E. Crum, JEA 13 (1927), 24-5.

The bishops protested in the letter (b) above, but Meletius disregarded their remonstrance and went down to Alexandria where, finding that Peter was again in hiding and Christian life at a low ebb, he made contact with two Christian laymen, Isidore and Arius, both of whom were seeking a teacher. They put him in touch with two presbyters through whom Peter was secretly supplying support for the *canonici* and poor of the Alexandrian Church. Meletius apparently urged on these clerics the suitability of the time for action. This action was presumably the resumption of Christian liturgy and preaching in defiance of the State. Peter, however, had forbidden such action and so Meletius severed the two presbyters from their allegiance to Peter. Meletius had clearly acted in a high-handed way and was guilty of a breach of church law and an act of discourtesy in intervening in the affairs of the metropolitan diocese. The act of ordaining clergy while Peter was still alive and secretly in touch with the Church was particularly reprehensible. S. L. Greenslade,² with some probability, thinks that personal ambition played a large part in Meletius' action together with a desire to score off the bishop of Alexandria whose control over the entire Egyptian Church may have been resented. As it was, his success was short-lived. Meletius was deposed by a synod of Egyptian bishops, perhaps c. 307 or soon after, and there followed his arrest and banishment to the mines of Palestine where he remained until the edict promulgated by Galerius in 311. The persecution was renewed by Maximus soon after Galerius' death, and one of the first victims was Peter who was martyred on 25 November 311, according to the shorter Passio, in retaliation for the insubordination of the Christian populace. His martyrdom, however, did not heal the schism although it seems to have impressed Arius who, before Peter's execution, had made his peace with him—Peter having originally excommunicated Arius.³ On account of this act of reconciliation the Meletians regarded Arius as a traitor and later were to bring against him a charge of heresy. Meanwhile, after Peter's martyrdom the schism continued unabated, even among the exiles in Palestine. Meletius ordained bishops and presbyters and his sect, according to Epiphanius, adopted the title ἐκκλησία μαρτύρων (Adv. Haer. 68. 3) as befitted a rigorist group.

Our next notice concerning the schism is provided by the Council of Nicaea (325). As is well known, the Council was called by the Emperor Constantine primarily to deal with the Arian controversy which had, by then, assumed dangerous proportions. But the Council also considered the Meletian question and addressed a letter to the Egyptian Church setting out a compromise solution to the problem:

Acting with more clemency towards Meletius, although strictly speaking he was wholly undeserving of pardon, the Council permitted him to remain in his own city, and decreed that he should exercise no authority either to nominate for ordination or ordain; that he should appear in no other district or city on this pretence, but simply retain a nominal dignity.

¹ Tantum sibi adsumpisse ut etiam ex mea auctoritate presbyteros... conaretur separare. On the sequence of events see W. Telfer, 'Meletius of Lycopolis and Episcopal Succession in Egypt', HTR 46 (1955), 227-37. Not all of Telfer's reconstruction, however, is to be accepted.

² Schism in the Early Church (1953), 51-5.

³ Sozomen, H.E. 1, 15: Telfer, op. cit. 231, connects this original excommunication of Arius with Peter's declaration of the invalidity of Meletian baptisms.

That those who had received appointments from him, after having been confirmed by a more mystical ordination ($\mu\nu\sigma\tau\iota\kappa\sigma\tau\acute{e}\rho a$ $\chi\epsilon\iota\rho\sigma\tau\sigma\acute{e}\iota a$) should be admitted to communion on these conditions: that they should continue to hold their rank and ministry, but regard themselves as inferior in every way to all those who had been previously approved and nominated in each place and church by our most honoured brother and fellow-minister Alexander. In addition to these things they shall have no authority to propose or nominate whom they please, or suggest names or to do anything at all without the concurrence of some bishop of the Catholic Church who is one of Alexander's suffragans. . . .

When it happens that any one of those holding office in the Church die, then let such as have recently been admitted into orders, i.e. Meletians, be preferred to the dignity of the deceased, provided they should appear worthy, and that the people should elect them, the bishop of Alexandria also confirming and ratifying their choice.

This privilege is conceded to all the others indeed, but to Meletius personally we by no means grant the same licence, on account of his former disorderly conduct; and because of the rashness and levity of his character he is deprived of all authority and jurisdiction, as a man liable again to create similar disturbances [Socrates, H.E. 1. 9. 1–14; Theodoret, H.E. 1. 9. 2–13; H. G. Opitz, Urkunden, 23, 47–51].

It is to be noted that, although obviously a compromise in the sphere of church discipline, the Council certainly regarded Meletian orders as in some way deficient and in need of regularization by a further rite, a 'more mystical ordination'. While this gave readmittance to communion in the Catholic Church it gave no further authority to nominate others without the approval of the Catholic episcopate. Moreover, reconciled Meletian bishops are not given absolute right of succession in a see on the death of the Catholic occupant although they would normally be regarded as the most likely candidates. But, in general, the Meletians are put firmly under the control of Alexandria whose ancient privileges the Council reasserted. Meletius himself is only allowed to retain the bare name of bishop. What is more surprising is that the Meletians appear to have agreed to this procedure although, on the death of Alexander, it quickly became a dead letter and ceased to be practical politics.

Athanasius' attitude at the time of the Nicene Council is unknown. With hindsight he came to regard the arrangement as disastrous: 'In the Council of Nicaea the Meletians, on whatever grounds, for it is unnecessary now to mention the reason, were received. Five months however had not yet passed when, the blessed Alexander having died, the Meletians, who ought to have remained quiet, and to have been grateful that they were received on any terms, like dogs unable to forget their vomit, were again troubling the Churches' (Apol. c. Arian. 59, cf. 71).

Athanasius' statement that Alexander's death occurred within five months has been the subject of much scholarly debate.² It would seem unlikely that the terminus a quo of the five months is the Nicene Council, as the Index to the Festal Letters of Athanasius dates the death of Alexander to April 17, 328 and the accession of Athanasius, as bishop of Alexandria, to June 8, 328. There is no good reason to reject this dating. It is possible that Constantine called a second meeting of the Council in 327 to settle the Meletian

¹ On this expression see L. Saltet, Les Réordinations. Étude sur le Sacrement de l'Ordre (1907), 35-9, and A. Schebler, Die Reordinationen in der althatholischen Kirche (1936), 42-55.

² H. I. Bell, Jews and Christians in Egypt (1924), 40.

question as is suggested by a passage in Eusebius, Vita Const. 3. 23. Epiphanius states that Alexander persecuted the Meletians after Meletius' death (Adv. Haer. 68. 5) which would then, if historical, have occurred after the Council, as Meletius there had handed Alexander a breviarium Melitii or a schedule containing the names of certain Meletian bishops and presbyters and introduced them to Alexander in person (Ath., Apol. c. Arian. 71-2). The most probable solution of the tangle is that the reference to the 'five months' in Apol. c. Arian. 59 is to the time elapsing since the reception of the Meletians into communion. If we take this as not having happened until late in 327, then this would not be at variance with the date of Alexander's death on April 17, 328. It may well be that neither Alexander nor Meletius was particularly enamoured with the Nicene decision any more than many Eastern Bishops were with that concerning Arianism.

The truce was, however, of very brief duration, as at the death of Alexander the Meletians appear to have opposed the election of Athanasius. The news that Meletius, before his death, had appointed a successor, a certain John Archaph, did not help matters. The persecution of the sect soon led to their sending a deputation to Constantine to lay their grievances before him. Epiphanius names, as leaders, John Archaph, Callinicus, bishop of Pelusium, and Paphnutius a confessor (Adv. Haer. 68. 5). Constantine, however, did not see them, and after hanging about Constantinople and Nicomedia they struck up an alliance with Eusebius of Nicomedia and his party which was Arian in sympathy and already bitterly hostile to Athanasius (Epiph., Adv. Haer. 68. 6; Soz. H.E. 2. 21).

What was the cause of this alliance? Meletianism was, after all, not a doctrinal schism, whilst Arianism was a theological question from its inception. Athanasius' view of the Meletians is in general biased and hostile yet significantly he does distinguish them from Arians; 'The wickedness and falsehood of the Meletians were indeed before this evident unto all men; so too the impiety and godless heresy of the Arians have long been known everywhere and to all' (Ad Episcopos Aegypti, 22). It would seem that the alliance was at first political, as Athanasius indicates; 'Upon learning this Eusebius, who had the lead in the Arian heresy, sends and buys Meletius with large promises, becomes their secret friend, and arranges with them for their assistance on any occasion when he might wish for it' (Apol. c. Arian. 59). Indigenous Meletian theology was, in fact, anything but Arian, as is shown by papyrus No. 1917 (c. 330-40), a letter emanating from a Meletian monastic group in Egypt:

By all means therefore, beloved, most genuine, and most worthy in the sight of the Lord God, with zealous entertainment of the Holy Ghost in God's keeping, by night and day entreat God the Lord of all—they that are in the Son being in the Father, and He that is in the Father is in the Son—that he may restore me into your hands;... burnt offering of the Holy Ghost. And not only did I write this, but I wrote also to Apa Ammon and Apa... and Apa Pebe and to the Upper Country to Megalonymus for myself, I Horion, they may lift up their most holy hands to God with all their hearts, in the semblance of a cross, and may not cut me off and may not [cast me out?], but to him to whom God is compassionate and merciful, so do you too be compassionate and merciful, being zealous on my behalf to God.¹

It is likely that groups of semi-Coptic Meletian monks in a rural milieu would have retained something of the indigenous, puritanical outlook of the 'Church of the Martyrs'. It may, however, have been otherwise with those in close association with the Eusebian party. This could well have produced an inclination to Arianism among these Meletians, particularly as the Eusebians were past masters at the art of gaining converts by a specious display of learning. The Church historian Sozomen states that in course of time the Arians were called Meletians in Egypt (H.E. 2. 21). Athanasius, too, states that the Meletians readily and speedily became Arians polluting the whole of Egypt by causing the name of the Arian heresy to be known there (Hist. Arian. 78). While Athanasius' evidence is ex parte it may well contain a germ of historical truth, viz. that in some areas Meletians who had been in close contact with the Arians tended to adopt Arian tenets—although this is unlikely in toto as the evidence of the papyri shows.

The Meletian schism had important political consequences to which insufficient attention had been paid by scholars. The Breviarium Melitii, already mentioned, shows the considerable strength of the Meletians in Egypt c. 325. From the list of bishops we can deduce that the Meletian mission reached right along the Nile as far as Coptos, the modern Qift, and embraced nearly thirty cities outside Alexandria. The Meletians were in a position to free almost the whole length of the Nile delta and valley from the sovereignty of the bishop of Alexandria. This was a very dangerous political situation, which could have had dire consequences for the Orthodox, particularly as the Meletians had close contacts with the Coptic-speaking indigenous peoples. There was a possibility that the Meletians would altogether lose contact with the Emperor and the imperial organization. This would have left only Alexandria, Mareotis, Libya, and Pentapolis under the jurisdiction of the Pope of Alexandria. It was therefore natural, on political as well as ecclesiastical grounds, that the Meletian schism should be taken up at Nicaea and an attempted solution found. Meletianism remained a threat for some years in Egypt after Nicaea—a greater threat than Arianism itself. Later some Meletians made their peace with the Catholics and transferred their allegiance to Athanasius. Indeed it became Athanasius' policy to allow converted Meletian bishops and presbyters to witness for themselves before the Emperor.

The leader of the sect after Meletius' death, John Archaph, is a somewhat shadowy figure. He is probably to be identified with the John, bishop of Memphis, 'who was ordered by the Emperor to be with the Archbishop' mentioned in a puzzling phrase in the schedule presented by Meletius to Alexander (Athan., Apol. c. Arian. 71). Athanasius treats Archaph as John's native name (Apol. c. Arian. 65). Socrates (H.E. 1. 30) changed this to Achab to give it a more sinister reference. Telfer² suggests that Archaph was really a party-title 'Archapa' 'supreme father', corresponding to $\partial \rho \chi \iota \epsilon \rho \epsilon \psi s$ which the Coptic documents apply to the Alexandrian bishop. This, however, is uncertain as it is bound up with Telfer's theory that this John had prospective rights to the see of Alexandria. However, it is clear that Constantine was concerned about John and at one stage, before the schism became permanent, hints that a reward would follow a

¹ Noted by H. Nordberg, Commentationes Humanarum Litterarum, 30, 3 (Helsinki, 1963), 10-13.

² Op. cit. 236.

reconciliation with Athanasius which the letter suggests had come about (Apol. c. Arian. 70). This is, however, doubtful, as Athanasius himself admits. Our last notices of John Archaph are at Antioch in 334-5 (Papyrus No. 1914) and at the Synod of Tyre in 335 where John ruined his own cause through a desire to ruin Athanasius (Socrates, H.E. 1. 30). The result was his banishment by Constantine (Sozomen, H.E. 2. 31).

Fresh light on the Meletian schism during the crucial decade 330-40, and of the events preceding the Synod of Tyre in 335, has been shed by the discovery of Coptic and semi-Coptic documents published by H. I. Bell and W. E. Crum. These documents emanate from a Meletian Coptic monastic community in the Upper Cynopolite nome whose leader was a priest named Paiëous ($\Pi a \iota \eta o \hat{v}_s$). The importance of these documents lies in their coming from a Meletian Sitz-im-Leben and they give the Meletian view of Athanasius and show why the schism could not easily be healed. Earlier historians were dependent on the (often) ex-parte statements of Athanasius in his works. So he states that Meletius himself was convicted of many crimes and of offering sacrifice to idols during the Great Persecution (Apol. c. Arian. 59); the Meletians are sordid schismatics, dwelling in wickedness and apostasy, who deny Christ; like the chameleon, they assume various appearances; they are linked with the Arian maniacs and the Jews (Vita Antonii, 68. 89; Ad Episcopos Aegypti, 22; Hist. Arian. 78. 9; Festal Ep. 12 inter alia.) The Coptic documents show the other side of the picture. Papyri Nos. 1913-14, dating from March 334 and May-June 335, reveal that charges that Athanasius had engaged in violence, oppression, and reprisals against the Meletians were not without foundation. In Papyrus No. 1914 Callistus, a Meletian monk, gives a circumstantial account of the sufferings of the Meletians at the hands of Athanasius and his followers. Athanasius had caused distress; he had imprisoned one of the Meletian bishops in lower Egypt in a meat market, a priest of the same district in the applicitum, and a deacon in the principal prison. In addition he had banished or procured the banishment of seven Meletian bishops. There are even suggestions in the papyrus that Athanasius had interfered with the corn supply.² This was apparently at the time immediately preceding the Synod of Tyre in 335 and gives added significance to the statement of the Church historian Socrates that Athanasius exercised violence towards the Meletians (H.E. 2. 22), charges found in the minutes of the Synod (H.E. 2. 25). Further evidence is contained in the letter of the Council of Sardica (343). It is significant that Athanasius himself, while dwelling on the charges concerning the broken chalice and the imposter Arsenius, which he could easily refute, says nothing to defend himself against charges of violence and oppression of the Meletians. It would seem that there was an element of truth in these charges, and that the picture which Athanasius' enemies give of a strongwilled man who, once roused, gave no quarter, was not without foundation. Nevertheless, as Bell (op. cit. 58) notes, Papyrus No. 1914 is itself an ex-parte statement emanating from the Meletian side. There may have been provocation or some justification for

¹ H. I. Bell, Jews and Christians in Egypt, loc. cit., and W. E. Crum, 'Some further Meletian documents', JEA 13 (1927), 19-26.

² Cf. also Apol. c. Arian. 87. It is significant that Constantine immediately banished Athanasius because of his threat to hold up the corn fleet to Constantinople, which is odd if Athanasius was innocent of the charge. He did not even grant Athanasius a hearing.

Athanasius' undoubted violence. Both sides were lacking in tolerance and charity towards one another. Both used strong-arm methods while quick to complain of persecution directed against themselves. Both sought to align the State on their own side though they denounced any reliance on it by their opponents. Athanasius failed to grasp that Meletianism had deep roots in Egypt, particularly along the Nile Valley among the indigenous Copts—and that it was an authentic puritanical movement against disciplinary laxity rather than a doctrinal heresy. The Meletians failed to grasp the great theological principles for which Athanasius was striving in his struggle with the Arians. They did not possess the vision to see what was at stake. The conflict, as with so many in the history of Christianity, was a tragedy.

The Coptic documents reveal that the Meletians possessed a monastic organization in Egypt with a strong sense of brotherhood and charity which alleviated the distress caused by harsh economic conditions. These communities practised intercessory prayer and exhibited a simple piety (Papyri Nos. 1915–17).

The later history of the Meletians is somewhat obscure. It is clear that they continued to maintain their existence as a sect for several centuries. In the fifth century Theodoret speaks of Meletian monks still existing in Egypt following 'vain practices concordant with the infatuations of the Samaritans and Jews' (H.E. 1. 9. 14); once they had adopted Arianism but now claimed to have abandoned it (Hist. Fab. Comp. 4. 7). A Coptic text dating from the late sixth or early seventh century cites the Meletian heresy as 'division of the persons of the Trinity'. The sect continued its existence down to the eighth century as is shown by several notices collected by Bell (op. cit. 42). The latest reference is of the Patriarch Michael I (744–68) who tried to convert the Meletians, but failed because 'they denied that they were heretics, and they remained dissidents, some of them in monasteries and some in the deserts'. The result was a terrible persecution and of 3,000 Meletians only ten survived (P.O. 5, 198–9, quoted in Bell, op. cit. 43). The sect apparently did not last beyond the eighth century of our era.

Meletianism, which occupied so much of Athanasius' attention in the decade immediately following the Nicene Council, was not without points in its favour. W. Telfer believes that Meletius himself had an arguable claim to be pope of Alexandria, and that he himself had consecrated, single-handed, the twenty-eight bishops mentioned in the schedule which he presented to Alexander.² The succession of Athanasius to the see of Alexandria in 328, was, however, according to Telfer, a breach of tradition and existing agreements. Athanasius was not an Alexandrian presbyter and he did not, as pope, bury his predecessor and was not consecrated by the imposition of the dead pope's hand. Rather he was the first to be consecrated by living hands. Constantine had before this realized the flaw in the Synodal letter which the Nicene Council had sent to the Egyptian Church in that it held out no hope that the 'Church of the Martyrs' might place a bishop on the throne of St. Mark and so finally heal the schism with the Catholics. Telfer argues that Constantine interpreted the terms of the settlement so as to give John Archaph, Meletian bishop of Memphis, prospective rights not to the see of Memphis but to that of Alexandria. When this failed to materialize it was the end,

and Meletianism went its own way. Telfer holds that Meletius himself actually underwent rites of enthronement and investiture as Alexandrian anti-pope at the hands of his Meletian presbyters, when Peter had forfeited his office, and was thus the legitimate successor of Alexander. Only this makes sense of the Meletian story as it developed on the Meletian side.

Telfer's theory, however, must be rejected as resting mainly on conjecture rather than fact. There is no evidence that Meletius was, in fact, consecrated by his presbyters as an anti-pope, and no evidence that Athanasius' succession as pope of Alexandria was a breach of existing agreements and invalid—he was, in fact, elected by a majority of the assembled bishops with the acclamation of the plebs (Apol. c. Arian. 6). Moreover, there is no evidence that Athanasius was the first to be made bishop of Alexandria by living episcopal hands rather than by the imposition of the hand of the dead bishop² —we should have expected some contemporary or near-contemporary evidence for so remarkable an innovation if such had occurred just after the time of Nicaea. As to the position of Constantine, there is no evidence that he wished to give John Archaph prospective rights to the Alexandrian see—his one concern was to reconcile the Catholics and Meletians so that peace might reign in the Empire (Apol. c. Arian. 70); the Emperor appears little concerned with the ecclesiastical rights of John or the Meletians although he is concerned that they should not be subject to oppression. In any event, the Emperor was probably aware of the political consequences of a continuance of the schism—at least as regards administration.3

Without recourse to conjecture a sufficient explanation of the Meletian schism is to be found in the events of its origin. It was not a doctrinal schism but a puritanical, indigenous movement against laxity in the Catholic Church, much as Donatism was in North Africa. It was anti-Alexandrian, anti-imperial in outlook, and can only be understood against the background of the conditions of the Roman Empire of its day. Diocletian and Constantine had transformed the enlightened government of the early Empire into a police state based on the army and a strong bureaucracy. An army of controllers, inspectors, and secret agents scoured the empire to enforce laws and decrees. Every aspect of city and village life was in their grip. It is little wonder that the sect was anti-imperial and adopted the proud title 'Church of the Martyrs'. Indeed, in rural areas it is altogether likely that its Coptic-speaking members experienced the harsh winds of economic depression and social discontent which were everywhere prevalent to some extent. As with most schisms there were faults on both sides. Highhandedness, discourtesy, lack of tolerance and charity played their inevitable role instead of common sense and forbearance which would have provided conditions for healing the breach. Meletianism, in fact, went its own proud way. Athanasius became increasingly impatient with its adherents and adopted hostile, oppressive

¹ Op. cit. 231, 236.

² Telfer has expanded his views in 'Episcopal Succession in Egypt', JEH 3 (1952), 1-13. Against this see E. W. Kemp, 'Bishops and Presbyters at Alexandria', JEH 6 (1955), 125-42.

³ E. Schwartz states that Constantine deliberately dealt leniently with the Meletians in order to weaken the position of Alexander and so restore the balance of power disturbed by Alexander's victory in the Arian controversy: *Kaiser Konstantin* (2nd edn, Leipzig, 1936), 134. This, however, has no support in the texts.

measures which only led to a hardening of positions. On their side, the Meletians adopted violent methods against the Catholics, and formed an unwise alliance with the Eusebians which inevitably led to their being accused of Arianism. The rural Coptic-speaking Meletians were, however, removed by a social and linguistic barrier from the Greek-speaking Orthodox of the great sees. They continued their separateness for several centuries oblivious of the fact that the 'Great Church' had passed them by. They were one original, authentic voice of indigenous Egyptian Christianity—a voice which at one time was heeded in nearly thirty cities along the length of the Nile delta and valley and which posed a powerful threat to the privileges of the see of Alexandria.

COPTIC LOCATIVE CONSTRUCTIONS

By J. B. CALLENDER

In order to express the notion contained in 'John is in the house' Coptic has various means at its disposal. The constructions which Coptic uses to express the notion that the subject of the sentence is located in a particular place have never been treated together, largely because they are morphologically quite disparate. To express a locative predicate one may have a sentence with no verb ('adverbial sentence') such as (1) or one may have a verbal sentence such as those of (2) and (3).²

- (1) Ιωραπημε ρε πηι 'John is in the house'.
- (2) Iwannhe woon go nhi 'John is (has come to be) in the house'.
- (3) (ψαντε) Ιωραννής ψωπε ρε πηι '(until) John is (comes to be) in the house'.3

The grammarian of Coptic, as a matter of course, is curious about the difference (if any) in the usage of these constructions and the relevance any difference in usage has for our larger understanding of Coptic grammar. The first problem to be faced is to decide whether any difference in usage is to be understood as a fact about the meaning of \(\mu \omega \mu \epsilon \epsilon \varphi \), or is it to be understood as an observation about how words are combined? Is this, in essence, to be a semantic problem relevant to the lexicon, or is it to be a syntactic problem? In order to decide this question it is useful to review previous grammatical work that has dealt with this problem.

Previous grammatical work has viewed the question as a semantic one and has relegated it to the lexicon.⁴ The basis of this decision is related to certain assumptions

- ¹ The following article will be exclusively concerned with the Sahidic dialect of Coptic. The following abbreviations will be used: Callender, Copt. Nom. Sent. = John B. Callender, Coptic Nominal Sentences and Related Constructions (Chicago: unpublished dissertation, 1970); Crum, Copt. Dict. = Walter E. Crum, A Coptic Dictionary (Oxford, 1939); Polotsky, 'Copt. Conj. System' = Hans-Jakob Polotsky, 'The Coptic Conjugation System' (Orientalia 28 (1959), 392-422); Sethe, Nominalsatz = Kurt Sethe, Der Nominalsatz im Ägyptischen und Koptischen (Abh. Leipzig, 33, 3; 1916); Stern, Kopt. Gr. = Ludwig Stern, Koptische Grammatik (Leipzig, 1886); Till, Kopt. Gr. = Walter Till, Koptische Grammatik (Leipzig, 1955).
- ² Various verbs other than yi whe have similar meanings, but with more specific connotations that make a discussion of them in the present study undesirable. The form of hg, qualitative of of wg 'put' (cf. Crum, Copt. Dict. 507b) seems to mean 'be located', but also 'dwell'. As one might expect from the meaning 'put' of the infinitive of wg the qualitative of hg seems to be used with subjects that represent movable objects. The qualitative hh from hw 'to put' (Crum, Copt. Dict. 95b, section k) is also used to mean 'be located in' when there are overtones of some external force affecting the location. This is doubtless related to other meanings of hw along the lines of 'allow' and 'determine'. The meanings of both kh and of hg, therefore, are too specific to be considered in conjunction with ordinary adverbial sentences.
 - 3 (Μαπτε) μωπε stands for the numerous possible constructions with durative tense prefixes.
- ⁴ An exception to this is the treatment of your in Till, Kopt. Gr., paragraph 282, in conjunction with the paradigm of constructions containing a qualitative. When the tense desired is one of the non-durative ones, a form of your is introduced, followed by the appropriate qualitative form in the circumstantial tense. The same introduction of your occurs under identical circumstances when it is a question of one of the expressions of the suffix conjugation. For an example with a qualitative, cf. Luke 6: 40 mape oyon nim your eyelton 'May everyone (come to) be prepared!'

about the nature of Coptic sentences in general and their classification. Previous classifications have been based on the following data concerning affinities with other types of sentences:

- A. Sentences such as (1) share with sentences such as (4), which have substantives serving as predicates, the property of having no verb.¹
 - (4) Ιωραπημε ογρωμε πε 'John is a man'.
- B. Sentences such as (1), (2), and (5), unlike other types of sentences, require that indefinite subjects must be introduced by the existential particle $o\gamma n$ negative en n 'there is (not)'. Thus although (5) is a verbal sentence synchronically speaking, it reflects its origin as an adverbial sentence containing the preposition hr (John is at singing):²
 - (5) a. Ιωρ ληπης ιμοοπ 'John is . . . (comes to be)'.b. ογη ογρωμε ιμοοπ 'A man is . . . (comes to be)'.
- C. Furthermore, all the above sentences except (3) can occur with both durative and non-durative tenses. All of this may be summarized in the following table:

	Verb present	$o\gamma \overline{n}$ -	non-durative
(6) а. Іωраннис отршен пе			
'John is a man.'			
b. Ішраппнс ря пні		+	
'John is in the house.'			
с. Ішраннис щооп дле пні	-	+	
'John is (has come to be) in the house.'			
d. (шапте) Іюраппнс шюпе р м пні	+		+
" until John is (comes to be) in the house."			

In earlier treatments, for which Sethe's Nominalsatz may be considered representative, the data in the first column of (6) relative to the presence or absence of a verb was decisive and immediately inspired a comparison with the practice in traditional Arabic grammar of dividing sentences into nominal sentences and verbal sentences. Arabic grammar, however, based this distinction not upon the morphological category to which the predicate belongs, but rather upon the morphological category of the first word in the sentence. As a result the Arabic terms 'nominal sentence' (جُملَةُ وَعُلِيًّا) only fortuitously coincide with predicate-based categories, since Arabic sentences with nominal predicates also begin with nouns. Arabic traditional grammar also consistently classifies sentences that begin with nouns and have verbal predicates as nominal sentences. Thus a terminology that refers to the first word of the sentence was adapted by Sethe and his successors to refer to categories based upon the predicates of sentences. Following a predicate-based system,

¹ For justification of terming πε the 'copula', see Callender, Copt. Nom. Sent., par. 89.

² I.e. παι ωωπε 'this happens' derives from L. E. tw pry hr hpr (lit. indeed [???] this is on happening). Cf. Till, Kopt. Gr. par. 251.

³ Cf. W. Wright, A Grammar of the Arabic Language³ (Cambridge, 1964), 11, par. 113.

sentences (6a) to (6c) are 'nominal sentences' for Sethe and (6d) is a 'verbal sentence'. Between these two basic sentence types Sethe claims to perceive a distinction in meaning:

In der Tat besteht zwischen beiden Arten von Sätzen auch ein innerer Unterschied. Die 'Nominalsätze' sind Sätze die ein Sein (ein Zustand) ausdrücken; auch die, die ein Prädikat verbalen Sinnes haben, tun das indem sie ihrer Fassung nach dem englischen *I am doing*, *I am to do* u. a. entsprechen. Die 'Verbalsätze' dagegen, sind Sätze, die ein Geschehen (eine Tätigkeit) ausdrücken.

This categorization reflects the diachronic and morphological interests of the Neo-Grammarian analysis of the period.² The syntactic criteria of affix choice manifested in the dichotomy of non-durative and durative tenses were not considered relevant for the basic classification of the sentence although Sethe's classification allows one to predict the usage. The use of the existential particles ogn/een suffered a similar fate. Moreover, the unfortunate adoption of the Arabic terminology (nominal sentences instead of the more precise 'nominal predicates') involved the unjustified assumption that the morphological identity of the predicate was a factor so critical that it outweighed all other criteria in describing the basic nature of the sentence. This unfortunate absolutizing of sentence types has long been influential in frustrating any work based on the assumption that the Coptic sentence must be considered as a unitary whole, irrespective of the morphological identity of its predicate.

Of the sentences listed in (6) that Sethe considered 'nominal sentences' three of the four ((b), (c), and (d)) do not have nominal predicates at all, but rather adverbial predicates. Sethe, however, was never able to disassociate himself completely from the borrowed Arabic terminology, and satisfied himself with compromise terms such as 'der adverbiale Nominalsatz'.³ Thirty-nine years later, Till does make the break and posits three 'sentence types': 'nominal sentences' (6a), 'adverbial sentences' (6b, c) and 'verbal sentences' (6d). This now enables him to account for the usage of $\mathfrak{ogn}/\mathfrak{sen}$ with indefinite subjects.

Subsequent to Till's Koptische Grammatik the only serious attempt to categorize Coptic sentences on the basis of the syntactic evidence (i.e. the second two columns of (6)) has been that of Polotsky. In his article 'The Coptic Conjugation System' he categorizes (6b) and (6c) as the 'bipartite conjugation' and (6d) as the 'tripartite conjugation' avoiding category terms such as 'nominal' and 'verbal' as well as the notion of sentence type. This latter, however, still survives in the form of 'Nominalsatz', used to describe sentences such as (6a), and indicates that there is still no attempt to explain the Coptic sentence as a unitary phenomenon. The replacing of 'sentence type' by

¹ Cf. Sethe, Nominalsatz, par. 1.

² Cf. John Lyons, Introduction to Theoretical Linguistics (Cambridge, 1968), 32–3. In Egyptological work up to the present the bias in favour of emphasizing the morphological identity of the predicate and against making syntactic relations central has reflected certain philosophical axioms of positivism. According to Leszek Kolakowski, The Alienation of Reason (tr. by Norbert Guterman, New York, 1969) positivism is characterized by a 'desire to get back to the most primitive concrete datum, to a "natural" view of the world not mediated by metaphysical fictions' (p. 127). One suspects that syntax, abstract as it is, has also got tarred with the metaphysical brush.

⁴ Cf. Polotsky, 'Copt. Conj. System', 393-7.

⁵ One sees this in the heading at the top of p. 405 of Polotsky's 'Copt. Conj. System'.

'conjugation pattern' in two of the three cases ends up, however, by discrediting the notion of sentence type as a useful grammatical concept.

The notion of 'sentence type' can, furthermore, be shown to be ill advised in regard to at least four well-known syntactic facts in which sentences have to be treated as unitary phenomena.

- A. All sentences, irrespective of predicate 'type', can be introduced by the imperfect converter $n\epsilon(p)$ -.
- B. All sentences, irrespective of predicate 'type', can be made into circumstantial clauses with the circumstantial converter $\epsilon(p)$ -.¹
- C. All sentences, irrespective of predicate 'type', can be introduced as direct objects after verbs of speaking.²
- D. All sentences, irrespective of predicate 'type', can be conjoined with aγω 'and'.³

Thus, in respect of at least four major rules that operate on sentences in a unitary way neither sentence 'type' nor predicate 'type' is relevant. Certainly the notion of 'sentence type' has to be discarded and 'predicate type' must be considered a feature of a limited number of rather important rules.

The notion that sentence 'types' cannot be transcended in grammatical description has heretofore made the notion of mixed paradigms unthinkable. It will now be argued that not only are mixed paradigms useful concepts, in particular mixed paradigms of 'adverbial' and 'verbal sentences', but also that there is another area of syntax in which verbal sentences fill out the paradigm of non-verbal sentences, i.e. an area in which verbal sentences are in complementary distribution with non-verbal sentences.

In the following sentences verbal and adverbial 'sentences' serve to fill out the paradigm to nominal 'sentences'.4

- (7) Ιωρ αππικ ογπροφητικ πε 'John is a prophet.'
- (8) Ιωραπηκ ο πηροφητής 'John is (has come to be) a prophet.'
- (9) (μαντε) Ιωραννημο προφητής '(until) John is (comes to be) a prophet.'

It can be shown that forms with \overline{p} (ex. (9)), historically derived from the verb iri 'to do, make, function as', is used with a certain group of tenses, generally termed non-durative, with which $\pi \epsilon$ or σ (> iriw '(in a state of) functioning as') never occur. Thus whereas \overline{p} is used when the notion of existence covers a limited span of time (non-durative), forms with $\pi \epsilon$ and σ are used when existence is viewed as covering a significant span of time, or where the span of time covered is irrelevant. The uses of $\pi \epsilon$ and σ may be specified as follows: $\pi \epsilon$ is used when the span of time is irrelevant, as in (7) whereas σ is used with durative tenses when the span of time is significantly long, but where the limitations on it are relevant. Sentences with $\pi \epsilon$ are generic, whereas sentences with σ are stative, and able to be paraphrased with 'come to be', and in this latter respect are similar to the non-durative examples such as (9). The various forms belong to one paradigm because they are the forms which are used with the conjugation prefixes of Coptic predicates, in the same way as (despite the irregular forms) tuli and latus are considered to be forms of the paradigm of the Latin verb fero/ferre.

- ¹ For the imperfect and circumstantial 'converters' see Polotsky, 'Copt. Conj. System', 397 ff.
- ² Cf. Till, Kopt. Gr., par. 413.
- ³ Cf. Till, Kopt. Gr. par. 372; there seems to be no restriction known (as yet, at least) on the use of αγω to conjoin sentences.
 - ⁴ For a more detailed discussion, see Callender, Copt. Nom. Sent., ch. VI.

It is in the light of these distinctions that we must view the problem that was initially posited. It will be argued that in the forms used to translate 'John is in the house' a tripartite distinction is maintained that is exactly parallel to that sketched above in the case of sentences with predicate nominals.

Of the forms (i.e. the verbless 'adverbial sentence'), yoon and your used to translate 'be (somewhere)', your is the easiest to delineate, since when it is used to mean 'be (somewhere)' it can occur only with non-durative tenses, i.e. those tenses¹ in which the scope of the action is viewed as limited. The limitation on the action may be that it has been completed before the moment of speaking, as in the case of the perfect accurae 'he heard' or the form ntepeccutae 'when he had heard'. The limitation may be that the action has yet to begin, as in the case of the Third Future executae 'he will hear', the form ntexpecutae 'he has not yet heard', or the form yantequotae 'until he hears'. The limitation on the action may be that it is possible only under certain conditions, as in the case of the conditional equancotae 'if he hears' and the form yaqcotae 'he hears (under certain conditions)'.² In all these cases the form used to translate 'be (somewhere)', which we will henceforth term 'the locative copula', is the infinitive youre:

- (10) Matt. 2:13: 'Arise, take the child and his mother nuhwh ερραι εκκιε numwne ρει πεια ετειειγ μαν τροος κακ and go up to Egypt and be in that place until I speak to you.'
- (11) Matt. 10:25: θω επετβογι σε εψειμωπε πθε επεψελό σε εψειμωπε πθε επεψσοεις 'It is enough for the student that he be like his teacher, and the servant that he be like his master . . .'
- (12) Matt. 17:5: 'This is my beloved son πεπταπαογωμ μωπε gpai ng μτς in whom my affection has been (i.e. in whom I have placed my affection).'
- (13) Matt. 17:17: 'Jesus answered saying, "Oh unbelieving and corrupt generation, yathaγ †nayωπε πεεεμπη · yathaγ †namεχε εεεωπη how long will I be with you? How long will I entreat you?"'

When the infinitive wone is used with *durative* tenses, in which there is no limit to the scope of the action, such as in the present or the imperfect, it is used with its original meaning 'happen, take place'. Since only events can serve as the subjects of such a verb, whereas any noun can serve as the subject of a genuine locative expression, these

¹ See the recent discussion of the meaning of may- in D. W. Young, 'On Shenoute's Use of Present I', JNES 20 (1961), 118.

² This use of the infinitive your rather than the qualitative youn is paralleled by a use of p̄ instead of o π̄ 'be (something)' and occurs in the case of o π̄ when the subject is an event, and in the case of p̄ when either the subject or the predicate nominal (which has to be broadly similar to the subject in meaning) is an event nominalization, i.e. a substantive referring to an event. In the following one may see the consequences of having a repeatable event either the subject or the predicate nominal of p/o π̄ '(come to) be (something)'.

2 Tim. 4: 11: 'Only Luke is with me. Take Mark and bring him with you. qpyay vap hai εγαιακοπη 'for he is (comes to be) a useful person to me for service.' Notice that usefulness is a function of an occasion or event. I Cor. 11:21: πογα ναρ πογα ριμορπ εογωμ μπεσαπποπ... 'For each one is (comes to be) the one who begins to eat his dinner.' 'Each one' refers to a subject defined by an event. Rom. 2:25: πεθθε ναρ p̄ πογρε εκιμαπ punomoc... 'For (the custom of) circumcision is (comes to be) a valuable thing if you follow the Law.' Here circumcision refers to a customary series of events practised throughout Jewish history.

examples must be carefully distinguished from examples with the locative copula. Two Biblical examples are represented in (14) and (15):

- (14) Luke 6:49: 'He who hears and does not do (the word) is like a man who builds a house on the ground without a foundation, and the river rushes in and it immediately falls, πρε επημε ετειείν μωπε πογποσ and the falling of that house happens in a big way.'
- (15) Acts 5:12: εδολ Σε οιτη ησια παποστολος πεγιμωπε ησι σεπιαλείη και σεπιμπηρε επαιμωση σει πλαος αγω πεγιμοση τηρογ και πεγερηγ σει πρητε σα τεστολ ηςολοκωνη 'By the hands of the apostles many demonstrations and miracles happened among the people, and they were all together in the Porch of Solomon.'

Among the ways that event-nouns differ from ordinary nouns is that they are repeatable and therefore may 'happen'. I Ordinary nouns do not have this feature; a man or dog cannot be said to 'happen'. It is therefore desirable to exclude these examples from our consideration of a locative copula as used with all possible noun subjects.

The use of the locative copula $y_i \omega \pi \epsilon$ is similar to the use of the predicate nominal copula \overline{p} 'to be (someone or something)' in that they can both only occur with non-durative tenses, i.e. those tenses in which the scope of the action is viewed as limited. To discuss the larger relations of the locative copula with the predicate nominative copula we may posit the tables (16) and (17):

- (16) a. generic-durative Ιωρ λημης ογρρο πε 'John is a king (the time is irrelevant)'.
 - b. stative-durative: Iwo annuc o nppo 'John is (has come to be) a king'.
 - c. non-durative: (ψαντε) Ιωραννης φ ppo '(until) John is (comes to be) a king'.
- (17) a. generic-durative Iwannhe annhe for the house (the time is irrelevant).
 - b. stative-durative: Ішраппне щооп де пні 'John is (has come to be) in the house'.
 - c. non-durative: (ψωπτε) Ιωρωπικι ψωπε φω πκι '(until) John is (comes to be) in the house'.

As we have already seen, there is a parallelism between the copulas used with durative tenses (16c) and (17c). It will now be argued that the schema posited in (17) is correct and that it is exactly parallel to that of the predicate nominative copula given in (16). The symbol ϕ (for zero) will be used to refer to the copula of (17a), i.e. to refer to what has been traditionally termed the 'adverbial sentence'. Such a relation is paradigmatic in the sense that all the forms can be shown to be related, but it is non-paradigmatic in the sense that not all the distinctions in form correspond to distinctions in the tense-markings.

A number of arguments can be presented in support of the claim that 'adverbial predicates' (i.e. with ϕ) and predicates with the qualitative youn are related in a predictable way:

I. Sentences containing adverbial expressions of limited time which specify the length of time during which it is true that someone is located somewhere, always use the qualitative y on to express the idea 'be'. Conversely, if no such delimiting is present, the simple adverbial predicate (i.e. ϕ) is used.

¹ In generative terms, event nominalizations will have markers of time which will be required to match corresponding time-markers characterizing the predicate. These markers will function like other selectional restriction features such as *animate* and *human*, to prevent such sentences as 'The stone wept' in ordinary language.

Such time adverbials refer to spans of time which have a definite beginning or end or both. During the span of time so delineated the predication is true. Outside of it, the statement is false. Since the following sentences contain adverbial expressions of limited time, the copula used is yoon, and not ϕ .

- (18) John 2:23: ετιμοοπ Σε οραι οπ σίλης ος πιμα εππαςχα αγενημε πιστεγε επετραπ 'As he was in Jerusalem at the Feast of Passover, a multitude believed in his name.'
- (19) Matt. 6:30: εψακ πεχορτος πτωψε είμοοπ εποογ εραστε εγπαπογαί ππογτε τειωως πτειεε εκλλοπ ειωττηγτη πατκογι επιστις 'If God so clothes the grass of the field, which is (lives) today and tomorrow will be thrown into the oven, how much more so (will he clothe) you O (men) of little faith!'

These adverbial expressions all limit in some way the time the subject is located in some place. Some adverbial expressions of time, such as $\tau \in No\gamma$ 'now' or $No\gamma \circ \iota U$ 'always' that one would think would delimit time, do not necessarily do so, it would seem. In any case they escape from the above formulation, as can be seen in the following, where they occur with simple adverbial predicates (copula ϕ):

- (20) Eph. 2:12-13: **Σεπετετημοοπ επεγοειμ ετειελ ΔΣΗ πεχτ** . . . (13) **τεπογ Σε τετηρε πεχτ** το 'At that time you were without Christ . . . , (13) but now you are in Christ Jesus.' Possibly the second **μοοπ** one should expect in view of the change of state has been elided.
- (21) John 12:8: 'She will keep it [the ointment] for my burial not the poor are with you always, but I am not with you always.'

The following set of examples show that general specifications of time, which should include $\tau \in no\gamma$ 'now' and $no\gamma \circ \in m$ 'always', do not require $m \circ n$, but rather only adverbial expressions of limited time require it. The use of (n) 'approximately' in (23) converts an adverbial expression of limited time to an adverbial expression of general time, which can then occur with the simple adverbial predicate (ϕ) .

- (22) Matt. 9:20: εις ογριμε ερε πεςκος μοοπ ραρος εκεπτεκοογεε προκπε 'A woman suffering from haemorrhages for twelve years . . .' (lit. with the blood having come to be under her).
- (23) Mark 5:25: ογεριμε Σε οπ ερεπετικος ραρος επαμπτεοογε προμπε 'A woman suffering from haemorrhages for about twelve years' (lit. with the blood being under her).

Similar to examples with adverbial expressions of limited time are temporal sentences introduced by conjunctions of limited time. If gocon is used with goon it means 'during the (limited) time that' (= 'while'), whereas if it is used with ϕ it means 'seeing that' and does not limit the scope of the following temporal clause.

Thus if the subject is located somewhere for only a limited period of time, the qualitative form y = 0 is used and not ϕ , as no examples of ϕ have been found in the corpus associated with an adverbial expression of limited time.

A second argument can be made for the predictability of yoon and ϕ along the following lines:

II. Sentences with woon are obligatory and simple adverbial sentences (= ϕ) are excluded if there is an explicit reference made to the manner or way in which the subject comes to be located in a particular place.

Like the examples with adverbial expressions of time, this can occur with explicit adverbial expressions of manner (24), or in the form of clauses introduced by manner conjunctions (25).

- (24) Acts 2:44: ογοη δε μιω μταγπιστέγε μεγιμοοπ πε ων μεγέρηγ αγω ερε μπα μιω μιοοπ παγ 21 ογοοπ 'It was that' everyone who believed were (remained) together and the way all the property was (held) was in common.'
- (25) I John 4:17: κατα σε ετερεπή ψοοπ απός απόν δωων ντηψωπε δα μεικοσίος 'In the way that that one was, so must we ourselves be in the world.'

A third argument for the predictability of ϕ and ψ oon has to do with distinctions in the usage of them in relative clauses. This rather subtle distinction can be described as follows:

III. In relative clauses, ϕ is frequently used in expressions that correspond to nouns or adjectives in English, whereas y almost always must be translated by an English relative clause.

The reason that this correspondence obtains between Coptic relative clauses with ϕ and English nouns and adjectives, is that the forms in both languages are usually not marked specifically for time. In Coptic predicates with ϕ , time, as we have been claiming, is essentially irrelevant. This is true, in most cases, of English nouns and adjectives as well. On the other hand, **yoon** is used when limited time and modality are features of the predication. In English specific time and modality are usually conveyed by verbs, and this accounts for the use of English relative clauses (with their verbs marked for time) to correspond to Coptic relative clauses with **yoon**. This may be seen in the following:

- (26) Sh. III, 189:11: εκιλλαγ πρωσε οπ πετοιογπασ επιρρο σε πεεπαγ απ η σε πεεπαείσε απ επετηπαερογωρογ τηρογ ερρα εασιπτε οπ περοογ πτορυμ 'There is no one of the right-hand men (lit. those who are (φ) on the right hand) of the king such that he does not see or will not understand about all the people he will curse down into Hell on the day of wrath.'
- (27) 1 Cor. 5:13: πηογτε \mathbf{x} ε πακριπε πηετριβολ . . . 'God will judge the outsiders . . .' (lit. those who are (ϕ) outside).

Conclusion

To conclude, I would like to present again the 'paradigm' given in (17) and to summarize the arguments for its validity.

- (28) a. generic-durative Ιωρανικό εν πηι 'John is (φ) in the house'. (The time is irrelevant.)
 b. stative-durative Ιωρανικό μοοπ εν πηι 'John is (μοοπ 'has come to be') in the house'.
 - c. non-durative (ψωντέ) Ιωρωννης ψωντέ γεν πηι '(until) John is (ψωντέ 'comes to be') in the house'.

For a discussion of the meaning of we after the imperfect, see Callender, Copt. Nom. Sent. par. 116.

In this list of forms, ϕ and ψ oon require durative tenses whereas ψ one is used for non-durative tenses. Thus the use of the infinitive ψ one can be predicted as the contrast of durative and non-durative tenses, and thereby related to ϕ and ψ oon considered together. ψ one is also related morphologically to one of the two forms.

Now, in the light of this relation, one can discuss the interrelationship of ϕ and yoon. It has been seen that yoon is used when there are limitations on the time and the manner in which the location takes place. ϕ is used when there is no such limitation, and this can be seen most notably in those expressions which correspond to English nouns and adjectives.

Viewed from a perspective that considers basic the markers of the Coptic conjugation system, one finds that the only way to express an 'adverbial sentence' such as 'John is in the house' in one of the non-durative tenses is to use $y_0 m_{\epsilon}$. In turn $y_0 m_{\epsilon}$ is linked with its qualitative $y_0 m_{\epsilon}$ which is in turn related in predictable ways with the simple adverbial predicate with the copula ϕ . Thus these three forms constitute a syntactic unit that may be considered a particular sort of paradigm.

FURTHER STUDIES CONCERNING ANCIENT EGYPTIAN BREAD

By F. FILCE LEEK

Scientific contributions are of value only if they give rise to better ones.

(Alexander Humboldt)

SINCE the report in $\mathcal{J}EA$ 58 (1972) on a series of X-ray and petrological investigations made on particles of inorganic debris found in samples of ancient Egyptian bread, the author decided to take advantage of recent advances in techniques of chemical analysis and to initiate further examinations. In this way the valuable specimens of bread, so hard to come by, would be used to provide the maximum information.

Reports of excavations record many collections of cereals found in graves and tombs, and also note their botanical identification. The most ancient samples came from the neolithic settlements in the Fayûm, excavated by G. Caton-Thompson and E. W. Gardner (1934), and from Mostagedda, excavated by G. Brunton (1937). Many other samples have been recovered from sites along the Nile valley, dating from pharaonic times into the Graeco-Roman period. As literature on botany and related disciplines of ancient Egypt is not freely available, some enlargement of salient points might well be of interest. The two most common cereals to be found in all sites in Upper and in Lower Egypt were wheat and barley, in spite of the suggestion made by Täckholm (1937, p. 284), that the former was grown mainly in Lower Egypt, whilst the latter was the prevailing crop of Upper Egypt. Triticum dicoccum Schübl. 1818—emmer—was the most important variety of wheat grown. It is no longer sown in Egypt, although it is still grown today by isolated tribes who cherish their old customs. Hence it is to be found in certain parts of Spain, South Germany, Russia, and Ethiopia. It has also been reported from a number of places in India, and in some Armenian settlements in Persia (Brunton, 1937, p. 227). Although some farming practices have changed but little since historic times, the ancient ones, as described by A. R. M. Tantawi (1939), are of interest:

In ancient Egypt irrigation was carried out almost exclusively by the basin system. The flood water was conducted to the lands which had been divided into basins by earthen walls. Only the higher lands were irrigated by lifting the water by means of the Shadoof. The water being drained off, the land was ploughed as soon as it was sufficiently dry. The seeds were dropped behind the plough as in the Talqit system of nowadays. At the same time the clods of earth were broken by wooden hammers. Flocks of sheep or pigs were driven over the field to tread the seeds into the soil.

The plough of ancient times was exactly the same as the baladi plough, Mihrát, still in use among the peasants. It may be recognised on monuments from 4,500 years ago, e.g. in Ti's tomb, Saqqâra, and also in the system of hieroglyphs. Cutting was done by means of flint or bronze sickles. Only the ears were cut, the rest of the plant was left in the soil as an organic manure. The ears were heaped

and later carried in baskets or nets to the threshing floor. Threshing was done by driving cattle over the crop, as it is still the custom in some parts of Egypt. Likewise winnowing was done by the same kind of wooden forks and fans as nowadays. The grains were stored in prehistoric times in baskets buried in the sand as in the Oases at present. Silos of Nile mud and wooden storing houses with holes in the top for filling and doors below for drawing out the grains were used during historical times and partly in prehistoric settlements.

As a rule, the cereal remains associated with a burial consisted of spikelets, and these can be readily identified. In certain cases however, they consist only of naked grains, and often present a carbonized appearance. In these cases it is difficult to determine whether they represent threshed emmer, naked wheat, or even in some cases barley, especially as anatomical signs are useless in carbonized material, because the shape of the grain frequently changes in the process of desiccation. Much of the ancient grain, whether taken from underground pits, storehouses, tombs, or vessels within the latter, is more or less carbonized. Naked grains generally exhibit complete carbonization, becoming changed into charcoal; their appearance suggests the action of fire, and they are often described as charred or burned. It is pointed out by Percival (1936), and by many others, that the change from normal to carbonized grain is a natural process which takes place at ordinary temperatures. The carbohydrates, cellulose, and starch, of which the cereal grains are largely composed, consist of carbon united with elements of water. Under certain dark conditions they both become slowly dehydrated, leaving behind only the carbon.

On this subject Täckholm (1941, p. 250) has this to say:

Whilst many of the grains are carbonised, it is interesting to note that both charred and uncharred grains are to be found in the same silo, e.g. in the Neolithic pits of the Fayum. In certain cases predominantly uncarbonised grain and wholly carbonised grain were lying in contact with uncarbonised wheat straw. Depth below surface apparently means nothing. The carbonisation of naked grains is sometimes accompanied by profound changes in grain shape. They sometimes become swollen, hence ancient emmer has occasionally been tentatively assigned to *Triticum vulgare*.

The carbonization of complete spikelets, on the other hand, is very much less marked. The chaff is more resistant to dehydration and usually appears dark brown in colour. The proteins of the endosperm are, however, completely decomposed, the embryo is always disorganized and quite incapable of germination. Naturally, all germination experiments with ancient grain have failed!

As for *Hordeum vulgare* L. 1753—barley—in a sterile state it resembles wheat, but may be distinguished easily by its pronounced auricles at the base of the leaf-blades (these are lacking in wheat). The kernel of barley also resembles wheat, but is pointed at both ends and firmly attached to the 'hull'. In most cases it is very difficult to distinguish carbonized grain of naked barley from grains of ancient wheat or threshed emmer. The dorsal furrow in the barley grains, however, is narrower and more shallow than that of the naked wheat. Barley is an important fodder. It is also made into bread, either alone or mixed with other cereals. It is made locally into a refreshing drink, as well as alcoholic ones. F. Netolitzky, who examined the abdominal contents of many prehistoric Egyptian mummies, stated that almost every sample contained husks of

barley (1941, p. 274). The ancient method of cultivation is similar to that already described under the heading of wheat.

The method of grinding corn amongst all ancient peoples was extremely inefficient. Hence samples of bread contain numerous unground grains, thus providing material for the botanical identification of the cereal used. To place on record the grain used in some of the pieces of bread that remained after last year's experiments, three samples were sent to the Jodrell Laboratory, Kew, for identification. The report received is as follows.

Origin of Sample

Thebes A chaffy wheat 'Emmer' Triticum dicoccum, Schrank.

(Royal Scottish Museum)

Thebes Some fragments of the palets of barley present in this sample; probably

(Ashmolean Museum) a mixture of 'Emmer' Triticum dicoccum, Schrank, and 'Barley'

Hordeum vulgare L.

Thebes Badly decomposed, and weevil remains present. Few chaff fragments (Turin Museum) found; probably of 'Emmer' *Triticum dicoccum*, Schrank. Portions of

found; probably of 'Emmer' Triticum dicoccum, Schrank. Portions of the epicarp of a seed also present in this sample but not identified;

probably a weed seed.

It is to be noted that in two samples emmer was the sole ingredient, and in the third, a mixture of the two cereals. As the pieces originated from Thebes, it suggests that emmer was commonly used in Upper Egypt. If it is true, as Täckholm suggests, that emmer was largely grown in Lower Egypt, it must mean that transportation was readily available, and this in spite of the reverse flow of the Nile to Upper Egypt.

Lichens

It has been frequently reported that lichens have been incorporated in the dough prepared for bread-making. Indeed Täckholm writes that even today lichens are used in order to make bread and cakes more porous. They are imported for this purpose from Greece and sold at the local bazaar, the 'attarîn, under the name of Sheba, 'grey hair'. Similar lichens of apparently Greek origin, have been found at Deir el-Baḥari, from the Twenty-first Dynasty, by G. Scheinfurth (1883), and by two other expeditions working in Upper Egypt (1941, p. 247).

Whether the lichens were added to give flavour or to make the bread more porous is as yet not established; if the latter, it is possible that the associated wild yeasts were responsible for the rising. It has been suggested that the 'manna' of the Israelites may have been a lichen. Harrison (1950), who has considered this subject in detail, writes:

'Manna' has been used very generally to describe the saccharine exudations from a number of different plants, belonging to various families, whilst in other instances, the term is applied to an entire organism, as for example, certain edible fungi and lichens. The use of the word manna for any particular subject appears to be purely arbitrary, although it seems to be based essentially on the idea that Manna is a 'gift from God'. The term has therefore been applied to diverse substances which apparently 'come from Heaven', in the sense that they were found on the ground or on trees or shrubs or herbs, as though they had simply fallen out of the sky.

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At least in 1930, bread made from lichens was sold in Teheran. The lichen normally used is collected after dew (which was the time when the Israelites are said to have collected manna), for it will swell when moist, making it more easy to work than when dry, and it is more visible to the non-specialist when swollen. Recent chemical studies have shown that certain lichens contain proteins that are highly characteristic and detectable by thin-layer chromatography, whilst the proteins of other lichens remain difficult to detect. A positive result would prove definitely that lichens were used in the production of the bread, but a negative result would still leave the question open.

The three samples of bread which had been examined for the identification of the grain were also examined by chromatography at the Commonwealth Mycological Institute. Dr. D. L. Hawksworth who undertook the examination wrote:

I have now studied all three samples of the ancient Egyptian bread by thin layer chromatography (TLC), and regret that I have to inform you that I have been unable to detect any of the characteristic compounds which occur in some of the species of lichens used as 'manna' in the past in the Middle East. The techniques used were extremely sensitive and would have revealed any such compounds even if present in only minute traces. The negative result must, however, still leave the matter open as some lichens do not produce the chemicals normally characteristic of other 'manna' lichens.

Invading insects

A limited amount of research has been done on the identification of insect specimens that have invaded stored food material found associated with ancient burials. Six references are to be seen in literature referring to such infestation.

Table 1. Earlier References to Insects Found in Ancient Egyptian Tombs

Source/Date of origin	Material infested	Insects found	Author
VI Dynasty c. 2500 B.C.	'grains or flour'	Tribolium spp.	Andres 1931 (Alfieri)
2300 B.C.	barley	Sitophilus granarius L.	Solomon 1965
Tutʻankhamūn 1345 B.C.	Not stated	Lasioderma serricorne Fabr. Stegobium paniceum L. Gibbium psylloides Czemp.	Alfieri 1931
Tut ^c ankhamūn	Not stated	Stegobium paniceum L. Lasioderma serricorne F. Tribolium castaneum Herbst. Oryzaephilus surinamensis L. Rhyzopertha dominica F.	Zacher 1937
Ramesses II	mummy	Necrobia rufipes de Geer	Allaud 1908
1235 B.C.		Dermestes frischii Kug.	
1200–1085 В.С.	figs (Ficus sycomorus L.)	Sycophaga sycomori L. Apocrypta longitarsus Mayr.	Galil 1967

P. R. Chadwick examined seven samples of bread for the presence of insects, and his findings are appended below. At the same time, he carried out two chemical tests.

Test No. 1. The iodine colour reaction. This reaction, a distinct purple colouration, is used to indicate the presence of starch. When, with the passage of time, the complex starch molecules change into simpler ones, namely polysaccharides, a red-brown coloration results. It is to be seen from the appended list, that the simplification of all the starch molecules has not become final in every case.

Test No. 2. Estimation of available protein. The methods of Lowry et al. (1957), were followed. Available protein, as seen under the heading 'Cereals', is contained in the endosperm. Modern white bread contains about 80 mg/g, whilst brown bread, which, because it is less refined, is more comparable with the ancient bread, contains about 90 mg/g.

From the appended list, it is to be seen that all samples still retain some protein. This finding is contrary to the statement in Täckholm, that the proteins of the endosperm contained in ancient Egyptian bread, are always decomposed.

Table 2. Origin and Description of Bread Samples with Insect Remains Found

Specimen number	Source/period approx. date of sample	Description	Protein content (mg/g)	Reaction with iodine	Insect remains found
I	Badari pre-dynastic 2999 B.C.	tan-coloured flaky material	18	red-brown	remnants of moth cocoon (many sand grains)
2	Thebes XI Dynasty 2049 B.C.	dark brittle crumbs	21	red-brown	4 complete Stegobium paniceum many fragments
3	Thebes XVIII Dynasty 1549 B.C.	tan-coloured lump clearly bread	26	blue	nil
4	Thebes XVIII Dynasty	tan-coloured lump recognizably bread	20	blue	nil
5	Thebes XVIII Dynasty 1399 B.C.	dark-brown brittle porous lump	24	red-brown	nil
6	Thebes XVIII Dynasty 1399 B.C.	dark-brown brittle crumbs	26	red-brown	2 fragments of Stegobium paniceum elytra
7	Thebes XVIII Dynasty 1399 B.C.	dark brittle crumbs with some lumps	27	red-brown	5 complete Stegobium paniceum with many fragments 3 Bracon hebetor

Acknowledgements

Grateful thanks are due to Dr. D. F. Cutler, of Jodrell Laboratory, Kew; Dr. D. L. Hawksworth, Commonwealth Mycological Institute, Kew; Dr. P. R. Chadwick and Dr. R. J. Hunt, of the Cooper Research Station, Berkhamsted, for their investigations and reports.

Täckholm, V. and G., Flora of Egypt (4 vols. Fouad University, 1941) contains exhaustive information on the botany and related subjects of present-day and of ancient Egypt. The author has derived much knowledge from this authoritative work.

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Corrigendum

Mme Diana Harlé kindly draws my attention to the fact that pl. XXX, 2 in JEA 58 (1972) represents object no. 7704 in The Louvre and not an object in the Leiden Museum.

THE BIBLIOGRAPHY OF

HENRY REGINALD HOLLAND HALL (1873–1930)

By E. P. UPHILL

Compiler's Note. In JEA 57 I drew attention to the lack of bibliographical material for many of our leading Egyptologists. This bibliography is the second of the series that I have planned. Hall's interest in many areas outside Egypt has been long known, but I think that the vast range of his interests, both archaeological and historical, will only now for the first time be immediately seen. The subjects covered by his work as indicated in books, articles, and reviews, range from Chinese sculpture to Aegean archaeology, from Sumer and Babylonia to surveys of archaeology in America and remarks on Hittite hieroglyphs. Yet this was no mere nineteenth-century dilettante dabbling in a mass of half-understood fields; and to anyone who troubles to read his work it will be apparent that he often had something interesting, not to say forceful, to add, especially in matters relating to small points. He was in fact a master of the short article, or as we would say today in $\mathcal{J}EA$ parlance the 'brief communication', that excellent medium for making quick points, and his one-page articles in BMQ and JEAare models of how to introduce small subjects such as new museum acquisitions or interesting objects, giving a closely packed and very compressed account of them. Standard abbreviations are again used and all items numbered in their respective sections. A full obituary of Hall by Hugh Last can be found in $\mathcal{J}EA$ 17, 111–16 with portrait.

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BRIEF COMMUNICATIONS

Fayûm A and B settlements

JACQUES VANDIER in his *Manuel d'archéologie égyptienne* ends his descriptive survey of the neolithic sites of the Fayûm with the following statement: 'Le site H apporte une dernière indication; il montre, en effet, que, dans la succession des civilisations préhistoriques, l'évolution n'a pas toujours été dans le sens de ce qu'on a convenu d'appeler le progrès, puisque les représentants du Groupe B, bien qu'ils eussent vécu sensiblement après ceux du Groupe A, étaient bien éloignés, sur le plan culturel, d'égaler leur devanciers'.¹

I do not believe it to be correct to compare the achievements of both groups as if they were formed by people with an identical racial and cultural stock. For instance, if the Naqada II period consisted of a more primitive form of civilization than Naqada I, it would be acceptable to speak of a step backwards within the frame of the general evolution of Egyptian predynastic cultures. In the case of the Fayûm settlements there is not a single strong piece of evidence to support the statement that both groups were bound by an ancestor—descendant relationship. The total absence of pottery, granaries, or hearths as well as the primitive aspect of Group B tools, put them in a very different level, culturally speaking, from the inhabitants of Group A settlements.

It is true that Miss Caton-Thompson's first estimation that Fayûm B belonged to the late Paleo-lithic or to the Mesolithic (late Capsian),² was later proved inaccurate in the light of stratigraphical considerations which placed these remains in a more recent period than those of Fayûm A. But nothing stands against the possibility of Fayûm B sites being the remaining evidence of two successive nomadic groups of neolithic Western or North African invaders, possessors of a declining and modified Capsian microlithic industry, who were pushed into Egypt by the climatic changes which were making difficult the survival of man outside well-irrigated zones like the Nile Valley. In this new perspective, Fayûm A and B settlements would belong to entirely different cultural (and probably ethnical) entities, obviously not admitting comparisons of any kind, which accidentally inhabited, at different times, approximately the same area of the Fayûm depression, settling each one in its turn on the edge of the ancient lake.

JUAN JOSÉ CASTILLOS

'The Pregnancy of Isis', a rejoinder

In my study of CT Spell 148 entitled 'The Pregnancy of Isis', in $\mathcal{J}EA$ 54, 40 ff., I took the view that the opening words of the spell, ky sšd, 'the lightning-flash strikes', taken with the clauses that follow, signify that the goddess was impregnated with the flash, and in a postscript in support of my view I quoted classical allusions to the generation of Apis by celestial fire or light to which Professor H. S. Smith had called my attention. In $\mathcal{J}EA$ 56, 194, J. Gwyn Griffiths questions my translation of ky sšd, which in fact has received some verbal support, and generally disputes my views of sšd, for which he prefers 'crocodile star'. M. Gilula in $\mathcal{J}EA$ 57, 14 ff., accepts my translation as above, but agrees with Griffiths in regarding these words as a mere spell-opening without any bearing on the pregnancy of Isis, and ignores the classical allusions to which I refer above.

I must confess that I find myself entirely unpersuaded. As regards sšd with det. \pm , I believe the basic meaning to be not 'crocodile star' but 'meteor', 'shooting star'; by extension 'lightning-flash' and thence 'flash' in general; cf. 'I cause them to see Your Majesty as a lightning-flash (sšd), strewing its fire in flame and yielding its downpour', Urk. IV, 615, 13-15. Such a description is not applicable to a star, but is most appropriate to a thunderstorm.

In view of the above, and also of the looseness with which Egyptian employed its determinatives, I cannot agree with Griffiths's strictures on my interpretations of sšd in the Pyramid Texts. I am not unaware that the stem sšd often refers to adornment, for I have record of seven such instances in the Pyr., but in § 889 I regard sšd 'flash' as referring to the sunshine of which the bull is the embodiment; in the case of § 1048 I reject the translation of sšd as 'adorn' because of the reference to the Lone Star, 'flash' being obviously more appropriate; the king is not adorned as the Lone Star, but is the Lone Star, cf. JNES 25 (1966), 160. Again, in § 1490, 'flash' refers to the Imperishable Stars. Also I cannot see any allusion to tomb-decoration in Utt. 488, which is a straightforward 'ascension' text.

Gilula accepts my translation of ky sšd, but agrees with Griffiths that these words are merely a spell-opening without having anything to do with the pregnancy of Isis, and cites CT II, 254a (Spell 150), which also introduces with this phrase a text referring to the unborn Horus. He also refers to CT II, 257a, but the relevance of this escapes me. We are dealing here with a matter of opinion which is not capable of absolute demonstration, but I cannot believe that an allusion to such a precise event as a flash of lightning would be used merely as a 'grandiose prelude' (Griffiths) without a real connection with the following text, nor can I recall any instance where the opening phrase of the spell is thus divorced in meaning and allusion from the context. In my opinion, this comment applies also to Spell 150, which is a variation on the same theme, the advent of the unborn Horus being signalled in the same fashion. Therefore, with all due respect to my critics, I adhere to my belief in the impregnation of Isis by a flash from the sky—or by a bolt from the blue, if that interpretation be preferred.

R. O. Faulkner

A baker's posture

THE stimulating article by F. Filce Leek in JEA 58 (1972), 126–32, on 'Teeth and Bread in Ancient Egypt' is illustrated, *inter alia*, by a photograph (pl. xxxii, 2) of a 'coloured limestone statuette of the Fourth Dynasty' from Giza, now in the Cairo Museum, showing a 'baker with loaves in front of a fire'. His left arm is raised to his face, and Mr. Filce Leek's caption states that 'the pose suggests thoughtfulness, possibly prompted by fears that his product may be contaminated'.

However, there may be a less sophisticated explanation for this gesture. In fact, a very similar painted limestone figure of a baker was discovered in Giza during a Vienna excavation in 1912/13. It is dated to the Fifth Dynasty and is now in the Pelizäus Museum, Hildesheim. Alfred Hermann, Agyptische Kleinkunst (Berlin, 1940), reproduces it and describes it on p. 30 as follows: 'Lässig hockend schürt der Bäcker mit der Rechten das Feuer, die Linke schützt das Gesicht vor der Glut.' I should like to suggest that the baker pictured in Filce Leek's article is in the same way poking the fire with his right hand while his left hand is raised to protect his face from the heat of the glowing embers.

The coloured statuette of a maidservant from the tomb of Pepi-en-cankh, Meir, may usefully be compared. She, too, is represented poking the fire while her left hand is upraised before her face. See L. Borchardt, Statuen und Statuetten von Königen und Privatleuten (CCG, 1911), I, pl. 50, 238 with p. 155. Another group from the Sixth Dynasty (ibid., pl. 52, 243 with p. 158) shows two maid-servants.

the one grinding corn and the other stirring a fire; the second figure holds her left hand rather similarly, and Borchardt (p. 158 n. 2) ascribes a like purpose to the posture—'um sich gegen die Glut zu schützen'.

KATE BOSSE-GRIFFITHS

Two lexical notes to the Reisner Papyri: whrt and trsst

I. In Papyrus Reisner, I D 29, a heading for a list of workmen reads ntt m whrt, 'those who are in (or from) the dockyard-workshop'. This institution plays a major role in P. Reisner II but is not otherwise attested in P. Reisner I and III. In the commentary on P. Reisner I the term is erroneously read krt, since the sign in question seemed to be Sign List N 29, the sandy hill-slope; the term krt was consequently discussed. It is now evident to me that the initial sign is the similar cake sign of Sign List X 7, which is best known from its use in writings of wnm, 'to eat'. In brief, krt is to be eliminated from the discussion and index of P. Reisner I and the term properly recognized as whrt. The sign of the cake, Sign List X 7, is not otherwise represented, to the best of my knowledge, in early hieratic: it does not occur in the palaeographic tables of Möller's Hieratische Paläographie, I, The Ḥeḥanakhte Papers, and the Abu Sir papyri. The instance of P. Reisner I, D 29, may be the only example noted to date. For similar writings of whrt in hieroglyphic one has only to consult the admirable list made by Fischer, the reading of which prompted me to dispose of the spurious krt. As is well known, hieratic has a general preference for fuller writings, as exemplified by the normal writings of whrt in P. Reisner II.

II. In Papyrus Reisner I a term in the accounts is rendered as trsst, 'bread unit or compensation unit'.4 Its importance is indicated by the remark: 'One gains the distinct impression that the ultimate purpose of the document as a whole is the computation of the number of man-days expended on a work project in order to determine the cost of the labor in terms of terseset units.'5 The only other instance of the term that I could find is the locus of Hekanakhte Papers V, Ro. 30–3, in which 1,000 \$i\$irt-loaves, 500 bhsw-loaves, and 3,700 trsst-loaves are added to obtain a total of 6,000 trsst-loaves or units, perhaps implying, as James suggests, an unexpressed equivalence of 5 \$i\$irt-loaves to 4 trsst-loaves and 1 bhsw-loaf to 3 trsst-loaves.6 A curious set of trsst documents has now come to my attention in the inscriptions on wooden objects, circular disks, pegs, cones, and a diamond shaped object, from the débris of Room F 5 at the fort of Uronarti.7 Most have been plastered with a light coating and have piercings, a single hole, and/or three smaller holes, for thin wooden nails to attach them. One bears the date of Year 33 of Ammenemes III, without month or day, and hence the objects are securely dated in the Twelfth Dynasty. They were found with six hard-stone weights inscribed with units of gold.

- ¹ W. K. Simpson, Papyrus Reisner I, pl. 7, 7A.
- ² Ibid. 33, 135, pl. 7A.
- ³ Henry G. Fischer, Dendera in the Third Millennium B.C., 211-12.
- 4 Papyrus Reisner I, 35 and passim.
- ⁵ Ibid. 35.
- ⁶ T. G. H. James, The Hekanakhte Papers, 60-1.
- ⁷ D. Dunham, Uronarti, Shalfak, Mirgissa (Second Cataract Forts, III. 34-5, pls. 27-8. I have attempted in the accompanying figure a transcription of the texts of these objects. For those in the Museum of Fine Arts I have had access to the originals as well as N. F. Wheeler's copies made at the time of their discovery. For the objects in Khartoum I have had to rely on the photographs and Wheeler's copies. The writing is generally clear except when damage has occurred, yet the texts are not easy. The letters in the accompanying figure refer to the objects as follows: (A) 24-5-8; MFA 24.732; S(econd) C(ataract) F(orts) II, 34, 37, pl. 27, I/2; (B) 24-5-18; MFA 24.747; SCF II, 35, 37, pl. 28, 3; (C) 24-5-10; Khartoum; SCF II, 35, 37, pl. 27, I/3; (D) 24-5-II; Khartoum; SCF II, 35, 37, pl. 27, I/I; (E) 24-5-I6; MFA 24.754; SCF II, 35, 37, pl. 27, 2/I; (F) 24-5-I4; [continued on p. 222]

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The function of these objects is not clear to me, although both shape and the texts should prove sufficient for a closer identification of their use. Since all have holes for wooden pegs or nails (in part preserved), it must be assumed that they were attached to something else. The use of the term shifterther identifies them as a sort of 'record' or 'memorandum'. The ink-signs on the front and back of one of them (ad and nfr) suggest that the material to which they refer was later examined and found in sound condition. From the texts (see figure) it is clear that they refer to baked units of bread, perhaps in the shape of the objects themselves, and that these units or loaves were made from fixed quantities of barley and wheat assigned to or provided by the work force (msr). In 'B' sixty units are baked from 2/3 heqat of northern barley, in 'C' seventy units from 1 heqat of wheat. The writings with the fire-drill further suggest that it is used for the term psw with the sense of baking and not as a determinative for trsst (see 'C').

I have considered several interpretations for these objects but feel unconvinced by any of the alternatives, or combinations of them: that they are in the nature of receipts for baked goods taken from the bakery, that they were presented to the bakery as authorization for the expenditure of grain and the baking of bread, that they merely commemorated a transaction or act of baking, or that they served as models for the shape of the loaves to be delivered. These factors could have been simply transmitted orally or by hieratic messages. The certain factors are their use as a memorandum (sh3) and their attachment as a docket to part of a container such as a storage bin, although they do not seem to be ideal for covers or plugs. It is curious that one of them should be so formally dated in terms of a regnal year and yet lack an indication of month and day. The horizontal sign with a loop above it in 'E' and 'G' looks like the cover of a bin or a levelling stick to smooth the heaps of grain. The term sndm(?) in 'B', 'E', and 'G' may signify the object itself or the wood from which it is made. Similarly, the first word in 'G' may be a term for the object itself. In 'F' and 'I', I am not certain whether to read the verbal phrase sh3·n·tw followed by mm or to postulate an unattested *twmm or *wtmm as a term for oven or for a baking operation.

I draw attention to these puzzling objects and their texts in the hope that parallels may come to light to provide a better explanation. Since the daily allowance of *trsst* units is known from the Reisner papyri to be about eight per day,² and since the amount of grain used in baking them is provided now in these texts, it is possible that these documents can be used to determine the daily caloric allowance for a labourer in the Twelfth Dynasty. The dockets can be taken to represent a ten-day allowance for a single worker, 2/3 heqat of northern barley in 'B' and I heqat of wheat in 'C'. These Uronarti 'dockets', if such they are, may add significantly to the solution of the trsst problem if the examples in Khartoum can be collated and the group submitted to further study.

WILLIAM KELLY SIMPSON

A consideration of Papyrus Kahun 13

OF the domestic documents of the Middle Kingdom discovered at Kahun, Papyrus Kahun 13 is the most complex. (Petrie, Kahun, pl. 13: convenient transcription by Sethe, in his Lesestücke, 91.) The

MFA 24. 748; SCF II, 35, 37, pl. 28, 4 upper; (G) 24-5-17; Khartoum; SCF II, 35, 37, pl. 28, 1; (H) 24-5-15; Khartoum; SCF II, 35, 37, pl. 28, 2; (I) 24-5-13; Khartoum; SCF II, 35, 37, pl. 27, 2/3. Although these copies cannot be called definitive, especially in respect to the objects in Khartoum, the readings adopted should be given preference over those in SCF II, 34-5.

¹ See, for example, the objects represented in the frieze of objects in the tomb of Ḥesy-Rē^c: Vandier, Manuel d'archéologie, 1, part 2, 716, fig. 743.

² Papyrus Reisner I, 44-5.

narrator of this text describes how his father sold a priesthood which was in his possession to a scribe, Iyemya'tyeb, in return for a tp and the 'carrying of all the wiwi' which belonged to him. This agreement is then referred to a high official. The nature of a tp, which in the following section has become a tpy-r, is generally agreed to refer to a financial sum or capital (cf. Wb. v, 287), but the nature of the wiwi is more obscure: all that we know is that they may be 'carried' (line 22) and that they may be 'calculated against a man' (wiwi nb ipw r·k, line 25). The Wörterbuch, recognizing that these too are probably financial, proposes the translation 'interest' (I, 250 'ob Zinsertrag?'). This is a somewhat involved concept, and asks rather more questions than it can answer, and the present writer would like to suggest the translation 'debts'. The 'carrying' (or 'lifting') of the wiwi might possibly refer to a cancellation of such debts. There is a very small amount of evidence for this conjecture:

- 1. Among several words written as wiw in Wb. there is one, wiw t'cord', or the like, which may well be the reduplicated form of wit, 'string, binding' (1, 244). Such a root could easily lie at the base of a word meaning 'debt'.
- 2. The transaction is taken before a high official, the deputy nty m sryt Merisu, and an oath is imposed upon the parties. This process is not mentioned in the simpler documents from Kahun, but might be explicable if the compounding of a debt were involved. That such a matter could be very serious is suggested by the fact that in Roman times the imprisonment of private debtors needed to be prevented by law (cf. Bell in CdÉ 13 [1938], 354). The oath here is necessary to protect the interests of both parties, and to simplify the decision of the State in any future litigation.
- 3. The point of the document is contained in its sequel. Upon the death of the writer's father, the second party, Iyemya'tyeb, had not paid the capital sum promised—in other words, he was now himself in debt. This new development is so serious that it is brought before the law (n sr sdmty·fy st), and redress is sought.

A free translation of the relevant passage may run as follows: 'My father made a deed of transfer (imyt-pr), consisting of the (posts of) priest and overseer of a phyle of Sopdu, lord of the East, which belonged to him, for the scribe-over-the-seal of the Eastern Side, Iyemya'tyeb. The latter said to my father, "I [shall] give to you a capital sum together with the cancellation [lit. raising] of all the debts belonging to you." Such were his words. Then my father was addressed by the overseer of the fields Merisu, acting as the deputy of the nty m sryt, as follows: "Are you content with the giving to you of the capital sum aforesaid, together [with the cancellation] of all the debts assessed against you, in return for your priesthood and overseer of a phyle?" Then my father said, "I am content." Whereupon the official said, "The two men will be made to swear to the effect that they are content." [.....] Now, my father came close to death, but without overcoming the obstacles on [i.e. obtaining] the sum. Moreover, my father said to me as he was failing (mr), "If the sum which the scribe-overthe-seal Iyemya'tyeb promised to me on oath is not given to you, then you shall petition on its account the official who will judge it, and then the sum will be given to you." Such were his words. I petitioned in order to make [.....], concerning the giving to me of that which accrued to the scribeover-the-seal Iyemya'tyeb without delay.' The final sentence may refer to an attempt to confiscate the defendant's property, but it is more likely to mean that the stipulated sum should be recovered under duress. The above reconstruction is, of course, conjecture, and is proposed entirely on its merits. J. D. RAY

¹ Not to mention the legislation of Bocchoris (Diodorus i. 79. 3: see also Pierce, Three Demotic Papyri in the Brooklyn Museum (Oslo, 1972), 128 ff.).

The meaning of nyswt as 'javelins' confirmed

The word $\bigcap_{i=1}^{n} [N_{i}] \bigcap_{i=1}^{n} (Sinuhe B135 = R160)$ has almost invariably been rendered 'javelins' or the like by translators, a meaning suggested both by the context—they are closely associated with the other stock weapons of combat, the axe and shield—and in particular by the fact that there is an 'armful' (hpt)² of them. However, the uncertainty over the meaning of the word is reflected in the Wörterbuch's 'Waffen' (Wb. II, 324, 17) and in Gardiner's rendering of the only other instance of the word known to him in the phrase is pnswt·tn (Totb. ed. Nav. 37, 17) which he translated 'seize your daggers(?)'. This uncertainty is now finally dispelled by the further appearance of the word, this time written in the singular $\bigcap_{i=1}^{n}$, applied to the actual representation of a light spear or javelin in the frises d'objets of a coffin of the Twelfth Dynasty. The object in question occurs between the curious pd 'he, which often elsewhere is associated with the bowman's equipment, and the ritual staffs labelled mdw n s. Moreover, it is interesting to note that the word occurs a second time on this very same coffin in the phrase $\bigcap_{i=1}^{n} \bigcap_{i=1}^{n} \bigcap_{i=1}^{n}$

Hands and hearts (Berlin 1157)

THE phrase \(\) \

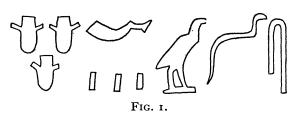
The association of and is is so meaningful, however, that it is difficult to regard the first group as nothing more than an orthographic anomaly. Biographies of the late Intermediate Period and the Eleventh Dynasty often use the word (hpš, literally 'foreleg') in place of 'hand' or 'arm' when the

- ¹ Cf. e.g. Gardiner, Notes on Sinuhe, 52-3; Faulkner, Dict. 139.
- ² Gardiner notes (op. cit. 52) that hpt (lit. 'embrace') is not found elsewhere in any similar sense; one might, however, compare the use of the word hfe '(Pfeil) bundel (eigtl. eine Handvoll)' Wb. III, 273, 7 as applied to arrows.

 ³ Gardiner, op. cit. 52.
- 4 On the interior, right side, of the outer coffin of Dhwty-nht from Deir el-Bersha—recently published by Terrace, Egyptian Paintings of the Middle Kingdom, pls. 15-31.
- ⁵ Cf. Terrace, op. cit., pls. 16 (left) and 24 (lower left). The representation of a single weapon of this kind in a coffin frieze is unique: avelins and the like are elsewhere always depicted in a group and encased (cf. Jéquier, *Frises d'objets*, 218).
- ⁶ Cf. Terrace, op. cit., pls. 18 (upper left) and 28 (lower left); they are not, therefore, cases for saws or other bladed objects, as suggested by Terrace.
 - ⁷ Berlin 1157, line 13; Ägyptische Inschriften, 1, 258.
- 8 See Sethe, Erlaüterungen, 138, referring to Lesestücke, 84, line 8; Gardiner, Egn. Gr. 361, where is queried, although no such doubt is expressed in Ägyptische Inschriften or elsewhere. Piankoff, Le Cœur, 34, translates '(des malheureux) aux jambes et aux cœurs cassés', but on p. 120 transliterates *dw-ibw' poltrons'. Janssen, who deals with the duplicate text from Uronarti in JNES 12 (1953), 51 ff., does not comment on the absence of ind apparently relegates it to the 'purely orthographic' differences, which he does not enumerate in detail (ibid. 54). Janssen provides a further bibliography for the Semna stela, ibid. 54 n. 5.
- o Often written thus, as also in Couyat-Montet, *Hammamat*, no. 43, line 3 (temp. Ammenemes III); cf. the examples given by Polotsky, *Zu den Inschriften der II*. *Dynastie*, § 73, which also include writings such as and The variant is only known to me from the Girga region: Dunham, *Naga ed-Dêr Stelae*, no. 12 and Cairo J. d'É. 55607.

meaning is 'strength' or 'might', and the achievements wrought by one's 'ox-like arm' are often linked with skill in speech or counsel. Similarly, in line 5 of the same Semna stela, the king says $\stackrel{\circ}{\circ}$ $\stackrel{\circ}{\circ}$ 'I am a king who says and does; what my heart plans comes about by my hand.' The use of hps in place of the last word would not be expected in reference to a Middle-Kingdom ruler, and royal epithets containing hps are rare before the Eighteenth Dynasty.²

In temple and funerary rituals the heart and foreleg of the slaughtered steer are often combined as an offering, 3 and in the temple of Sethos I at Abydos this offering is identified with the vanquished enemy that is itself a recurrent motif in the same rituals. 4 Here the king offers Nefertem the same rituals. 4 Here the king offers Nefertem the same rituals. 5 these warm roasts consisting of choice cuts, the forelegs and hearts of the rebels'. 5



The hand and heart of the southern adversary are more graphically associated in a Fifth-Dynasty scene from the pyramid temple of Saḥurē^c (fig. 2).6 Trampled beneath the feet of the king, who has

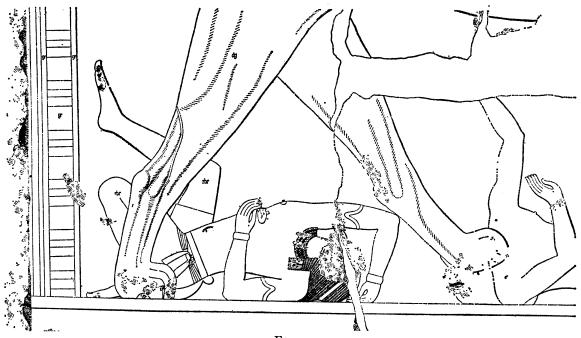


FIG. 2.

- ¹ Kush 9 (1961), 48 (c).
- ² Two exceptional examples are to be found in Naville, *Deir el Bahari: XIth Dyn.* I, fig. I(a), p. 5, and *Sinuhe* B 52 (R 76): a king \bigcirc \(\sum_{\text{\texts}} \sum_{\text{\t
- ³ E.g. Bissing, Re-Heiligtum des Königs. Ne-woser-re, II, pl. 23 (56b); Oriental Institute, Mereruka, pls. 202, 205, 208; Junker, Gîza, XI, fig. 14, p. 21; James and Apted, Khentika, pl. 37; Davies, Rekh-mi-Rēc, pls. 90, 106, and Menkheperrasonb, pl. 38. Also cf. the offering formula sh·tw hpšw n k·k h·tyw n śch(w)·k 'may forelegs be cut off for thy spirit, and hearts for thy dignity' (Davies, Rekh-mi-Rēc, pl. 86, and Ramose, pl. 21). In J. Dümichen, Grabpalast des Patuamenap, II, pls. 1, 7, the lector priest presents a foreleg and the 'companion' a heart.

[footnotes 4, 5, and 6 continued on next page]

assumed the form of a griffin, the vanquished Nubian (or Puntite) surrenders his heart and hand in a single gesture.¹

As it happens, the English language has made frequent use of the same concept. The expression 'with heart and hand' is defined by the Oxford English Dictionary (v, 161 [50]) as meaning 'with will and execution; readily'. The nineteenth-century American Shakers offered their 'hands to work and hearts to God'. And Shelley, in his sonnet 'Ozymandias', gives a paradoxical twist to the conventional usage in 'the hand that mocked them, and the heart that fed'.

HENRY G. FISCHER

An analysis of Urk. IV, 1287, 20-1 (Amada stela)

THE lack of a proper grammatical explanation of the last two lines of *Urk*. IV, 1287, 17–21 (see fig. 1) has rendered the translation of the entire passage somewhat problematic. An attempt at an interpretation was made by Helck (*Urkunden der 18*. *Dynastie: Übersetzung zu den Heften 17–22*, 29) who translates as follows:

Worte sprechen durch Amunre, König der Götter, Herrn der Throne der beiden Länder: Mein geliebter Sohn, G-hprw-Rc, Herr der beiden Länder, den ich auf dem Thron habe erscheinen lassen, mein lebendes Abbild auf Erden, den man zu meinem Heilsbringer hat werden lassen, aufgezogen in seinem Wesen! Er hat alle Länder unter deine Sohlen gelegt.

Thus he apparently takes hpr(1.20) as the rare word meaning 'Wesen' (Wb. III, 265) and rather awkwardly attaches $i\underline{t} \cdot f(1.21)$ to what follows. Furthermore, he seems to construe the verbs $shpr \cdot n$ and $rn \cdot n$ in 1. 20 as past relative forms with the indefinite pronoun tw as subject, but this leaves the vocative $sp \cdot (i) mr(1.18)$, which introduces the address to the king, hanging at the head of the sentence without a main verb to complete it. That Gauthier (Le Temple d'Amada, 24) also misunderstood these lines is shown by the fact that he wrote 'sic' under the second person suffix of $\underline{t}bwty(1.21)$ in his facsimile, thereby indicating that he thought the text to be corrupt here. Kuentz, in the vocabulary of his edition (Bibliothèque d'études, x), likewise failed to shed any light on the problem.

The main difficulty can be eliminated if we take $hpr \cdot f$ (l. 20) and $it \cdot f$ (l. 21) as together forming another example of that substantivized verbal expression $hpr \cdot f - it \cdot f$ 'a born conqueror' (lit. 'a hecomes-into-existence-(and)-he-seizes') mentioned by Gardiner in JEA 32 (1946), 55 n. v. (ad Urk. IV, 390, 13), and by De Buck in Studia Aegyptiaca, 1, 55 n. 22 (ad Berlin Leather Roll, 1, 12). The

- 4 Cf. Junker, 'Die Feinde auf dem Sockel der Chasechem Statuen' in Ägyptologische Studien Grapow, 162 ff. and esp. p. 171; also his article 'Die Schlacht- und Brandopfer und ihre Symbolik im Tempelkult der Spätzeit', ZÄS 48 (1910), 69-77. For other references to enemies in rituals see also Fischer, Dendera, 144.
 - ⁵ Mariette, Abydos, 1, 376, 9-11. Cited by Piankoff, Le Cœur, 71.
- ⁶ Borchardt, Grabdenkmal des Königs. Sashu-Re, 11, pl. 8 (also reproduced in Wm. S. Smith, History of Egyptian Sculpture and Painting in the Old Kingdom, fig. 105, p. 274).
- ¹ Borchardt, op. cit. 23, interprets the exposed heart as an indication of fear: 'sein Herz geht heraus'. But no such expression for fear is known to me. If it were regarded as a literal representation of an Egyptian idiom, the scene would merely mean that the enemy was unconscious. But such an interpretation ignores the fact that the hand of the enemy is cupped around the heart, as though yielding it to the griffin that has passed over him.
- ² Van de Walle, Le Mastaba de Neferirtenef, 59; the sign \heartsuit is omitted in Mariette, Mastabas, 325, and similarly Wb. v, 124 (2) and Sethe, Übersetzung und Kommentar zu den altäg. Pyramidentexten, 111, 2. Note also the epithet \multimap 'who fills the hand' (with wealth) as compared with \multimap 'who fills the heart' (with counsel) in Siut Tomb I: Montet, Kêmi 3 (1930–1), 51 (line 241, reading \multimap for \multimap , and line 246); cf. Janssen, Traditioneele Egyptische Autobiografie, 11, 100 (11 Ax 4, 5).

latter, which reads $rnn \cdot kwi \ m \ hpr \cdot f - it \cdot f$ 'I was brought up as a born conqueror', yields a particularly close parallel to our text. For such idiomatic phrases in general, see Gardiner, $Egn.\ Gr.^3 \$ 194. The apparent absence of a main verb in the sentence, moreover, is easily overcome by parsing $shpr \cdot n \cdot (i)$ and $rn \cdot n \cdot (i)$ as $sdm \cdot n \cdot f$ forms with the second person masculine singular dependent pronoun tw (in

Fig. 1. Urk. IV, 1287, 17-21.

In conclusion, here is a translation of the whole passage:

Recitation by Amen-rē^c, [king of the gods], lord of the Thrones of the Two Lands: (My) beloved son, c₃-hprw-Rc, lord of the Two Lands, whom (I) have caused to appear upon (my) throne, my living semblance upon earth, (I) have brought thee into existence so as to be my champion, (I) have reared thee as a born conqueror, all lands (being) under thy soles.

Stephan W. Gruen

A pun in the Lansing Papyrus

- P. Lansing 7, 6–8, 7 (= LEM 106-7) contains 'an advice to choose the scribe's profession', and ends in a reproach to the idle fellow, 'You have betaken yourself to pleasure and have made friends with revellers. You have made for yourself a waiting place in the brewer's quarters like one who longs to drink beer. You sit in the Parlour¹ with Safeniawef;² you hold writings in abhorrence and fraternize with the Cassite [woman] . . .' (according to Caminos, see his LEM 396).
- ¹ Ti-st-hnkyt could also mean 'der Ort des Bettes oder des Schlafzimmers' (see Erman and Lange, P. Lansing, 77), e.g. the Red Lantern quarter of Thebes.
- ² $Hms \cdot k$ must be 'emphatic'. The meaning is, therefore, 'It is in the "bed(-room?) place" you sit, together with Safeniawef'. A simple 'you sit' would read $tw \cdot k$ $hms \cdot tw$.

The name Safeniawef is most probably a fictitious one, and aims at describing an ill-reputed individual. Caminos suggests interpreting it as 'He who is fully satisfied with his profession', which, however, lacks a negative sense. In Erman-Lange's work (see *P. Lansing*, 77) we find the name in question interpreted as 'Von seinem Amte wird er satt'. The authors regard this as 'einen natürlich scherzhaften Namen'. On the other hand, they observe that 'Er soll übrigens seinem Träger nichts Böses nachsagen, denn siw m ist f ist etwas Gutes, was die Götter den Frommen gewähren [in the footnote, 'So *Inscr. in the Hieratic Character* 29, 7 und in einer Inschrift im Tempel Ramses' III. in Karnak.']. Der Name wird also nur andeuten, daß der Mann ein älterer, gut gestellter Beamter ist, der sich, anders als der Schüler, Muße und Vergnügen gestatten darf.'

Since ssi m iswt f is something morally positive, as was shown by Erman and Lange in the passage quoted, there seems to be contained no hint of the man's 'allowing himself leisure and pleasure'. Whatever the meaning is, 'to be satisfied with', or, 'sated by, one's profession', is 'something the gods grant to the pious'. Furthermore, none of these meanings seems to me 'humorous' (scherzhaft). If, however, the sentence 'It is in the "bed place" you sit, together with Safeniawef' has any sense in its particular context, the name cannot have a positive meaning; and yet it obviously has. The only solution of this puzzling contradiction is to assume a pun. I should think that the teacher, while referring to the fictitious individual named Ssif-m-iswt-f,2 'He-is-fully-satisfied-with-hisprofession',3 may have had in mind the scribal joke that the name in question can be taken also in the sense

HELMUT SATZINGER

The biconsonantal doublet gp/gb, 'overflow'

Some years ago, Faulkner rendered the *gp pt* of *Pyr*. 393a as 'the sky pours water', noting that *gp* is related to the noun *igb*, 'flood, overflow'. While his more recent translation reads 'the sky is overcast', it can be shown that the relation between *gp* and *igb* still holds good; both were originally biconsonantal roots forming a doublet pair through an interchange of the bilabials.

That gp is a biconsonantal root is shown by its spelling in Pyr. 393a and elsewhere, p by the idiom

- ¹ Cf. Wb. IV, 15, 13; also Caminos, LEM 399.
- ² For Syy-m-iywt·f as the name of an existing individual, see in Mélanges Maspero, 233 ff. (Černý, Parch. Louvre AF 1577).
 - ³ I would prefer Caminos's interpretation against Erman-Lange's.
- * The use of n for m is a slight hint of the meaning intended. Cf. Wb. iv, 9, 10, and Gardiner, Notes on the Story of Sinuhe, 34, for the meaning 'turn one's back to . . . ', 'flee', for $rdisinfn \ldots Sinf$, being in its absolute state *soisf (cf. Coptic $\overline{n}c\omega >$), will be weakened in this context in the same way as the $sdm \cdot f$ -form used here of $sinfline{n}$, 'be sated', whatever the basic pattern of their vocalization may be; the pronunciation which may be suggested for both of the cases would be something like *sefnewotof. Rdi $sinfline{n}$. . 'seems to be a classicism. In Ramesside vernacular, the synonymous expression is $finfline{n}$ for $finfline{n}$ for
 - ⁶ The Ancient Egyptian Pyramid Texts (Oxford, 1969), 80.
- ⁷ Pyr. 891b; Grundr. Med. VII, 108 (P. Ebers); W. Wolf, ZÄS 64 (1929), 24, line 43; J. Vandier, Mo'alla, IFAO, Bib. d'Ét. 18 (Cairo, 1950), Text Va, 3; S. Sauneron, BIFAO 60 (1960), 9 f. While Sauneron notes a hitherto unrecognized example of gpt and correctly points out its relation to Coptic čēpe, he errs in attempting to derive the term from old kp 'cover'. The term gpt has here a derived meaning 'roof' (of a portico), a logical development from the basic sense 'thunder-head', on which see below.

iti mi gp n mw, 'seize [a town] like a thunderstorm', and the Ptolemaic verb gp, 'overflow', which is certainly the same word. The root is likewise biconsonantal in Demotic gpt, 'cloud', Coptic čēpe, 'cloud', čēpe mmou nhōw, 'rain cloud' (old gp n mw). The several instances where the verb is spelled igp show the i-augment which is found only with biconsonantal roots. The Ptolemaic usage of the verb, the idiom gp n mw, the meaning of the noun igp (see below), and the usual RAIN-det. combine to show that the root carries the inherent sense 'be full of water ready to overflow', with special reference to storm-clouds. Pyr. 393a can thus be rendered 'the sky looms with saturated storm-clouds'. From this is derived the meaning 'loom, float like a cloud', said of the king as he goes heavenward in the form of a bird.

The noun igp has the i-prefix sometimes found with nouns from biconsonantal roots,⁵ and can refer either to a storm-cloud about to burst forth in rain, or the storm itself. In Pyr. 500 the word is used in parallelism with ip, 'rainstorm',⁶ and in, 'raging storm',⁷ suggesting that igp means 'thunderstorm'. The divine ferryman is called 'the lord of the thunderstorm', that is, able to reach shore safely in spite of adverse weather.⁸ The rebirth of the deceased is accompanied by rumbling of the sky and quaking of the earth while 'N. goes forth on a thunder-head' (in igp; in in). Elsewhere the reborn soul appears as in0 moving in the midst of the thunder-head'.⁹ This thunder-head may also be symbolic of famine and hard times,¹⁰ and brings gloomy darkness which is dispelled by the sun.¹¹ The igp, then, is basically the dark, looming thunder-cloud full of water and, by a logical extension of this meaning, is also the ensuing storm. That is, the igp is both a reservoir full to over-flowing as well as the actual overflow itself.

This is precisely the sense of gb. It is the primeval ocean, the reservoir from which life-giving waters flow, 12 but may also be the overflow from such a reservoir: 'Bring me the milk of Isis, the overflow (gb) of Nephthys, the overspill of the lake, the surge of the sea. 13 Here the gb is the milk flowing from the reservoir of the divine breast. Elsewhere gb refers to the abundance (overflow) of drink or food in general. 4 Finally, the 'Great gb which issues from the Great One' is a reference to Nut giving birth to the morning sun, 15 and one may perhaps see here an analogy to the discharge of the birth-water from its reservoir, the womb. The noun gb thus has the same dual significance as the noun gb, namely, a reservoir about to overflow or the overflow itself.

The two words are therefore semantically identical and I suggest they originate in a biconsonantal doublet gp/gb formed by an interchange of bilabials through dialectical variation.¹⁶ For gp this is no

- ¹ Lit. 'storm-cloud of water'; Merikarēc, 73; Urk. III, Pianchi Stela 27, 93, 96.
- ² Listed separately in Wb. v, 166, 1-2.
- ³ Pyr. 1560a, 2042c, 2179a; Grundr. Med. VII, 108 (P. Berlin), here spelled igp with the frequent confusion between i and i in N.-K. times. On the i-prefix, see E. Edel, Altäg. Gr. § 450.
- 4 Pyr. 891b, 1560a, 2179a; Faulkner regularly translates 'soar'; Sethe, Komm. IV, 160: 'wie eine Wolke fliegen'.

 5 Cf. išnn, 'war-cry' (šn); išf, 'spittle' (šf); etc.
 - ⁶ Elsewhere <u>h</u>pt (Wb. III, 362, 8) from <u>h</u>p, 'flow freely (water)'.
- ⁷ From šn, 'rage, be furious', from which numerous other stems are derived: šnšn, šnn, nšn, etc. The triple pellet determinative has led some to the plausible translation 'hailstorm'.
- 8 Naville, Totb. 99, 5. A Ptolemaic text likewise refers to sailing in a storm (igp); E. Naville, The Store-city of Pithom (London, 1903), pl. 10, 22.

 9 Coffin Texts, IV, 125.
- 10 J. Vandier, Mo'alla, Text IV, 9.
- ¹¹ A. Erman, ZÄS 38 (1900), 24; see also P. Mag. Harr. II, 5-6.
- ¹² Pyr. 507a, 551b; Naville, Totb. 61, 1-2; E. Hornung, Das Amduat (Wiesbaden, 1963), 79. A verb 3gb 'overflow', and its causative s3gb, 'irrigate', are both known only in Graeco-Roman times; Wb. 1, 22, and IV, 27.
- 13 Pyr. 707 a-b; cf. M. Münster, Untersuchungen zur Göttin Isis (Berlin, 1968), 66.
- ¹⁴ Pyr. 120a, 130a, 1876b. This abundance is perhaps also found in CT vI, 13 h-i, where the 'field of 3gb' is apparently equated with the 'field of Iaru'.

 ¹⁵ Sethe, Komm. 1, 268.
- The evidence for this is quite clear in the Semitic languages; the scarce evidence for Egyptian will be published shortly in $Z\ddot{A}S$.

problem since this is obviously biconsonantal in structure, but the initial 3 of 3gb does present a difficulty since this is not a usual method of augmenting biconsonantal roots. There is, however, sufficient evidence to indicate that this is the case here.

In the first place, the Semitic cognate is gb, 'pool, cistern', the various dialectical forms of which point to an originally biconsonantal root in Semitic. Secondly, there is further testimony for the addition of an initial f to biconsonantal roots in Egyptian:

- 1. The biconsonantal hd, 'tremble, be weak', is preserved in such forms as hddwt, 'weakness (from lack of food)',² and hd, 'weak spot, fontanel',³ while the augmented stems nhd, 'be weak, tremble', and nhdhd, 'throb', preserve the n-prefix common with biconsonantal roots.⁴ Also from this root is the verb shd, 'tremble, quiver', with an s-augment.⁵
- 2. From an original *šr, 'be dry', 6 is derived wšr, 'be dry', known already in the Old Kingdom; cf. wšrt, 'dry land', in a Sixth-Dynasty letter, 7 and sntr wšr, 'dried incense', in Pyr. 8 The causative sšr, now known from the Middle Kingdom, 9 again shows the biconsonantal original with the common loss of the w-prefix. 10 From this biconsonantal root is also derived the verb sšr, 'roast, bake', and a noun from its causative stem ssšrt, a kind of baked bread, both words found in Old Egyptian. 11
- 3. Since most reduplicated stems of the structure abab derive from biconsonantal roots, the verb hfhf (det. WATER), 'gush out, swell', said of both water and fire, 12 suggests an otherwise unattested *hf. Whether the unique hf (det. BOOK-ROLL) of P. Prisse 1, 2, is related, has been both proposed and denied. Gardiner rendered the pertinent passage: 'If thou sit with a glutton, eat thou when his fever of appetite (hf) is past', noting the probable relation to the likewise unique hfhf (det. FIRE) on which see below. Federn has suggested that hff means 'surfeit' of food, connecting the word with hfhf, though this was immediately opposed by Gardiner. Hut once the possibility of the s-augment is recognized, there is little difficulty in relating these words; the means simply 'gluttony', that is, a swelling or filling up with food. The term hfhf is used only in one passage in the Coffin Texts: 'He subdued the Eye when it was angry, when it burst forth in fiery fury (hfhf).'15 This derived sense is
 - ¹ Hebrew gebe', Arabic jubb, Akkadian gubbu, Nabataean-Palmyrene gb, Late Hebrew geb, etc.
- ² Pyr. 1876 only, usually rendered 'famine' though a derivation from hd, 'be weak', is indicated by the context.
- ³ P. Smith 4, 11; Breasted, *The Edwin Smith Surgical Papyrus* (Chicago, 1930), 169, assumes a scribal error for *nhd* since this is the sole occurrence of *hd*. The word for 'fontanel' is written *iht* in P. Smith 2, 21, undoubtedly for *ihd*; so *Grundr. Med.* VII, 9 n. 6. However, there is no reason to assume a scribal error and it is more likely that *hd*, *ihd*, *iht*, and *nhd* are variants of the same word.
 - 4 See my remarks in ZÄS 95 (1968), 70 ff., and 98 (1971), 155 f.
- 5 With reference to the heart and limbs; Gardiner, Notes on the Story of Sinuhe (Paris, 1916), 30, who gives other references, and J. Barns, The Ashmolean Ostracon of Sinuhe (Oxford, 1952), v. 46. For the noun 1hd, 'weakness', see Grundr. Med. VII, 9, in which context it is defined as mib, 'dissembled', on which see J. Clère, FEA 35 (1949), 40 n. 6. The variant 1hd/1ht, 'fontanel', (see above, n. 3), would also fit here.
 - ⁶ E. Otto, ZÄS 79 (1954), 50; S. Sauneron, BIFAO 62 (1964), 57 n. 2.
 - ⁷ A. Roccati, JEA 54 (1968), 17.
- ⁸ Pyr. 1644b, the title to Utterance 29; R. Faulkner, Ancient Egyptian Pyramid Texts, 6. This and the occurrence in the preceding note invalidate the long-held view that Old Egyptian wš became Middle Egyptian wšr; cf. E. Edel, Altäg. Gr. § 428bb.
 - 9 J. Barns, Five Ramesseum Papyri (Oxford, 1965), B, i, 15.
- 10 E. Otto, ZÄS 79 (1954), 49. E. Edel, Altäg. Gr. §§ 424, 442, suggests that most Primae w verbs are probably biconsonantal in origin. See also P. Lacau, BIFAO 58 (1959), 124 f., and Grundr. Med. VIII, 20.
- ¹¹ Wb. 1, 21, 4-6, and IV, 25, 4-5; cf. E. Edel, Altäg. Gr., Nachtr. § 220. Ember's suggested relation with Arabic šarra, 'expose to the sun', is doubtful; see his Egypto-Semitic Studies (Vienna, 1930), 93.
- 12 Wb. III, 273; on such stems see M. Feichtner, WZKM 38 (1931), 197 ff.
- 13 Gardiner, JEA 32 (1946), 73 n. 6.
- ¹⁴ W. Federn, JEA 36 (1950), 48; Gardiner, JEA 37 (1951), 109. Federn is supported by A. Erman, Literatur der Ägypter, 99, and A. Scharff, ZÄS 77 (1941), 16, and 17 n. 20.

 ¹⁵ CT iv, 154e.

suggested by the FIRE-det. and the phrase hfhft hh 'outburst of fire' (Faulkner) from the uraeus which Sethe logically connected with the uraeus' poison, the fiery stuff that is spewed out. Both the shf and shfhf thus conform to the basic sense of the root, 'swell up, gush out', so that their relation to hfhf is probable and they can be considered variants of the original biconsonantal with the s-augment.

WILLIAM A. WARD

Cylindrical amulet cases

JOHN RAY in his article 'Two Inscribed Objects in the Fitzwilliam Museum, Cambridge' published a fine gold oracular amuletic decree case. In the conclusion to the discussion about this piece the rarity of these cases was mentioned. Indeed, cases of this type are rare, but whether they should be called 'hardly similar' to the amulet cases of Petrie's classification is a matter of dispute.³

Amulets or pendants consisting of a hollow cylinder of metal capped at each end, one cap having a suspension loop, are a well-known Middle-Kingdom feature.4 In most cases these cylinders are now empty, but a few with contents are extant suggesting that such cylinders were normally, if not always, containers of some sort. One cylinder, for example, contains three small amulets,5 and at least three are known which contain loose garnets.6 Cylinders holding small rolls of papyrus seem to be more elusive. Garstang found an electrum case at El Arabah⁷ which, according to him, contained a small roll of papyrus at the time of discovery. Later examination, however, could produce no papyrus, only dried clay.8 A cylindrical gold case with granulated decoration was also found by Garstang in the tomb of Seneb at Beni Hasan (Tomb 487). This was also reputed to have contained a roll of papyrus at the time of discovery but here again examination at a later date in Cairo showed an empty case. 10 Whether or not Garstang was mistaken about one or both of these cases cannot be answered now, but if he was mistaken, could he have jumped to conclusions due to having experience of similar cases which really did contain papyri? John Ray in his article refers to leather and wood examples containing oracular decrees, 11 and the American University of Beirut possesses a bronze cylinder containing a spell written on papyrus.12 C. Aldred13 in describing two gold amulet cases in Cairo says that such empty cases are 'generally thought to have contained an amulet of some sort, evidently of a perishable nature'. Oracular decrees on papyrus surely should be included since they are definitely perishable and would presumably have had some amuletic significance, that is some religious or magical power. The very use by Ray of the term 'Oracular Amuletic Decree Cases' would indicate that he considered the case or its original contents to have had some such powers. Any distinction between this case and Petrie's class of amulet cases would seem to be based only on appearance, differences of which are only to be expected considering the dating of the articles in question.

- ¹ Pyr. 295d; Sethe, Komm. 1, 349. See also my remarks on Egypto-Semitic srp, 'burn', in RSO 43 (1969), 142.

 ² JEA 58 (1972), 247-53.

 ³ Petrie, Amulets (London, 1914), 29 and pl. 19.
- 4 For example B.M. 24774; C.G. 52807; 53107; Brooklyn 13.1038; 59.1997; M.M.A. 2211391.
- ⁵ Bulletin de la Société Royale Géographique d'Égypte, 1932, pp. 83-4.
- 6 Peet, Cemeteries of Abydos, part III (35th Memoir Eg. Expl. Fund, London, 1913), pl. 8 n. 11; C. L. R. Williams, Gold and Silver Jewelry and Related Objects (New York, 1924), pl. 1 and pp. 47-54.
- Garstang, El Arabah: a Cemetery of the Middle Kingdom (6th Publ. Egypt Res. Acc., London, 1901), 4, 29, pl. 1; Williams, op. cit., pl. 1A.

 8 Williams, op. cit. 50.
- 9 Garstang, The Burial Customs of Ancient Egypt as illustrated by tombs of the Middle Kingdom (London, 1907), 113; 226; figs. 104-5.
- 10 For Lacau and Quibell's report see Williams, op. cit. p. 50 and n. 7.
- Op. cit. 253. Cf. Edwards, Hieratic Papyri in the British Museum, 4th series. Oracular amuletic decrees of the Late New Kingdom (2 vols. London, 1960), pp. xviii-xix.

 12 No. 3450.
- 13 Jewels of the Pharaohs: Egyptian Jewellery of the Dynastic Period (London, 1971), pl. 46 and pp. 196-7.

The Middle-Kingdom examples are mainly decorated with geometric patterns of granules, and such cylinders, like granulation itself, may well be Asiatic in origin. A very similar hollow cylinder of gold with triangular line decoration in granules was found at Alalakh and is now in the British Museum; although it has been called 'a possible plating for a staff' it compares favourably in design with the Egyptian Cylinders and similarity of workmanship cannot be disputed. Hollow gold cylindrical pendants of plain Phoenician origin are known from Tharros (Graves XXII, XXIV, XXV),2 and a similar pendant, also from Tharros, of square section now in the British Museum is described in the British Museum Catalogue of Jewellery3 with the interesting note that such types of amulet or pendant 'seem usually to have contained inscribed plates of metal'.4 Side by side with the hollow cylinders in the Middle Kingdom are found similar but solid examples; these two types are obviously closely related, and one hollow cylinder is inlaid to represent a solid cylinder of the typical alternate layer of stone and gold type.⁵ Solid cylinders of stone with gold caps at each end and a suspension loop were found far away at Susa of c. sixth to fourth century B.C.,6 and from Ziweye in Iran come two gold caps from a similar article, one with the suspension loop, the other with an embossed design on the flat end suitable for sealing. This combination of cylinder pendant and seal is interesting. Williams8 tried to equate the Egyptian cylinder with the cylinders mentioned as magical amulets in Berlin P. 3027;9 although she noted that some authorites translated the word 'seal' rather than 'cylinder', she thus, unintentionally, suggested the interesting speculation that the Egyptian cylinder amulets may be ultimately related to cylinder seals.

Egyptian examples of post-Middle-Kingdom date are practically unknown. The cylinder from El Arabah found by Garstang is usually considered to be of Middle-Kingdom date although Williams believed it could be later¹⁰ and thought it likely that such cylinders would have continued in use at least until the New Kingdom. If the Phoenician examples are related, one would expect to find such cylinders in Egypt at the same period, c. seventh to sixth centuries B.C.; such late examples might either await excavation or else may lie unrecognized in existing collections. The Fitzwilliam cylinder may well fill the bill here as might the Meroïtic hollow gold cylinder found in situ on a girl's neck.¹¹ This cylinder is of a shorter, stubbier shape than the ones so far mentioned, and is very similar to one in the Metropolitan Museum of Art.¹²

Future study of all the Egyptian and other Mediterranean and Western Asiatic cylinders would be interesting and would possibly eventually allow the dividing of these cylinders into smaller classes, but until then, the Fitzwilliam cylinder might better be included in the general category of amulet cases. The exact amuletic significance of an oracular decree is difficult to determine although, as mentioned above, they would have had a great magical value for the owner. It might not be beyond the bounds of possiblity that cases containing loose stones or several amulets could be of some

- ¹ B.M. 125984. Maxwell Hyslop, Western Asiatic Jewellery c. 3000-612 B.C. (London, 1971), pl. 100.
- ² Catalogue of the Jewellery, Greek, Etruscan and Roman in the Department of Antiquities, British Museum (London, 1968), nos. 1557–9.

 ³ Ibid., no. 1556.
- ⁴ The references given are: Gauckler, CRAIBL 1900, 195 ff.; Sitzungsb. München, 1905, 499 ff.; Comparetti, Laminette orfiche, 3. See also Harden, The Phoenicians (London, 1971), 205 f. and fig. 80.
- ⁵ Cairo Museum 53071. Reproduced in a colour plate by Aldred, op. cit., pl. 46. For discussion of solid examples see Williams, op. cit. 50–1.
- ⁶ De Morgan, Recherches archéologiques (Délégation en Perse, Mem. Vol. 8, 3rd series, Paris, 1905), 56, pl. iv, 10-11. For amulets of this type from Egypt see De Morgan, Fouilles à Dahchour, mars-juin 1894 (Vienna, 1895), 61, no. 16, fig. 131, pl. 18 (lapis and gold); Carnarvon and Carter, Five Years Exploration at Thebes (London, 1912), 53, pl. 45, D and E.
 - ⁷ Iran, Bastan Museum: see Maxwell Hyslop, op. cit., pls. 182 and 213.
- 8 Williams, op. cit. 52-3.

 9 Verso IV, 7; Verso II, 7-III, 3; III, 3-7; III, 8-IV, 2; IV, 2-6.

 10 Williams, op. cit. 49-50 n. 5.
- Found by Professor Rainer and apparently still unpublished—see Williams, op. cit. 54. 12 10.130.1536.

oracular significance as random selection of stones from a container or a particular arrangement of stones dropped from a container has had such a significance among many primitive people.

J. M. Ogden

Faience from Sinai and Cyprus

The faience lid from Sinai (B.M. 13214) recently published by J. D. Cooney (JEA 58 [1972], 284, pl. XLV) affords a new parallel for the decoration of the polychrome faience rhyton from Kition in Cyprus, found and published by V. Karageorghis some ten years ago. On the lid and in the top register of the rhyton are two very similar animals: they are both in the flying gallop position with their heads turned back and their horns more or less continuing the line of their necks, and both are part of a frieze. Both animals are male and are probably intended to represent the same creature in real life, an antelope according to Cooney and a goat according to Karageorghis. The few differences between the two (extended legs on the Sinai animal, and a more life-like gait on that from Kition, which also has dappling on the body, a stronger tail and a different angle for the penis) do not obscure their basic similarity.

The Kition rhyton has been shown by Karageorghis and others who have discussed it to represent a fusion of Aegean, Syrian, and Egyptian artistic ideas. It was found in a Late-Cypriot IIC context of the middle of the thirteenth century, but it may have been made earlier, quite probably in Cyprus (or possibly on the Syrian mainland) where a meeting of the three traditions would be natural. This new parallel from Sinai, which Cooney dates to Amenophis III, emphasizes the Egyptian links of the rhyton.

Gerald Cadogan

The Isiac jug from Southwark

A Jug found near the Thames at Southwark, London, in 1912 bears the graffito Londini ad fanum ISIDIS. This has been usually translated, 'London, next door to the temple of Isis'. Thus Taylor and Collingwood, $\Re S$ 12 (1922), 283, who noted that the letters were scratched on after the clay had dried, from which they concluded that 'in that case the address is that of the tradesman who bottled the contents rather than that of the manufacturer'. Cf. R. W. Moore, The Romans in Britain (London, 1938), 185: 'presumably the address of a public-house, whose property the jug is', a view followed by Eve and John Harris, The Oriental Cults in Roman Britain (ÉPRO 6, Leiden, 1965), 79 f. (see also pl. 18). They tend to favour a date towards the end of the first century A.D. and think that the jug 'belonged to a wine shop, or, more probably, a tavern situated near a temple of Isis . . .'. They show that taverns were sometimes built close to temples. On this view the graffito will be a designation, virtually, of the tavern. Vidman, SIRIS 317 f., no. 751a, reproduces the same view with no comment; cf. Anne Roullet, The Egyptian and Egyptianizing Monuments of Imperial Rome (ÉPRO 20, Leiden, 1972), 25 n. 6 ('the Roman jug from a London tavern near the temple of Isis'). R. E. Witt, Isis in the Graeco-Roman World (London, 1971), 138, seems to agree, for he invokes (p. 303 n. 32) an inscription (Vidman, op. cit., no. 540) in which tabernae, shops or taverns, are dedicated to Isis and Sarapis.

¹ BCH 87 (1963), 368 ff., fig. 67, pl. 8; also Mycenaean Art from Cyprus (Nicosia, 1968), 43 f., pl. 39, and cover (best picture of animal), and (with H.-G. Buchholz), Altägäis und Altkypros (Tübingen, 1971), 157, no. 1671 a-d. Other discussions: W. Stevenson Smith, Interconnections in the Ancient Near East (Yale, 1965), 44, 163, fig. 66; L. Aström, Studies on the Arts and Crafts of the Late Cypriote Bronze Age (Lund, 1967), 54 f., 123 f., fig. 68.

² The ancestor of this animal may have been the agrimi, or wild goat, of Minoan art.

³ Another such animal on an ointment dish of the Eighteenth Dynasty in Leiden (H. Kantor, AJA 51 [1947], 69, pl. 21, C, D) is cited by Karageorghis (as above).

The preposition ad is of some importance in the interpretation. Madame Roullet, op. cit. 25, implies with some emphasis that it means 'near'. The matter is not so simple. Ad can also mean 'in' or 'at'—frequently in vulgar Latin and occasionally in respectable literary contexts: see Stolz and Schmalz, Lat. Gr.: Syntax, § 90 (5th edn., 1928) with the remarks of F. Schulz, JRS 33 (1943), 58 and H. I. Bell, JRS 36 (1946), 130; Hofmann and Szantyr, Lat. Syntax und Stilistik (1965), 219; Thes. L.L. I, 522, 11 ff. This possibility was realized by R. G. Collingwood, The Archaeology of Roman Britain (London, 1930), 174 ('at the temple of Isis'); cf. Gordon Home, Roman London² (London, 1948), 205; R. E. Witt, op. cit. 138 (though hard to square with his subsequent explanation). Such a meaning, however, is sometimes combined with a sense of purpose: see Thes. L.L. I, 528, 25 ff. ('ex loci notione partim ad finalem transit'), where, inter alia, CIL VI, 5197 is cited: 'disp[ensatori] ad fiscum Gallicum'; cf. Oxford Lat. Dict. (1968), 34, sections 42 and 44. This, it may be suggested, is the meaning here: 'in, and for the use of, the temple of Isis.'

Such an interpretation proves attractive, although radically different, in view of the demotic inscription on a drinking-cup from Egypt which has recently been published by A. F. Shore in the British Museum Quarterly 36 (1971), 16–19. Shore's translation of the first line is 'The cups of the shrine of Isis-the-great (Esoeris) of the island of Paos'. The last line gives the date of the dedication of the bronze bowl: Shore converts it to 26 October A.D. 73. If a drinking-cup might seem to be an unexpected appurtenance of a shrine of Isis, the surprise is removed by the inscription's reference to the 'men of the guild'. Shore reminds us that these guilds of worshippers not only performed strictly religious tasks such as carrying a shrine of the deity in a public ceremony, but also indulged in convivial meetings as a part of their religious obligations. Here I should like to quote his own words:

Drinking wine and beer on certain occasions was an important element in the religious observations of the guilds. So prominent was this activity that in the demotic texts hwrw n swr 'days of drinking' becomes a technical term to mean the sessions (hmsi) of the members, absence from which involved payment of a fine. Although in certain aspects the guilds in Egypt were probably influenced in their practice by the social customs of the symposium and thiasos of the Hellenistic world, their religious observances were in keeping with native tradition; their demotic name, it seems, derives from the name of an ancient lunar feast, and there is some evidence that formal written constitutions existed in the pre-Ptolemaic Period.

(Shore, op. cit. 17 f.)

He proceeds to cite a number of relevant studies, among which W. Erichsen's Die Satzungen einer ägyptischen Kultgenossenschaft aus der Ptolemäerzeit (Copenhagen, 1959) is of basic importance. Shore also kindly refers me now to Mme F. de Cenival's study, Les Associations religieuses en Égypte d'après les documents démotiques (IFAO, Cairo, 1972).

It is clear that such a background would fit the jug from Southwark admirably, but a problem must be faced before one can accept the connection. It is a far cry from Egypt ('the island of Paos', Pi-ḥr, is not yet located: see Shore, p. 18 n. 4) to Roman London, although the dates involved are fairly close to one another. Can we be sure that guilds of worshippers were found in the western Roman Empire in the Isiac cult? For Greek lands the evidence is plentiful; see Vidman, Isis und Sarapis bei den Griechen und Römern (Berlin, 1970), 67 ff. (One demurs only to Vidman's initial claim, that the Kultverein was 'eine typisch griechische Erscheinung'; contrast the dictum of Roberts, Skeat and Nock, Harv. Theol. Rev. 29 (1936), 85: 'an Egyptian form of organisation', though they cite some Greek analogies.) Referring to an inscription in Thessaloniki, R. E. Witt in Ancient Macedonia (Symposium, 1970), 331, cites a board of fourteen ἱεραφόροι συνκληταί who 'met in private for convivial purposes'. (I have corrected the accent of the first word.)

Writing in BIFAO 55 (1955), 178, Jean Leclant expresses some scepticism as to whether one should really expect to find in the West 'des cénacles de dévots des cultes égyptiens, dans leur originalité propre'. The last phrase is a rigorous one and a detailed vindication of its application

would be difficult. But there can be no doubt at all that collegia of Isiac priests or believers were to be found in several of the western provinces of the Roman Empire. Leclant has himself reviewed recent discoveries in his valuable surveys in Orientalia; and Vidman, op. cit. 87 f., provides tangible evidence, beginning with Rome and Italy. In an inscription (of the end of A.D. ii) from Potaïssa in Dacia, the modern Turda in Romania (17 m. south-east of Klausenburg or Cluj) a collegium Isidis is mentioned; its pater and quaestor are named; see CIL III, 882 (Mommsen) = Dessau, ILS 4361 = Vidman, SIRIS 300, no. 698. A more specialized Isiac guild, one of lamp-makers for the cult, a collegium Illychiniariorum, is mentioned in an inscription (A.D. ii) on a statuette of Isis as a rivergoddess found in Pratum Novum which is now in the Cordoba Museum; see A. García y Bellido in Hommages à W. Deonna (Brussels, 1957), 238-44 with pl. 36, and in his Les Religions orientales dans l'Espagne romaine (ÉPRO 5, Leiden, 1967), 113 f.; cf. Vidman, SIRIS 320, no. 757. Also from Spain (Valencia) comes a brief but revealing inscription (A.D. i-ii) which mentions an Isiac association of slaves: 'sodalicium/vernarum/colentes Iside[m]'; see CIL II, 3730 and 6004 (Hübner) = Dessau, ILS 4412 = Vidman, SIRIS 322, no. 762. W. Liebenam, Zur Geschichte und Organisation des römischen Vereinswesens (Leipzig, 1890), 166, shows that sodalicium was synonymous with collegium in the imperial era. Again the Helen mosaic discovered in Trier in 1950, even if not directly Isiac in significance, may well reflect some Egyptian ideas in a syncretistic link with the Dioscuri, especially ideas relating to the cosmic egg; see K. Parlasca, Die römischen Mosaiken in Deutschland (Berlin, 1959), 56 f., modifying his earlier views in Trierer Zeitschrift 19 (1950), 109-25. The food-bearing figures around the mosaic certainly suggest the banquets of an association of worshippers, in this case, perhaps, 'a kind of Theosophical Club', as Parlasca suggests. Other views also recognize the presence of a Kultverein—one of the 'Casti' (R. Egger) or of the 'Nemesiaci' (J. Moreau); cf. G. Grimm, Die Zeugnisse ägyptischer Religion und Kunstelemente im römischen Deutschland (ÉPRO 12, Leiden, 1969), pls. 22 f. with p. 73.

A more direct connection with the practices of the cult is also possible. Apuleius, Metam. xi. 24, writing about A.D. 170, describes the ceremonies of the First Initiation of Lucius as culminating in 'welcome feasts and merry banquets'; two days afterwards he says that 'there was a sacred meal and my initiation was duly consummated'. Some of these banquets may, of course, have been those arranged by the association of worshippers. A little later Tertullian (Apol. 39) was saying that the firewatchmen will have to be summoned ad fumum cenae Serapiacae, and his reference may well be to Rome. A good deal has been written about the κλίνη of Sarapis. What is here relevant is the evidence of its popularity outside Egypt. Youtie, Harv. Theol. Rev. 41 (1948), 15 n. 34, says that 'a dining club of initiates may be attested by the inscription from Prusa'; his p. 12 n. 15 refers to Mendel's publication of this in BCH 24 (1900), 366 f.; it belongs to the second century A.D. On p. 10 n. 4 Youtie points out that by this same era Sarapis 'was worshipped by a cline or dining fraternity' at Cologne. For the inscription which proves this see now Grimm, op. cit., pl. 30 and p. 83 ('Sol-Serapis cum sua cline'). Greek centres of the custom (Delos, Priene, Mylasa) are invoked by L. Castiglione, Acta Ant. Hung. 9 (1961), 291; and he then refers (p. 293) to a relief on a vessel (actually on its lid) from Westheim near Augsburg which show Sarapis and Isis on the banqueting couch; see also Grimm, op. cit., figs. 39 f. and pl. 44 with p. 81.

It is, moreover, natural to connect the Southwark jug with other vessels on which the name of Isis has been inscribed. In 1960 a fragment of an amphora was found in a large house in Delos (ii-i B.C.) bearing the graffito ICIAO[C. See Leclant, Orientalia 32 (1963), 212. From the coastal site of the ancient Emporiae in north-eastern Spain has come a vase of terra sigillata (Dragendorff, 24-5) with the graffito ISIDI; see A. García y Bellido, Les Religions orientales dans l'Espagne romaine, 112 no. 7. A small jug discovered at Cologne bore a similar inscription: see Grimm, op. cit. 137, no. 17 and Vidman, SIRIS 309, no. 723. According to Grimm it is no longer accessible, nor is any information about its shape available. Grimm rightly groups the Southwark jug with the others here mentioned,

and he refers to numerous votive inscriptions on pottery vessels involving Sarapis, Iuppiter Dolichenus, and Mithras. A connection with the cult is therefore highly probable.

At the same time, the function of these vessels seems to have varied. The amphora from Delos is likely to have been used to carry the Osirian holy water, intended for libations and lustrations. Cf. Apuleius, Metam. xi. 10 fin., 'et alius ferebat amphoram'; it is perhaps the vase carried by the last figure on the relief at the Schloss Glienicke (acquired in Italy); see Leipoldt, Umwelt des Urchristentums,² III (Berlin, 1967), no. 293 and M. Malaise, Inventaire préliminaire des documents égyptiens découverts en Italie (ÉPRO 21, Leiden, 1972), pl. 26 with p. 236, where he suggests 'situle ou ciste?', ignoring the fact that a situla is never held in this way. The third figure in the Isiac group in the Vatican may be holding a vase with a similar function, although it is not strictly an amphora; see Leipoldt, op. cit., no. 292 and Malaise, op. cit., frontisp. The other inscribed vessels cited above may well have carried wine, and the drinking-cup published by Shore provides welcome illumination; like the jug from Southwark, it mentions a shrine of Isis, and its allusion to a guild of worshippers points to the most likely use of the jug. That the graffito was written after the clay had dried is no difficulty on this view; the pot-factory was probably supplying a variety of wine-users, and in this case they were adherents of a shrine of Isis.

J. Gwyn Griffiths

Note. The Reviews Editor cannot undertake to return copies of unsolicited books received by him.

Lexikalisch-grammatische Liste zu Spruch 335a der altägyptischen Sargtexte LL/CT/335A. By ROLF GUND-LACH and WOLFGANG SCHENKEL. Schriftenreihe des deutschen Rechenzentrums, Heft 5-8/1-2. Darmstadt, 1970. No price stated.

In this work of two volumes we have an attempt to apply the processes of the computer to the philological investigation of a single Coffin Text spell of considerable length, giving every occurrence of every linguistic phenomenon, and it must be said at once that it does with great thoroughness what it sets out to do, but I must confess that it seems to me that the authors have thrown up a mountain to produce a mouse. In the limited field chosen, a perfectly adequate analysis of the linguistic usages of this text could be made by hand in the traditional manner with a fraction of the cost and labour which have been expended on this production, which itself is subject to drawbacks that render it inconvenient and tiring for close research, though it might be useful for occasional reference. For one thing, using it puts an undue strain on the eyes, which are usually worked hard by Egyptologists in the ordinary course of their studies. When the potential user has mastered the code of transliteration, he is faced with pages of letters and numerals, mostly close-packed in small type and of most arid appearance, which not only are very fatiguing to the eye, but also need a straight-edge to keep it from straying from the right line; particularly bad examples of undue closeness are vol. I, pp. 244-6; II, pp. 318-21.

Another major disadvantage of this computerization is the excessive bulk of the results. Despite the close printing, this work occupies two volumes of text, 647 pages in all, and deals with one spell only, admittedly a lengthy one; the imagination boggles at the number of volumes in this manner it would require to cope with the whole of the Coffin texts. The cause of this great bulk is that the computer is merely a mechanism with no choice of its own; the scholar who works on his texts in the usual manner can omit or eliminate at will. Further, though at times one may balk at the drudgery of writing slips, the present reviewer is convinced that in working over texts by hand the student absorbs something of the 'feel' of the Egyptian language; it is indefinable but none the less it exists, and it cannot be acquired by conning over the mechanized results of a computer.

The final verdict must be that while this work is a valuable exercise in the computing of an Egyptian text, as an instrument of research it shows grave disadvantages, and it is not obvious how they are to be overcome.

R. O. FAULKNER

Ausgrabungen von Khor-Dehmit bis Bet el-Wali. Von Herbert Ricke, mit Beiträgen von Carl Fingerhuth, Labib Habachi und Louis V. Žabkar. Campagne Internationale pour la Sauvegarde des Monuments de la Nubie. University of Chicago Oriental Institute Nubian Expedition, Vol. II. Pp. xv+70, pls. 30, text figs. 81, 3 plans. Chicago, 1967 [1968]. Price \$20.00.

Dr. Ricke here presents us with the results of a two months' joint archaeological undertaking in 1960-1 of the Oriental Institute and the Swiss Institute, Cairo, directed by the author as part of the UNESCO campaign to save the Nubian monuments.

The concession lay in the region between Khor Dehmit and Kalabsha, on both banks of the Nile, an area which had been identified by some scholars as including the territory of the Blemmyes, expelled in the early sixth century A.D. by Silko, king of the Nobatae. It is safe to say at the outset that the Expedition has wrung every drop of information possible out of a most unpromising region, one ostensibly barren and with little evidence of human activity even in modern times. Preliminary reconnoitring was hardly encouraging: such cemeteries as were noted appeared to be completely worked out, with scarcely even a bone to be found.

However, north of the Beit el-Wali Temple (also recorded by the Expedition and published in 1967 as *The Temple of Ramesses II at Beit el-Wali*) some elaborate tombs, conceivably of kings or chieftains, were found and provisionally assigned by the excavators to the Blemmyes, or possibly to the X-Group (if they are not one and the same), or to another tribe or nation in the area. At the village of Tafa on the west bank a group of strategically-placed buildings ('Bergkapelle' or 'Bergheiligtum') was investigated on a height overlooking the Nile. Behind Tafa some scanty architectural remains ('Talkapelle') were skilfully planned and reconstructed on paper. Finally, the small island of Dar Mus ('Monastery of Moses') south of Tafa was explored, and the tumbled remains of a church recorded. Here was found a property deed of Year 666 of the Muslim era (= A.D. 1267-8), the latest occupation-date found in the area of the concession.

The main body of the report—the architectural record—is in German, and deals principally with the three buildings of the 'Bergheiligtum'. The northernmost is a massively-constructed vaulted building, with slit windows set high up in the rear wall. The entrance doorway was decorated with an ornamental frieze, illustrated in the report by a drawing of Jean-Jacques Rifaud, who journeyed to the Second Cataract in 1816. In front of the building was a stela in the form of an obelisk, carved with representations of a Ḥatḥor head, a marguerite and double uraei. Ricke makes the interesting suggestion that the building was a dream-incubation chamber, and cites parallels with the Sanatorium at Dendera.

The middle building was furnished with stone benches, set up against the interior walls, and on top of which were offering-tables. The southernmost building is somewhat similar to the first, but larger.

Dr. Žabkar contributes (in English) a description of three Christian tombstones with invocation prayers in Greek, together with a useful topographical list of published Greek-Christian epitaphs from Nubia. The remainder of the book contains a catalogue of the objects from tumulus graves, dated to the fourth and fifth centuries A.D., including glass vessels (of which a notable example, an engraved footed beaker of the fourth century is illustrated in the frontispiece), pottery (including a rare type which may have been the work of Blemmye or X-Group potters), and small finds, the last two categories ably described by Dr. Labib Habachi.

Geoffrey T. Martin

Re-used Blocks from the Pyramid of Amenemhet I at Lisht. By Hans Goedicke. The Metropolitan Museum of Art Egyptian Expedition. Publications, vol. XX. Pp. ix+162. Many illustrations. New York, 1971. Price not stated.

The Old-Kingdom blocks (and a few fragments, probably post-Old-Kingdom) published by Professor Goedicke emanate from the pyramid *enceinte* of Ammenemes I, the northernmost of the two pyramid complexes at El-Lisht at the entrance to the Fayûm, and were found during the Metropolitan Museum of Art's expeditions, active between 1906 and 1934. Maspero had earlier noted the presence of Old-Kingdom blocks, notably those lining the entrance corridor of the pyramid and others in an adjacent plunderers' tunnel.

It was apparent to the American excavators that in addition to these blocks and others found scattered in the surface debris, the superstructure of the pyramid itself contained many reused blocks with relief decoration. Short of dismantling the pyramid, naturally it was impossible to investigate these, but a record was made of those located in the shattered remains of the funerary complex and of those which could be extracted from the pyramid without endangering the superstructure. Thus the volume under discussion contains the selection of reused material available to the excavators, rather than a complete catalogue of every relief block at El-Lisht. A rich harvest undoubtedly awaits the archaeologists of the future if work were ever resumed on the site.

Some of the blocks have long been known from other publications and the fine quality of their relief decoration has excited admiration. Privately, perhaps, it might have been wondered if anything could be done with such a varied selection of broken bits and pieces, but Goedicke has shown what a wealth of important information can be extracted from such wreckage, and has produced a volume of great interest for Old-Kingdom studies and Egyptian art history. Comparatively few Old-Kingdom royal reliefs have survived *in situ*, and there are still many questions to be answered concerning the decoration of Old-Kingdom pyramid temples. The blocks now published add notably to the repertory and help fill important gaps, particularly in the history of Old-Kingdom art. Goedicke remarks that 'coming as they do from many different monuments, they cannot by themselves give us a well-rounded picture of any particular structure;

but a single fragment may serve to throw light on an element or style, and a number of such fragments together may form a pattern of the decoration of the royal monuments of the Old Kingdom. Thus we may be able to trace some scenes farther back then before, and once in a while the earlier representation may provide us with a new understanding.' The commentary which accompanies the physical description of each block admirably justifies this hope.

Necessarily much of the material can be dated only by style. Only eight blocks bear cartouches, those of Khufu, Khephren, Unas and Pepi II (?). Problems arise since it is clear that the court artists of the early Twelfth Dynasty consciously imitated not only the style but also the content and iconography of Old-Kingdom Memphite relief sculpture. As a result it is sometimes impossible to distinguish later from earlier work, especially when dealing with small broken fragments. Likewise our information (some of it still unpublished) on the decoration of royal monuments of the Old Kingdom, and even more on those of the early Twelfth Dynasty, is still rather sketchy. Despite these difficulties Goedicke, in emphasizing that the book is first and foremost a *catalogue* of the material, is able to make many plausible suggestions about the date and original provenance of the various pieces. In addition to those bearing royal names there are blocks depicting religious ceremonial, members of the royal entourage, nautical scenes, offerings, agricultural activities, as well as pieces with the remains of representations of human beings and animals, the former including a fragment showing a child being carried in a container on its mother's back.

There is material of every dynasty of the Old Kingdom. The Third (probably) is represented by a fragment from an unnamed private tomb, and bears interesting titles. Of the Fourth-Dynasty material Goedicke assigns blocks to the Mortuary and Valley Temples of Khufu as well as to buildings of that monarch so far unidentified. Of the Fifth Dynasty one item is from the Unas Causeway, others from the Mortuary Temple of the king as well as from buildings yet to be identified. Only four of the numerous blocks of Sixth-Dynasty date can be allocated, probably to a structure of Pepi II.

A point of peculiar interest is discussed in detail: why the builders of the pyramid of Ammenemes I should have gone to the trouble of transporting such blocks, often from considerable distances, to the Lisht pyramid plateau. Goedicke makes the illuminating suggestion that the selection of blocks was systematic, rather than the result of wholesale looting of the monuments of Ammenemes' predecessors, and is to be seen as deliberate dynastic policy by the founder of a new, and possibly usurping, royal house. Thus Ammenemes is linked to the great monarchs of the past in an act of 'spiritual participation' in the glory of the puissant sovereigns of the Old Kingdom.

There is a wealth of material here for study and discussion, and Goedicke must be congratulated on his excellent presentation of it. In this he is assisted by good photographs and beautiful facsimile line drawings, the latter being the work of Lindsley Hall. The book also bears all the marks of a careful, but anonymous, editorial hand.

Geoffrey T. Martin

Jewels of the Pharaohs. Egyptian Jewellery of the Dynastic Period. By Cyrll Aldred. Special photography in Cairo by Albert Shoucair. Pp. 256, with many illus., including 100 in colour. London, 1971. Price £4'95.

Ancient Egyptian Jewellery. By ALIX WILKINSON. Methuen's Handbooks of Archaeology. Pp. lxi+266, pls. 60, including 4 in colour, 77 illus. London, 1971. Price £8.50.

Egyptologists, both professional and amateur, have long felt the lack of an up-to-date handbook on Egyptian jewellery. The valuable earlier specialist studies, notably by Vernier, Ransom Williams, Brunton, and Winlock, have long been out of print. The plates illustrating certain of the jewels from the tomb of Tutcankhamūn in Mme C. Desroches-Noblecourt's *Tutankhamen* were a milestone in Egyptological publishing history, our eyes being opened thereby to the possibilities brought about by inexpensive colour photography. The more recent book on Egyptian jewellery by M. Vilímková is likewise well illustrated in colour, but lacks an authoritative text. Now, by an extraordinary coincidence, two books on Ancient Egyptian jewellery have appeared practically simultaneously. Fortunately, as it happens they complement each other to some extent.

Jewels of the Pharaohs will probably appeal alike to the specialist and to the general reader. Mr. Aldred is eminently qualified to write such a study, being not only a distinguished historian of ancient art but also a

gifted craftsman, as anyone will testify who has had the good fortune to see reproductions of Egyptian jewels made by his own hand, and exhibited in the Royal Scottish Museum, Edinburgh.

His introductory chapter deals with the discoveries of jewellery made in Egypt by archaeologists and plunderers. Subsequent chapters deal with the uses of jewellery (its amuletic nature is stressed), the craftsmen and artisans who were employed in the royal workshops and doubtless also to some extent as journeymen, and the materials and techniques used. We are reminded that jewels were made not only for the adornment of human beings but also for the statues of the gods.

To the non-technical mind the chapter on the methods of production is particularly lucid. Mr. Aldred has the enviable gift of literary style, and knows just how to emphasize his point with a memorable phrase or judicious archaism. Among several interesting points discussed, Mr. Aldred reveals that the Egyptians knew the art of enamelling. This has hitherto been denied, but he points out that at least one object in the Tutcankhamūn finery—a gold vulture pectoral—almost certainly had its cloisons fired *in situ*, a process which is characteristic of the cloisonné enamelling technique. A final chapter deals with the various ornaments used by the Egyptians: those of the head and torso and the limbs being treated separately, followed by a section of detailed notes on the plates. In short, an excellent book, brimful of information and ideas, beautifully illustrated and relatively inexpensive.

Mrs. Wilkinson's book Ancient Egyptian Jewellery covers largely the same ground, except that she begins with the Predynastic material and ends with the Twenty-sixth Dynasty, while Mr. Aldred excludes the Predynastic jewellery but includes material of the Ptolemaic Period. Inevitably to a large extent the same objects are discussed and illustrated, so that comparisons are bound to be made. One cannot help being struck by the disparity in the quality of the plates in the two publications. Mrs. Wilkinson's book is illustrated throughout in black and white, with the exception of eight in colour, and a number of the photographs will give rise to disappointment. Most of them do not do justice to her text.

After a chapter on the craftsmen, the author arranges her material first by period, each main epoch (Predynastic, Early Dynastic, Old Kingdom, etc.) being divided according to the following plan: historical resumé, notably archaeological discoveries containing jewellery, and classes of jewellery, arranged according to object: amulets, anklets, bracelets, collars and necklaces, diadems, earrings, finger-rings, girdles, pectorals. Not all of these necessarily, of course, occur in each historical period, but this kind of arrangement makes the book a very useful work of reference. An Index of museums and object numbers is provided.

The jewels that have come down to us represent only a minute fraction of what must have been made for personal everyday use, as well as for ritual and funerary purposes. Comparison of the two books makes one thing quite clear: only colour photography does full justice to the magnificence of much of the material. It is to be hoped that in time all the jewels from the Tutcankhamūn treasure and from other royal tombs will be properly published in colour. Meanwhile Mr. Aldred's book makes some of the objects available in fine photographs, and both authors deserve our gratitude for their full discussion of Egyptian jewellery and for filling a notable gap in Egyptological studies.

Geoffrey T. Martin

Pektorale nichtköniglicher Personen. Von Erika Feucht. Ägyptologische Abhandlungen, Bd. 22. Pp. ix+141, pls. 39. Wiesbaden, 1971. Price DM 65.

In recent years a number of studies on classes of Egyptian objects have been published by a new generation of young German scholars. Such catalogues have usually started life as doctoral dissertations. Dr. Feucht has already provided us with a corpus of royal pectorals (*Die königlichen Pektorale*, *Motive*, *Sinngehalt und Zweck*, Bamberg, 1967), and now turns her attention to pectorals made for private persons, one of many items of funerary paraphernalia designed to assist the dead through the dangers and uncertainties of the Underworld.

Hitherto most of our information on pectorals has been limited to a chapter in the second edition of Sir Wallis Budge's *The Mummy* (London, 1925) and to an article by Towry White in *PSBA* 15 (1893). Both studies were very brief and necessarily summary, and we congratulate Dr. Feucht on her industry in collecting and analysing so much new material.

In a long section of 45 pages preceding the Catalogue the author examines in detail all aspects of pectorals, including the various deities and combinations of deities and sacred emblems appearing on them. Pectorals

are, of course, intimately connected with the heart scarab, and many of them are designed with a sunken recess designed to receive such a scarab, or have scarabs depicted on them. They range in date from the Eighteenth Dynasty to the Ptolemaic Period. Two private pectorals of the late Twelfth Dynasty from the Royal Tombs at Byblos are included. These are rather clumsy products of local Byblite craftsmen imitating Egyptian jewellers' work. Other sections deal with the form, methods of attachment, material, and quality of pectorals. These are also found painted on sarcophagi, and are depicted in reliefs and on statues of gods, kings, and other royal and private persons, as well as on canopic jars and shabtis. Dr. Feucht illustrates representative examples of the various classes of pectorals described in the Catalogue in thirty-nine plates of line drawings.

Ideally a few photographs would have been included for comparison and to indicate the quality of work-manship. The present writer has had access to photographs of some of the objects drawn in Dr. Feucht's book, and it is apparent that she makes few concessions to the crudity of many of the pectorals. Indeed, some of the illustrations bear only a superficial resemblance to the originals. For instance, B.M. 29369 = plate vii, 66, is also illustrated by Budge, *The Mummy*, 2 pl. 19 (not mentioned in the catalogue entry for this object in Feucht, p. 79), and shows that this pectoral is in reality quite a well-made piece. The quality of many of the drawings leads one to suppose that the same holds good in other cases. Such lack of detail will disappoint the scholar looking for iconographical minutiae. This mars the publication, but does not, of course, invalidate it as a work of scholarship which will remain standard for many years.

Evidently on p. 139 the author has quoted the title of Dr. Faulkner's Concise Dictionary of Middle Egyptian from memory.

GEOFFREY T. MARTIN

Untersuchungen zur Wortfamilie bis-. By E. Graefe. Inaugural-Dissertation. Pp. xi+250. Cologne, 1971. Price DM 32.

Lexicography is a branch of Egyptological research to which even now far too little energy is devoted. We have, of course, the great Berlin Wörterbuch, but its shortcomings quickly become apparent to the practised user. The manifold gaps which still remain to be filled can be dealt with in a variety of ways. As Gardiner pointed out, individual dictionaries devoted to specific subjects—tools and weapons, nautical terminology, engineering vocabulary, food and food preparation, etc.—are badly needed and here the way has already been pointed by J. R. Harris's excellent Lexicographical Studies in Ancient Egyptian Minerals, but there is also another technique which must yield equally important results—the detailed analysis of particular roots and their development—and it can hardly be said that great progress has been made in this field. The present work is, therefore, all the more welcome as an object-lesson in what can be accomplished in this sphere, provided the investigation is conducted with a little imagination, full awareness of the difficulties which it inevitably poses, a willingness to admit ignorance when evidence fails, and, above all perhaps, an acute awareness of the cultural context within which Egyptian civilization unfolded—a quality which is regrettably all too often singularly lacking in linguistically-orientated Egyptologists.

Graefe is concerned in this thesis with words containing the consonants bis and listed in Wb. 1, 436, 1-442, 4. He begins his discussion on a cautious note by stating the difficulties which this type of etymological research encounters in Egyptian. He points out that some words may show similarities with others, purely as a result of linguistic or phonetic development, without there being any etymological relationship, and that isolating such cases is made particularly difficult by the nature of the script, which does not show vowels and also exhibits a tendency, simply by way of Volksetymologie, to give certain groups of words standard writings which quite misleadingly suggest that they are all cognate. Hence the only principle one can follow is to isolate the root meaning and then consider the possible semantic developments thereof. Having stated this principle Graefe proceeds to his analysis.

The problem, as he sees it, is to establish what connections, if any, exist between the word $\int \nabla bisi$ 'sich entfernen' (Wb. 1, 439, 10–13) and the other words showing the consonants bis. He argues convincingly in favour of a relationship by postulating an active 'to remove, separate' as the prerequisite of the exemplified

reflexive. This is the root meaning of bi:-* and permits us to explain the evolution of all bi: words suspected of a connection by giving rise to two major developments:

(a) Bis certainly has the sense 'Sternenmaterie' in many religious texts (e.g. Pyr. 138b ff.; 2051c ff.; CT VI, 9d ff., 473 (BIC); 24 a-b, 474 (BIBo)) and is a natural semantic development of the root via 'that which is removed, placed far away' or even 'separate, special'. It denotes, however, not only the material composing the stars but also meteoric stone or iron (in PT 1293a, 1301b, 1364b the determinative resembles a burning meteorite). When similar material of non-meteoric origin (e.g. copper ore) was identified, the term was applied to that also. Thus developed the common meaning 'ore, metal' with the natural extension that it could denote any metallic substance irrespective of whether it was ore or metal obtained by smelting. Sinai acquired the name $\sqrt[4]{\bigcirc}$ (Wb. 1, 438, 13) 'Ore-district' as the source of ore par excellence, and it is also possible that the meaning 'mine' evolved (cf. Urk. IV, 825, 12; 1111, 14) but the evidence is fragile and the word in question may simply mean 'Erzgebiet' in the sense of an area from which metallic ores and minerals were obtained. In the Nineteenth Dynasty, with the importation of iron from abroad, the expression bit n pt 'iron' was coined (Wb. 1, 436, 14). Bis šm' (op. cit. 438, 10) and Bis Ksi (op. cit. 11) are probably haematite from Upper Egypt and Cusae respectively.

From the meaning 'ore, metal', i.e. a solid mass of material with its associations of firmness, durability, and steadfastness (cf. op. cit. 436, 10-11) developed metaphorical uses like sbty n bist, inb n bis(t), etc. and that, in turn, paved the way for the meaning 'shell' properly of an egg shell (cf. the use of *inr* in this sense, op. cit. 98, 6) but subsequently through the role of the 'Urei' in mythology (see H. Bonnet, Reallexikon, 162 ff.; H. Kees, Götterglaube, Index, s.v. 'Ei'), it was used of the heavens regarded as part of the primaeval egg. This in turn yielded the meanings 'Himmel, Himmelgewässer' (cf. Wb. 1, 439, 6-9). It is possible that the meaning 'egg-shell' is the source for $\bigcup \bigcup_{i=1}^{n} etc.$ bi(i)t 'behaviour, character' (op. cit. 441, 17–19) and $\bigcup \bigcup_{i=1}^{n} etc.$ 💆 🐧 bù 'example, model, paradigm' (op. cit. 441, 14–15) since, to the Egyptian, qualities of character showed themselves pre-eminently in the physical exterior (cf. the metaphorical use of iwn, op. cit. 52, 14-16; Anglice a man may be said to have a particular 'stamp').

(b) The meaning 'treasure' develops via the nuance 'that which is separated from the ordinary > precious'. Often the 'treasures' are regarded as a strange phenomenon, and we are told their like has never been seen before. It is used particularly of 'treasures of the earth', i.e. metals and minerals which, in the texts of the New Kingdom and later, are said to have been hidden in the mountains and to have come forth specifically for the king. It also applies to the 'Precious Things, Treasures' captured from his enemies (Urk. II 15, 10) or acquired by trade (ibid. IV, 329, 1). The expression sr biryt 'to make known treasures' (ibid. IV, 2059, 12) which is used to describe the ceremony whereby the king, seated on the tntst throne, displays to his people the proceeds of his military activities, falls into precisely this category, as does the use of biryt in descriptions of the king's ceremonial appearance at the sšd-window (e.g. K. Kitchen, Ramesside Inscriptions, IV, I (Oxford, 1968), pp. 7, 15 ff.). In all cases it is the gods who are responsible for the bisyt and the appearance of these treasures was regarded as one of the signs of the god's favour to the king and as a sign of a harmonious world order. Since they form a guarantee of the continued well-being of Egypt, it is not surprising that the sr biryt and related ceremonies assumed the character of a popular festival.

From this use of biryt, with all its cosmic overtones, evolved biryt 'sign, omen' which denotes an event which is out of the ordinary and at the same time god-given. It is employed of such famous cases as the accounts of Nebtawyre Montuhotpe's expedition into the Eastern Desert where the biryt are clearly regarded as a divine benefaction demonstrating the harmony between the god and the king (J. Couyat and P. Montet, Les Inscriptions hiéroglyphiques et hiératiques du Ouâdi Hammâmât (Cairo, 1912), pl. 29 n. 110; pl. 36 n. 191). Graefe rightly insists that neither here nor elsewhere does the word biryt mean 'Wunder' in the sense 'miracle' ('Ereigniswerden des Unmöglichen'); for the concept of a fixed natural law which is presupposed by such a concept is totally foreign to the Egyptian (for that matter to almost all primitive and

¹ Montuhotpe IV, not III as Graefe numbers him on p. 113 (see W. C. Hayes, CAH I, ch. XX, Fasc. 3. (Cambridge, 1961), p. 31).

ancient civilizations). It implies rather that something strange and unexpected has happened and, above all, that the gods are behind it. Hence it is much better translated 'Manifestation der göttlichen Macht, Offenbarung, Prodigium' or 'Zeichen'.

This summary covers only the main lines of Graefe's discussion but even that must indicate what a wealth of valuable material his book contains. His discussion leads to a much deeper understanding of several extremely common words and this, in turn, not infrequently yields a considerable improvement both in translation (cf. particularly the texts discussed on p. 17, Doc. 22) and in interpretation (cf. pp. 13 ff.). For the historian the analysis of the relationship between Pharaoh and biryt is of great value, and there is also a new interpretation of \frown the nsw bit(y) name Miebis (Mr pw bis(i)) 'Er ist ein fester Kanal' referring both to the role of the king 'als Garant der Ordnung "rühender Pol" gegenüber dem Chaos "Wasserfluten", and also 'auf die Konsolidierung des Bewässerungssystems zu Anfang der ersten Dynastie'). In the sphere of metallurgy and minerology Graefe has gone a long way towards reducing to order and explaining the apparent confusion which surrounds the use of words like $\bigcup \Box$ (cf. Wb. 1, 436-8, 11). He also discusses the vexed question of the reading of the sign D found in rubrics over metal-workers in the Old Kingdom and translated 'ore, ore-workers', convincingly showing that, despite Kaplony's ingenious attempt to establish a value bis or bisi (Kleine Beiträge zu den Inschriften der ägyptischen Frühzeit. Ägyptologische Abhandlungen, 15 (Wiesbaden, 1966), 54 ff.), we are still no nearer knowing the correct reading than we ever were. All of this is supported by more than seventy pages of notes and completed by four Indices. The one criticism which I feel bound to make concerns the extremely low standard of calligraphy shown throughout this study. If an Egyptologist cannot write hieroglyphs with some pretension to elegance, then he would be well advised to enlist the aid of someone who can. That apart, however, Graefe is to be congratulated on a very fine piece of work. Alan B. Lloyd

Les Guerres d'Amosis, fondateur de la XVIII^e dynastie. By Claude Vandersleyen. Monographies Reine Élisabeth, 1. Pp. 246, pls. 4, 2 maps. Brussels, 1971. Price c. £15.50.

This volume, in origin a doctoral thesis, is the first of a new series of monographs instituted by the Fondation Égyptologique Reine Élisabeth. The author's aim has been to situate more precisely in time the military acts of Amosis, and to trace more accurately on the map the movements of his armies—a formidable task, given the present state of knowledge concerning the early Eighteenth Dynasty. After a brief introduction outlining the importance of Amosis's reign, the data to be considered, and the methods to be followed, the book consists of six main divisions: the first three sections, following closely the order of events as related in the biography of Aḥmose, son of Ibana, which provides a relative chronological scheme for Amosis's military activities, deal with the expulsion of the Hyksos, the Nubian campaign, and the rebellions of Aata and Teti-an respectively, while the fourth examines the supplementary evidence for operations in Asia; the fifth considers the importance of Aḥḥotpe's role during the reign of her son, and the sixth is a synthesis of the preceding arguments and conclusions.

Part I opens with an account of the inscription (and accompanying relief) of Ahmose, son of Ibana, and with the history of its publication, then quickly passes on to a consideration of its content, beginning with Ahmose's origins, youth, and early career as a ww in the king's service. The discussion of the latter term is a little confusing. Vandersleyen's conclusion (p. 30) that 'ww n'était ni un grade, ni un titre, mais un nom commun de métier' (i.e. 'soldier' in the professional sense) is not entirely consistent with the earlier statement that 'le ww est toujours mis au bas de l'échelle hiérarchique' (p. 28), and his further affirmation that 'dans le récit de Qadech, le roi se plaint de n'avoir autour de lui ni officier, ni ww' (p. 28) seems to be based on a misunderstanding of the passages quoted in support. In each of these, Poems 89, 199, and 265, the basic contrast is between the 'infantryman' (ww) and the 'chariot-warrior' or 'shield-bearer' (snny or krew); in other words the king is saying that neither foot nor horse came to his aid. Curiously, though the discussion is based almost entirely on Schulman's documentation, no reference is made to the latter's conclusions (cf. A. R. Schulman, Military Rank, Title, and Organization in the Egyptian New Kingdom, 37, par. 82) that ww meant basically 'infantryman' and was the lowest rank of the infantry, but could also be of more general designation indicating only 'soldier'. (Another possibility that might be taken into account is that ww evolved in meaning from 'soldier' in the general sense to the more specific 'infantryman', perhaps with the

emergence of the chariotry as a distinct and separate branch of the army.) The 'meat' of this first section is reached with Ahmose's account of the siege of Avaris. For the dating of the latter event and the actual expulsion of the Hyksos from Egypt, Vandersleven, following Nims (Thebes of the Pharaohs, 199 n. 2) and von Beckerath (Zwischenzeit, 209-11), utilizes the entries in the Rhind Mathematical Papyrus for Year 11 of an unnamed king subsequent to Apophis (quite possibly Amosis himself, though, as the author shows, even if it be that of Khamudi, who is the only feasible alternative, it does not materially affect the argument). These seem to record among other things military operations against Heliopolis and Sile, which, according to Vandersleyen, would constitute a logical strategic prelude to the siege of Avaris, whose final capture must, therefore, have taken place after Year 11, and at the earliest in Year 12, if we accept a minimum of c. one year (with a max. of c. four) for the duration of the siege (cf. Redford, History and Chronology of the Eighteenth Dynasty, 48). This accords well with the chronological approximations afforded by Ahmose's biography. Moreover, the author would see a direct allusion to these operations in Ahmose's account of his activities on land, which in his narrative immediately precede the siege of Avaris (cf. Urk. IV, 3, 5 and 6)—an attractive idea, but one based on a rather subjective view of the lines in question. Another view, taking the iw hms-tw, etc., of the following line (Urk. IV. 3, 7) as a circumstantial-temporal iw sdm f limiting the preceding main clause (the only other example of a iw sdm·f in the text (Urk. IV. 2, 16) would support this interpretation) would be entitled to see in these lines a reference to operations, perhaps subsidiary expeditions, carried out by the king during, not before, the siege of Avaris. Or again, it might be objected that the word swtwt, when used of royal excursions, is more normally associated with activities of a recreational or sporting nature (cf. e.g. Urk. IV, 91, 14; 1541, 12; 1542, 11; P. Anast. IV, 11, 1; and Decker's remark, Die physische Leistung Pharaos, 162 n. 55). However that may be, we know that the subsequent siege of Sharuhen lasted three years (cf. Urk. IV, 4, 14), which, with the capture of Avaris placed at the earliest in Year 12 (see above), gives a terminus post quem of Year 15 for the taking of Sharuhen. This first part is concluded with a discussion of the so-called 'gold of honour' consisting of jewellery, collars, amulets, etc. awarded by the pharaoh, including an outline of their evolution in usage from the representational evidence of the New Kingdom.

Before dealing directly with Amosis's Nubian campaign (Part 2), the author examines its historical background and traces Egypt's relations with Nubia prior to the Eighteenth Dynasty. Among other things in this excellent survey, he proffers a valuable new dating criterion—the form of the hieroglyph of the moon, a common element in names at this period—which confirms Säve-Söderbergh's date (cf. JEA 35 (1949), 50 ff.) of the extreme end of the Second Intermediate Period for the stelae belonging to expatriate Egyptians in the service of the prince of Kush (as well as being of much wider application, fully discussed in an Appendix). In considering the extent of Kamose's activity against Nubia, he rightly stresses the importance of the rock-inscription from Arminna (cf. W. K. Simpson, Heka-nefer, 34 and n. 14, fig. 27), mentioning a 'king's son', Teti, under Kamose, which may imply that the reconquest or even the reorganization of the territory had already begun under this king. Moreover, if he is right in ascribing to Kamose the badly damaged cartouche on a stela found at Buhen belonging to a certain Ahmose (cf. Randall-MacIver and Woolley, Buhen, 90-1)—a point which he argues forcefully—then it is even possible that Kamose reoccupied Buhen; for further evidence of such activity cf. Černý, MDAIK 24 (1969), 91 f. In the light of this, Vandersleyen would see Amosis's contribution to the reacquisition of Nubia as primarily one of consolidation rather than reconquest, and his expedition to *Hnt-hn-nfr* (cf. Urk. IV, 5, 4-II)—a geographical term defined by the author as designating the region lying directly beyond the Second Cataract and comprising the state of Kush—as a campaign not of conquest but of intimidation to reaffirm the pharaoh's hold on the southern boundary at the Second Cataract.

Turning to the rebellions of Aata and Teti-an (Part 3), which in Aḥmose's account follow closely upon Amosis's return northwards from his expedition to <code>Hnt-ḥn-nfr</code> (cf. Urk. IV. 5, 16-6, 15), the author argues that nothing in the evidence compels us to connect them with the king's Nubian activities, but that they should more logically be seen as essentially internal affairs, reflecting a situation where Amosis still needed to impose his authority on a land that had been divided for several generations, and whose local potentates had found in Amosis's absence an opportunity to re-establish a disunity to their advantage. In support of this he cites, inter alia, the absence of geographical indications which usually attend on the descriptions of foreign wars; the exceptional nature in size and importance of the rewards granted to Aḥmose in these two cases; the explicit mention, at least in Teti-an's case, of the leader of the opposition (cf. Kamose's naming of

Teti, son of Pepi, in the Carnarvon Tablet); and the account in Amosis's Karnak stela of Aḥḥotpe's actions in dealing with dissident elements within the land, which the author believes pertains to the same situation (see Part 5). He would also see in the use of the auxiliary verb chen to introduce the accounts of the two rebellions (cf. Urk. IV, 5, 16, and 6, II) a specific indication of their close proximity in time, in the first place to the preceding campaign, and in the second to one another, but this is less convincing.

With Part 4, the author turns to a consideration of the number and extent of Amosis's campaigns in Asia. Apart from Ahmose's reference to the siege of Sharuhen and the slaying of the Mntyw Stt (cf. Urk. IV, 4, 14-15, and 5, 4), the only other direct allusion to military operations by Amosis in Asia is that of the former's fellow-townsman, Ahmose-Pennekheb, who briefly recounts that he served under Amosis in Djahy (cf. IV, 35, 16-17). It has generally been assumed that the operations against Sharuhen and those in Djahy, alluded to by Pennekheb, were quite distinct—the argument being that since Sharuhen was taken in the first half of Amosis's reign, then Pennekheb, who lived on to serve under successive kings and finally died in the reign of Hatshepsut, would have been too young to have taken any part in this action—so that Amosis must, therefore, have carried out a second campaign, later in his reign, a conclusion lent further support by the mention of oxen from the 'plains of the Fnhw' in a quarry inscription of Year 22 (cf. Urk. IV, 25, 12). However, with the lowering of the date for the taking of Sharuhen to at the earliest Year 15 (see above), the necessity for postulating this second campaign is removed, it being quite possible for Pennekheb to have been present at the siege of Sharuhen, or at least to have participated in the same expedition, if, as seems likely, it involved operations further afield. Nor do the different geographical designations impose upon us the need to multiply itineraries; the author shows that the region of Djahy, a general term for 'Asia' (pp. 90-100), began at the north-eastern boundary of Egypt, and therefore naturally included within its limits both Sharuhen and the plains of the Fnhw—the people inhabiting at this time the lowland regions of what would one day be Phoenicia (in his extremely interesting study of the term trw Fnhw, pp. 102-19, Vandersleven resuscitates the old view of Sethe that Fnhw and φοίνικες are basically the same word, or at least shared a common ancestor)—while the reference to the Mntyw of Stt similarly implies no topographical incompatability, the latter being merely a designation for a collection of people occupying the territory called elsewhere Djahy (pp. 119-20). As to the total extent of this one campaign (if such it was), the evidence of the Tombos stela of Tuthmosis I, carved in Year 2, would seem to demand considerable territorial expansion into Asia on the part of one of the latter's predecessors, possibly as far as the Euphrates itself, if line 13 is to be taken literally (cf. Urk. IV, 85, 13 and 14). With Vandersleyen, the only plausible candidate is Amosis, the welldocumented exploits of the latter being conclusive, as set against the total lack of evidence for any such activity by Amenophis I in Asia (as opposed to Nubia). Indeed Amosis's successes in the north, considerably aided, he suggests, by the contemporaneous Hittite attack on Babylon and its consequent reverberations (pp. 123-4), may have been so complete as to preclude the need for similar operations by his successor.

Next (Part 5), comes an evaluation of Ahhotpe's role during the reign of Amosis in the light of the evidence afforded by his great Karnak stela (Cairo CG 34001) and, in particular, by the striking passage in which Ahhotpe is eulogized (Urk. IV, 21, 3-17). This stela has generally been assigned to the early part of the reign, owing largely to its similarity in design to that of Kamose. Vandersleyen would prefer a lower dating, arguing that the hostile references to *Hnt-hn-nfr* and tiw Fnhw (cf. Urk. IV, 18, 5 and 6) clearly refer to the king's Nubian and Asiatic campaigns (if so, it is strange that the text is silent on what would surely have been considered his greatest achievement—the actual expulsion of the Hyksos from Egypt), and that, therefore, the stela must have been carved after Year 15 (and before Year 22, according to the criterion of the moon sign). Ahhotpe's titles and actions may then be squared more satisfactorily than hitherto with the other known facts of the reign, reflecting, on the one hand, the very real authority that she wielded, both over Egypt and over the conquered Asian territories and, on the other, the vital part she played in maintaining loyalty to the throne in the king's prolonged absence in foreign parts (the mention of her expelling of rebels—Urk. IV, 21, 15 and 16—immediately recalls the insurrections with which Amosis had to deal on his return from the south). The queen's authority abroad is specified in her title 'mistress of the banks of the Hiw-nbwt' (cf. Urk. IV, 21, 4), a term, the author affirms after a long analysis (pp. 139-74), indicating the numerous plains enclosed in the mountains of Palestine and the Lebanon (or their inhabitants), and thus designating basically the same region as trw Fnhw, though a different aspect of it. One of the author's more startling conclusions from his examination of this term is his denial of the generally-held view that

Hiw-nbwt meant 'Greeks' in the Late Period; cf. pp. 143-54. A valuable study of the word mnfyt (pp. 176-91), often erroneously translated 'soldiers', reveals that one of Aḥhotpe's key actions had been to secure the cohesion of the intelligentsia or social élite, from which were recruited the high officials of state (cf. Urk. IV, 21, 11). This section is concluded with a brief discussion of the date of Aḥhotpe's death, placed between Years 16 and 22, and a consideration of the relative roles of Tetisheri, Aḥhotpe, and Aḥmose-Nefertari, which leads the author to suggest that the queens of this time succeeded one another in their public roles in strictly chronological order.

The main points of the synthesis (Part 6) may be summarized as follows: on the death of Kamose, Amosis ascended the throne while still a young boy (supported by the examination of the king's mummy by Elliot Smith, Royal Mummies, 16, who concluded that the king was at the most forty years old at death); this would explain the ten years or so of apparent inactivity at the beginning of his reign. The operations against Heliopolis and Sile in Year 11 give a terminus post quem of Year 15 for the taking of Sharuhen. Between Years 15 and 22, by which time peace had probably returned, there occurred successively the completion of the Asiatic campaign (if the taking of Sharuhen did not mark its end), the Nubian expedition consisting of the reoccupation and cleaning-up of the Second Cataract, the reduction of the rebellions of Aata and Tetian, and the return to calm. The last Years (22-5) would probably have been devoted to the reorganization of the land. Campaigns abroad may, therefore, be reduced to two in number; the first, in Djahy, included the siege of Sharuhen, but allusions in documents to the 'plains of the Fnhw' and the Hiw-nbwt suggest that the action was extended well beyond, possibly as far as the Euphrates itself; the second re-established the southern frontier at the Second Cataract and discouraged the prince of Kush from menacing the border, and while it is unlikely that Amosis penetrated further south, the fact that his two successors were able to push on to the Third and Fourth Cataracts respectively shows how firm a base of departure he had prepared for them. This final part ends with a brief evaluation of Amosis's role as founder of the New Kingdom.

The book is concluded with an appendix, dealing in full with the form of the hieroglyph of the moon as a dating criterion, several useful indexes, two maps—of Nubia and the Near East respectively—and four plates, which illustrate various relevant monuments.

One is, perhaps, surprised on first reading the title of this book that such a subject could sustain a work of this length. That it does so is, in the event, a tribute to the author's exemplary thoroughness of approach to the scant and often all too brief documents that constitute the main body of evidence. Inevitably, the final solution to the many problems of this period must await new evidence of a less equivocal nature. In the meantime, we can be grateful to the author not only for the systematic manner in which he has brought together and evaluated all the data available at present but also for his many fresh and original insights into the possibilities arising therefrom. Certainly, this book is essential reading for anyone seriously interested in the late Seventeenth to the early Eighteenth Dynasties.

W. V. Davies

Das Grab des Horemhab im Tal der Könige. By Erik Hornung with the collaboration of Frank Teichmann. 305×220 mm. Pp. 51, pls. 66 (42 in colour) + coloured frontispiece, folding plan and sections. Bern, 1971. Price Sfr. 160.

The tomb of Ḥaremḥab is, except for that of Tut'ankhamūn, the last royal tomb to be discovered in the Valley of the Kings at Thebes. It was found in 1908 by Theodore M. Davis and published by him in 1912. In Greek and subsequent times it lay forgotten, with the fortunate effect that the decorations suffered no form of human interference, and the only damage is in parts of the shaft where rain-water has penetrated on occasion. This undisturbed state is the more important in that the tomb stands at a turning point, being the heir of the Eighteenth-Dynasty tombs and the forerunner of those of Ramesside times. Its decoration is at once brilliant in colour and careful, even innovating in detail; and, since the work obviously stopped in midcareer, demonstrative of every stage of execution.

Today the increasing humidity of Upper Egypt, arising from Lake Nasser, is beginning to affect the unsurpassed decorations. This, and the fact that the walls are in so good a state that colour photography is immediately possible without prior cleaning, determined the choice of this tomb for the initial publication of work intended to cover tombs in this valley, and more especially those not completely recorded.

¹ Theodore M. Davis, The Tombs of Harmhabi and Touatankhamanou (London, 1912).

This book is a picture-book with a difference, for instead of tantalizing the archaeologist with beautiful illustrations of parts selected only for artistic interest, it reproduces all the decorated surfaces of the tomb with completeness as its sole aim. This is effected in a series of 66 plates, including the pink granite sarcophagus of the king, which is still *in situ*. The colour printing is good but tends to vary a little, as can be seen by comparing the difference in tones, for instance, between plate 15b and a detail from it on plate 11b, or between plate 20b and detail plate 21a. However, these variations may well be as such due to the lighting used in the tomb whilst photographing as to the printing.

A most valuable aspect of these plates is the clarity with which they exhibit the original working methods: the setting-out; the rough preliminary sketch in red, figures first, then hieroglyphs; the accurate drafting in black; the cutting out in relief; the final colouring. Before the setting-out the prepared wall surface was made ready with a bright grey wash and, when the relief work was finished, a white wash was laid on which served as a covering coat, preventing the brilliancy of the final colour being ruined by absorption. Work started at the bottom of a wall and was continued upwards, one figure being finished at a time. All stages of the work were going on together from initial rock-cutting in one place to final painting in another. The abruptness with which the work in the tomb was abandoned with the happy effect for us of providing this demonstration of methods, is nowhere better illustrated than on plate 23b, where the background colour between the figures stands rough-edged and not even covering a complete piece of the work.

The plates are preceded by fifty-one pages of introductory matter in which Hornung, in a most smooth and pleasing German, goes into the career and political position of Ḥaremḥab and into the layout and decoration of the tomb. Teichmann, who assisted Hornung in the work, has written a chapter on the working methods. Hornung then concludes with a chapter on the finds made in the tomb when it was discovered, and a chapter containing a description of the plates with a translation of all texts and legends apart from those of the Book of Gates.

The tomb of Haremhab is the first to contain the Book of Gates, which is set out on the walls of the Sarcophagus Chamber. Hitherto the royal tombs had used the Book of the Secret Chamber (commonly called Amduat). The existence of this first edition, if it may be so called, of the Book of Gates naturally adds considerably to the importance of the publication of this tomb, despite the fact that the abrupt abandonment of the work left it incomplete. Hornung says that, as with the Book of the Secret Chamber, no compilation date is known for the Book of Gates, and he even speculates as to whether it could have been a new composition in response to the religious ideas put forward by Akhenaten. He further points out that under Haremhab no infamy was yet attached to Akhenaten, that being a development of the succeeding dynasty. His whole attitude is summed up in the words, 'The illustrative programme of Haremhab's Sarcophagus Chamber is, like his whole programme of government, a combination of restoration and revolution.'

This book, which concludes with a folding plan and a section of the tomb, is not only beautifully produced, but is an indispensable source of information for any scholar interested in tomb development, religious development, or art in Ancient Egypt.

C. H. S. SPAULL

Nofretari. A Documentation of her Tomb and its Decoration. Introduction by Gertrud Thausing. Commentary by Hans Goedicke. Monumenta Scriptorum, frühe Schrift- und Bilddenkmäler. 360×260 mm. Pp. 55, colour plates 155, 2 plans. Graz, 1971. Price öS 2850.

It is fitting that the exhaustive publication of the smaller rock-cut temple at Abu Simbel, which was constructed by Ramesses II in honour of his queen Nofretari, should be followed by the equally complete publication of her beautiful tomb in the Valley of the Queens at Thebes, albeit by another organisation. Both structures are unusual in the honour conceded to a woman by the king, and in the delicate femininity of their decorations. Dr. Goedicke, indeed, points out that there are many indications to suggest that Nofretari was no ordinary queen, and that she enjoyed a position superior to that of former queens. Whether this was due to her family connections or to her personality there is no way of knowing.

This book is a volume in the series 'Monumenta Scriptorum', the laudable aim of which is, to quote the words of the publishers, 'die Erschließung einmaliger Originale der wichtigsten Denkmäler der Schrift und der mit ihnen verbunden Bilder in Form vollständiger facsimiler Wiedergaben.' This has certainly been achieved. A visit to this tomb in the flesh could scarcely be more rewarding than is a perusal of this book.

The photographic recording of the tomb in colour was carried out under the supervision of Frau Dr. Herta Machold, to whom this book is dedicated, she having unhappily died as the result of a motor accident in the meantime. Her very last article "Hem" als Verbindung von Geist und Stoff, reprinted from Kairos, is included here, so that a few actual words from her pen may appear in the book for which she did so much. The colour plates resulting from her work are arranged in three sections. The first section, 'Location Photographs', is made up of 15 plates giving general views which enable one to stroll through the tomb, looking this way and that, and so getting an impression of the whole. Each plate is faced by a plan indicating the position of the camera and the extent of the view it is taking. 'Documentation' is the title of the second section, which comprises 115 plates together showing every inch of wall decoration to a uniform scale of 1:15. Again a plan accompanies each plate and shows with a thickened line the location of the wall surface depicted. The third section, 'Details', has 25 plates of selected scenes, figures, and parts of figures, to very much larger scales so that the detail can be appreciated. Finally there are two sheets; one a general plan and sections, the other a plan only which shows all the camera positions and plate numbers. These sheets can be unfolded clear of the other plates for constant reference while using the book.

A written commentary and description, plate by plate, is provided by Dr. Hans Goedicke, to which he adds some introductory remarks concerning the tomb and its occupant. He also points out that the decorations have deteriorated badly since the discovery by Schiaparelli in 1904 and that, attempts to halt this having failed, the recording of this very important tomb has become a matter of urgency. There is also an essay by Dr. Thausing called 'Nofretari und ihre Zeit' in which the queen, her tomb, and the religious conceptions involved are discussed.

It is to be noted that the prefatory remarks 'Organisation and Structure of the Illustrations' are given first in German and then in a not always happy English; Dr. Thausing's essay is entirely in German, Dr. Goedicke's in English; all the plate captions are in English. It would have been better if all the written matter could have been in both languages. This, however, is a very small criticism to set against the thoroughly satisfactory, if expensive, archaeological record of the whole of queen Nofretari's tomb which this book provides.

C. H. S. SPAULL

Le Petit Temple d'Abou Simbel, 'Nofretari pour qui se lève le dieu-soleil'. By Chr. Desroches-Noblecourt and Ch. Kuentz. Ministère de la Culture. Centre de Documentation et d'Étude sur l'Ancienne Égypte. Mémoires, tome I. i: Étude archéologique et épigraphique. Essai d'interprétation. 335×270 mm. Pp. xix+243, figs. 33, frontispiece in colour. II: Planches. 435×320 mm. Pp. x, pls. 127, general map of Nile from Third Cataract to the Mediterranean. Cairo, 1968. £E 25.00.

The Documentation Centre plans to produce a series of *Mémoires* on those monuments of Nubia which have been the objects of such intense work in recent years. The present two volumes are the first of this series. Well-bound and excellently printed, they provide a complete record of the smaller of the two rock-cut temples at Aswân. The larger one will be the subject of the next memoir. In the first volume there is a description of the temple, inside and out, wall by wall, scene by scene. All the accompanying legends are printed in hieroglyphs and translated. There is a very full commentary, largely in the form of notes, and a preface in Arabic and in English. In the second volume are the plates; these comprise an axonometric view pin-pointing the part of the temple involved, a reproduction of a photograph of that part, and a finely executed line-drawing. In addition many areas are reproduced photogrammetrically and, where appropriate, in colour.

Unlike its larger companion, the smaller temple has been largely neglected during the whole of the present century, and is virtually unpublished. It is composed of a façade dominated by six colossal statues, four of Ramesses II, two of his queen Nofretari; a pillared hall, a vestibule, and a sanctuary on the rear wall of which there is a relief depicting a shrine in which stands Hathor of Ibshek with the king standing protected between her legs, the whole in full face. The scenes in this temple are of considerable delicacy and there is a sense of youth and beauty as regards both the king and the queen. The colour, in so far as it is preserved, has a golden yellow atmosphere most fitting in a structure devoted certainly to Hathor and, in the opinion of the authors and many others, to the cult of queen Nofretari also. It is in fact quite remarkable how the queen is not just in evidence, but always of the same stature as the king and thus his equal. She even appears behind the king in the essentially masculine illustration of the slaying of the enemies of Egypt.

These two volumes constitute a remarkable and most valuable study. A full record and description is naturally to be expected of such a book, but wholly unexpected is the richness of the commentary. So often the commonplace legends that accompany temple scenes are, at best, merely translated, but here massive documentation and well-argued comment is provided on every detail, so that precious help is available to the student of the legends that accompany the scenes on temple walls. The only pity is that there is no index of words and expressions, divinities and scenes, discussed. C. H. S. SPAULL

Centre de Documentation et d'Études sur l'Ancienne Égypte. Collection scientifique.

Le Temple d'Amada. Cahier I, Architecture. By H. EL-ACHIERY, P. BARGUET and M. DEWACHTER. Pp. vii+14, pls. 38, 13 plans. Cairo, 1967. Cahier II, Description archéologique. By P. BARGUET and M. DEWACHTER. Pp. i+29, pls. 109. Cairo, 1967. Cahier III, Textes. By P. BARGUET, A. ABDEL HAMID Youssef, and M. Dewachter. Pp. i+59, pls. 1. Cairo, 1967. Cahier IV, Dessins — Index, Table de concordances. By Mohammed Aly, Fouad Abdel-Hamid, and M. Dewachter. Pp. i+37, pls. 85. Cairo, 1967. Cahier V, Les Inscriptions historiques. By J. ČERNÝ. Pp. iii+10, pls. 11. Cairo, 1967.

Le Speos d'el-Lessiya. Cahier I, Description archéologique, Planches. By Ch. Desroches-Noblecourt, S. DONADONI, GAMAL MOUKHTAR, with the collaboration of H. EL-ACHIERY and M. DEWACHTER. Pp. v+27, pls. 41. Cairo, 1968. Cahier II, Plans d'architecture, Dessins — Index. By H. EL-ACHIERY, M. ALY and M. DEWACHTER. Pp. 11, pls. 43. Cairo, 1968.

La Chapelle ptolémaïque de Kalabcha. Fascicules 1 and 2. By H. DE MEULENAERE, M. DEWACHTER, with the collaboration of M. ALY. Fasc. I. Pp. iv+6, pls. 10. Fasc. II. Pp. 20, pls. 34. Cairo, 1964-70.

La Ouabet de Kalabcha. By F. DAUMAS. Pp. v+9, pls. 25. Cairo, 1970.

Graffiti démotiques du Dodecaschoene. Qertassi — Kalabcha — Dendour — Dakka — Maharraga. By E. Bresciani. Pp. v+7, pls. 100. Cairo, 1969.

All volumes in portfolio form, 270×210 mm.

The Documentation Centre¹ had not long been in existence when the implementation of the High Dam project necessitated the turning of all its energies to the task of salvaging all that was practicable of the archaeological information and remains lying in that part of Nubia which was to be flooded. In 1960 an international appeal to this end was launched by UNESCO, as the result of which Egyptologists from Egypt and the rest of the world mounted expeditions which, over the ensuing years, laboured to gather the desired information and to save the standing monuments. Their efforts were rewarded by the successful removal and re-erection of the Nubian temples, some in the vicinity of their former sites, others as gifts in the countries that had helped with the work. In addition masses of surveys, photographs, copies of inscriptions, as well as notes and records of all kinds were accumulated. Now these must be published if they are not to become little-used, perhaps even largely forgotten, material stored away in archives. A praiseworthy start has been made with this gigantic task under the overall title of 'Collection scientifique', and under the editorship, initially of Mme Ch. Desroches-Noblecourt and Dr. Ahmed Badawi, and then of Mme Ch. Desroches-Noblecourt and Dr. Gamal Moukhtar. Between 1967 and 1971 the stone-built temple at Amada, the rock-cut temple at El-Lessiya, and the Ptolemaic chapel and Osiris chapel at Kalabsha, as well as the graffiti of the Dodecaschoenus have been issued in this series.

Five volumes, or 'cahiers', are devoted to the Amada temple. It is true that this temple was published by Gauthier in 1913² as part of the 'Temples immergés' series, but that book was the fruit of a short, and by modern standards ill-equipped, stay between December 1909 and February 1910. The archaeological description contained in this original publication stands and is not repeated; in all other aspects, however, the earlier book is now superseded.

Begun by Tuthmosis III, continued by Amenophis II, and added to by Tuthmosis IV, this Eighteenth-Dynasty temple at Amada is built, the pylon excepted, entirely in sandstone. During the Nineteenth

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¹ Centre de Documentation et d'Étude sur l'Histoire de l'Art et la Civilisation de l'Ancienne Égypte (CEDAE).

² Henri Gauthier, Le Temple d'Amada. Les temples immergés de la Nubie. Service des Antiquités de l'Égypte (Cairo, 1913). s

Dynasty the erasures effected under Akhenaten were made good and some inscriptional and decorative work added, but with this the history of the building finishes so far as Pharaonic times are concerned. Later, Greeks, Copts, and Nubians left *graffiti* on the walls, while the Copts converted the whole edifice into a church, adding a cupola.

The Eighteenth-Dynasty date, the interest and excellence of the decoration, as well as the unusually good state of preservation, make this temple one of considerable archaeological importance. In accordance with the principle of the 'Collection scientifique', the five volumes print facts and not comments. 'Cahier' I covers the architecture of the temple and includes views, plans, sections, and brief factual descriptions. 'Cahier' II contains a series of reproductions of photographs of each wall-surface and also a brief description of every scene. 'Cahier' III has hand-copies of all the texts that appear on the walls except for the steles of Amenophis II and of Merenptah to which 'Cahier' V is devoted. 'Cahier' IV again gives all the wall surfaces, but this time in beautifully executed line drawings which are an invaluable aid to the study of the photographs as these occasionally, and inevitably, present obscurities.

The Amada temple has now been successfully transplanted from its former riverside site to a new situation 3 km. away and some 60 m. higher above sea level. Eventually a sixth cahier is to appear in which the execution of this removal will be described.

El-Lessiya is also an Eighteenth-Dynasty temple, but in this case cut entirely in the rock of the hillside on the east bank of the Nile a short distance north of Kaṣr Ibrîm. It was constructed by Tuthmosis III, probably in his fifty-second year, and is dedicated to a number of Nubian deities. It was not included in the 'Temples immergés' series despite the fact that the first raising of the Aswân Dam inevitably resulted in its being flooded for a large part of the year, and being consequently so inaccessible that it has suffered general archaeological neglect. Even the authors of this book met with great difficulty in getting sufficient time free from water to carry out their work of recording.

Two cahiers are devoted to this temple. The first offers a set of reproductions of photographs of all the inside wall-surfaces together with a short descriptive text; the outside being excluded because the steles and graffiti there inscribed are to be the subject of a separate volume. The second cahier consists mainly of plans, sections, axanometric views, and set of excellent line-drawings covering every scene, which the bad state of the walls makes more than usually desirable. The rock-cut temple of El-Lessiya has now been removed to Turin.

The small Ptolemaic chapel left standing in the north-east corner of the temple area when the Kalabsha temple was rebuilt in Roman times, and a little square court and two chambers in the thickness of the southern wall of the sanctuary rooms of this same temple, are the subjects of the next two volumes in the 'Collection scientifique'.

The Ptolemaic chapel, in which the main gods figured are Mandulis and Arensnuphis, is decorated in a very crude fashion. These decorations are unfinished; the hieroglyphic legends are, with few exceptions, uncut. It is suggested by the authors that the work may have been completed in stucco and paint. The two fascicules devoted to this chapel give reproductions of photographs of all decorated surfaces, accompanied by brief descriptions, and also outline drawings of all the scenes.

The complex in the southern wall of the Kalabsha sanctuary suite, consisting of a small court open to the sky and a chamber or chapel with a crypt beneath, approached by means of a staircase descending from the roof, is published in a single volume. It is described with plans, sections, and photographs to produce an adequate archaeological record, although the relative positions of the staircase up to the roof and that down to the complex could have been made clearer. There is no decoration, the whole, including the approaches, being unfinished.

Hitherto the purpose of this complex has remained unexplained, but Daumas considers it to be a very simplified version of a $w^{\prime}bt$, or Osiris chapel, such as is found at Edfu and Denderah, although these have no crypt. He considered it to have been used in very secret ceremonies enacted on the eve of the new year. K. G. Siegler and U. Rombock call the main room an Osiris, or Oracle chapel, and suggest that the crypt under it, which can only be approached through a hole in the chapel floor, was for a priest to sit to give the oracles from behind a cult statue. They say that it is possible to see traces in the chapel floor of where the

It is to be noted that 'Cahier' II, pl. II, has the north point reversed.

statue stood, and also very plausibly explains the curious recess in the crypt floor as being a space for the legs of the seated oracle priest.¹

The final volume so far published dealing with the Nubian antiquities is that which contains the Demotic graffiti of the Dodecaschoenus. These were the subject of a book by F. Ll. Griffith in 1935–7.2 Griffith's book, however, is concerned mainly with Philae, which is not included in the present publication. For the graffiti from other sites he was dependent on squeezes. The present book lists 98 graffiti, of which 52 have not been previously published; 31 were published by Griffith, and 15 are omitted, largely because they can no longer be found. These graffiti, gathered from Qertassi, Kalabsha, Dendur, Dakka, and Maharraqa, are reproduced in hand-facsimile and in photograph. The position of each is shown on plans of the temple in question. It is pointed out that, considered statistically, the graffiti indicate that a period of maximum prosperity occurred during the second century A.D., and that at Kalabsha the siting clearly shows that common pilgrims did not have access to the sanctuary suite, or the mammisi.

All in all the 'Collection scientifique', so far as it has at present progressed with the publication of the Nubian remains, offers an adequate archaeological record of the structure, decoration, and inscriptions of the sites included. Everyone connected with this work, which must have been most exacting, is to be congratulated, and in particular the Documentation Centre itself.

C. H. S. SPAULL

Centre de Documentation et d'Études sur l'Ancienne Égypte. Collection scientifique.

Graffiti de la Montagne Thébain. I, I, Cartographie et Étude topographique illustrée. By J. Černý, Ch. Desroches-Noblecourt, M. Kurz, with the collaboration of M. Dewachter and M. Nelson. Pp. xxii+61, pls. 129. Cairo, 1969-70. I, 2, La Vallée de l'Ouest. Cartographie, Topographie, Géomorphologie, Préhistoire. By J. Černý, R. Coque, F. Debono, Ch. Desroches-Noblecourt, M. Kurz, with the collaboration of M. Dewachter and M. Nelson. Pp. xiv+55, pls. 58. Cairo, 1971. II, 1, Plans de Position. By J. Felix and M. Kurz. Pp. vi+7, 84 plans. Cairo, 1970. II, 2, Plans de Position. By L. Aubriot and M. Kurz. Pp. iii+4, 58 plans. Cairo, 1971. III, 1, Fac-similés. By J. Černý and A. A. Sadek, with the collaboration of H. el-Achiery, M. Shimy, and M. Černý. Pp. 8, pls. 50. Cairo, 1970. III, 2, Fac-similés. By J. Černý and A. A. Sadek, with the collaboration of H. el-Achiery, A. Chérif, M. Shimy, and M. Černý and A. A. Sadek, with the collaboration of H. el-Achiery, A. Chérif, M. Shimy, and M. Černý. Pp. i+3, pls. 46, Cairo, 1971. IV, 1, Transcriptions et Indices. By J. Černý and A. A. Sadek. Pp. i+108. Cairo, 1970. IV, 2, Transcriptions et Indices. By J. Černý and A. A. Sadek. Pp. i+40. Cairo, 1971.

La Face sud du Massif est du Pylone de Ramses II à Louxor. By CH. KUENTZ. Pp. iv+23, pls. 25. Cairo, 1071.

All volumes in portfolio form, 270×210 mm.

Before the Nubian crisis arose the Documentation Centre had as their first objective the recording of the funerary monuments, including the mortuary temples, situated in the western region of Thebes. This work started before the Nubian project and has been resumed since. Now the first series of 'Collection scientifique' volumes dealing with the Theban region has appeared. They cover *graffiti* from the Theban Necropolis and, on the other side of the Nile, the southern face of the eastern half of the pylon of Ramesses II at Luxor.

The Theban Necropolis is situated on the western desert edge, its tombs cut in the sides of the cliffs and wâdys of a limestone massif which rises to a local peak, so obviously a vast pyramid in shape, that it cannot but have inspired the choice of site. In this region lived and worked the artisans who cut and decorated the tombs of the kings and queens of New-Kingdom Egypt. As they worked, those who found an idle moment scribbled names and titles and sketches on neighbouring rock surfaces. Spiegelberg began the collection of the resulting graffiti at the end of the last century, to be followed by Howard Carter at the time of the first

- ¹ Karl Georg Siegler unter Mitarbeit von Ulrich Rombock, Kalabscha. Architektur und Baugeschichte des Tempels (Berlin, 1970), pp. 23, 56 and pl. 7.
- ² F. Ll. Griffith, Catalogue of the Demotic Graffiti of the Dodecaschoenus. Les temples immergés de la Nubie. (Oxford, 1935-7).

World War, and then by Černý in 1956. However, the task was a vast one and really beyond the capabilities of any one man.

The Documentation Centre, aided by UNESCO, the Centre National de la Recherche Scientifique Française (CNRS) and the Institut Géographique de Paris (IGN), has now carried through a survey of the whole of the necropolis region and has made a collection of *graffiti*, as exhaustive as is humanly possible, for The Valley of the Kings, The Valley of the Queens, the Dêr el-Baḥari area, and the valley to the west of that of the Kings. Until his death in 1970, Černý was naturally the leading light philologically, but he had the assistance of other philologists, while numbers of experts in other fields involved worked as well.

The results of this work are now presented in a fullness of detail that is rarely achieved. They are divided into four sections: topography of the Theban Hills; plans showing the positions of the graffiti; facsimiles, transcriptions; and indexes. Detailed contour maps, based on aerial survey and levelling but with ground control, depict the entire region and show by reference numbers the exact positions of the groups of graffiti. The individual graffiti are plotted on sections and numbered so that their relation to one another and their density is at once apparent. Innumerable photographs show every area involved and are increased in utility by the written topographical description that accompanies them. The graffiti themselves all appear in facsimile as well as in transcription. Every graffito can be located both in this publication and, if needs be, on the actual ground. Adequate indexes and concordances are supplied, giving royal names, names of individuals, titles, dates, selected words, signs and drawings.

The position and density of the graffiti give valuable indications of the work being carried out at any one time, and it is particularly to be noted that they are almost all of post-Akhenaten date, as though a previous anonymity, perhaps connected with the secrecy of the work in hand, had lost its importance. Most of the graffiti are little more than names, but just now and then a crumb of more detailed information can be gleaned. For instance, the revelation of the position where the scribe Qenḥerkhepshef must have sat while superintending work (No. 1401); the statement of the blocking of a royal tomb (No. 1860), which incidentally proves once and for all that the word hr does mean 'royal tomb' and not 'necropolis'; and the visit of the scribe Amennakhte and his sons to the wonder of a rain pool left by some unusual storm in a Year 2, fourth month of summer, day 24 (No. 1736).

F. Debono has a chapter in which he studies the flint workshops that have been found in the same region as the *graffiti*. These show, for the first time so far as Egypt is concerned, the presence of a very early pebble culture found elsewhere in Africa, and also indicate the continued use of stone for tools in Pharaonic times. Of the 45 sites found, 35 are Pharaonic, and stone tools recently found at Karnak obviously come from this source. It is clear that stone was used for all the rough work in the tombs and that tools of expensive metal were reserved for finishing work only. One of these workshops had served as an open air sculptor's studio. In it was found an unfinished statue that had broken in the making.

The final volume to be dealt with is devoted to a part of the Luxor Temple. Here the mosque of Abu'l Haggag, standing as it does above the north-east corner of the first court, has hitherto prevented anything being known about the decoration of the inner face of the eastern pylon or of the adjacent part of the eastern wall of the court. The difficulty has been removed so far as the pylon is concerned by cutting along the wall of the pylon under the mosque and so making it possible to obtain squeezes of the decorations. Photographs have also been taken, but the confined space and other problems made this difficult, so that only a few selected specimens are included in this book. It is intended to publish the entire wall in photographs and to provide commentaries and translations in a future volume of the 'Mémoires' of the Documentation Centre. This work is already well advanced. Here the whole wall is published in outline drawing showing all the scenes and their accompanying texts. In addition there are twenty pages of preliminary matter giving a brief description of each scene.

The wall in question proves to be divided into three registers, the middle one being larger than that above or below. The topmost register shows Ramesses II making offerings to various gods. The middle register contains interesting and important details from the Festival of Min, including a version of the pole-climbing episode before the statue of the god. The third register has a representation of the façade of the temple with its gateway, pylons and flanking colossi and obelisks; while the children of Ramesses II, at that time eighteen boys and eight girls, are shown in procession, although not all the names are preserved. This register also contains the end of the temple's foundation text, unhappily much mutilated by the deterioration of the lower

part of the wall. The beginning is upon the still hidden east wall of the court, but the end portion now revealed gives the fact that the work was finished in Year 3, third months of Inundation, thus dating the scenes and the work.

A very interesting and worth-while publication.

C. H. S. SPAULL

Schiffsmodelle im alten Ägypten. By ARVID GÖTTLICHER and WALTER WERNER. Arbeitskreis historischer Schiffbau. V. 21 pp., pls. 51 Wiesbaden, 1971. Price DM 24.

This book gives an excellent conspectus of the range of types of Egyptian model boats. The descriptive text is short, but the photographs and the excellent line-drawings which accompany it speak largely for themselves. The authors, however, have not confined themselves strictly to models, for they also show drawings from Nubia, drawings on prehistoric pottery, various sacred barks as depicted by the Egyptians, and a collection of hieroglyphs of boats and parts of boats. It is notable, however, that the rock-drawings come all from the single site of Sayala in Nubia, and no reference is made, for instance, to the First-Dynasty boat shown in the rock carving of King Djer near Buhen; this is of importance because it can be dated with reasonable precision. The models shown in this book range from the early dynasties to the New Kingdom; of the early models the most interesting is that on pl. VI, 1, which clearly shows the mode of construction of the reed-built boat. This model, which was first published in Petrie, Abydos, 1, pl. IX, 4, is stated by Petrie to be of alabaster, but by the authors of this book to be of ivory. Following it we have a series of drawings of predynastic and early dynastic models in pottery, and these are followed by photographs of wooden models of the dynastic period and line-drawings of various types of boat; in a few cases the authors have taken off the lines of the hull after the manner of a naval architect. A dozen plates are devoted to details of construction, rigging, and equipment; one point of interest is the illustration on pl. XLII, 6 of a scarfed joint in the Cheops boat. At this point perhaps I may remark that in my opinion the 'Bugspriet' of pl. XXXII, 12 and the 'Bugholz' of pl. XXXIX, 10, 11 are really the expression in wood of the end of the hogging-beam, the main length of which was usually represented in the models by a longitudinal band of paint. One might also remark that no models from the British Museum are shown, probably because the authors were aware that Wooden Model Boats was approaching publication.

While the main body of the text calls for little comment, there are some careless errors in the 'Literaturaus-wahl' and in the historical summary. On p. 16 the present reviewer is credited with an article on the dimensions of Egyptian ships which he did not write; on p. 17 the British Museum publications A General Introductory Guide to the Egyptian Collections and Wooden Model Boats are attributed to W. Wolf; on p. 21 'The Story of the Shipwrecked Sailor' is placed in the Eighteenth Dynasty instead of the early Middle Kingdom; and the naval battle against the Sea Peoples is allotted to Ramesses II. Such blunders suggest that all statements in this book may need verification, but the plates are the essential part of the work; they presumably can be accepted as reliable and they are really informative.

R. O. FAULKNER

De godin Renenwetet. By Dr. J. Broekhuis. Pp. 196, pls. 14. Bibliotheca Classica Vangorcumiana, XIX, Assen, 1971. No price stated.

This book is the nineteenth volume in a series which is otherwise concerned with classical Graeco-Roman themes. It is a study of a rather obscure Egyptian snake- and harvest-goddess and was accepted in this series, presumably, on account of the Greek hymns to Isis-Hermouthis discovered in a Ptolemaic temple at Medinet Madi in the Fayûm, which are treated in the last part of the book. These hymns are of equal interest to Egyptologists and classical scholars, as becomes apparent already in the first two lines of the first hymn (p. 138):

Πλουτοδότι βασίλεια θεών, 'Ερμοῦθι ἄνασσα, παντοκράτειρα, Τύχη Άγαθή, μεγαλώνυμε 'Ισι,

(Giver of riches, Queen of the gods, Lady Hermouthis, Ruler of all, Bona Fortuna, Isis with the great name)

The cover picture shows a stela from Deir el-Medineh (No. 33 in the chapter on the iconography of the goddess, p. 25): the goddess appears as a cobra equipped with a Hathor emblem; she is in front of an offering table and is worshipped by a kneeling man (not a woman, as is stated on p. 25). The stela belongs to the Twentieth Dynasty and the goddess is called 'Meretseger-Renenwetet, Mistress of food and Lady of provisions' (nbt kww hnwt dfww).

Besides the frontispiece there are fourteen plates which show a variety of forms of Renenwetet, including a completely human form given to her in the Lisht pyramid of Sesostris as well as the half-human half-animal figure of a madonna lactans with snake head and human body.

It is in this context that the present thorough study of the nature, meaning, and development of the cobra-goddess—one among others—has been undertaken. In four of the six parts of the book the name, iconography, cult, and character of Renenwetet are dealt with in detail. Part Five treats the relation of Renenwetet with other gods (Meshenet, Shay, Neper, Wedjoyet, Sebek, and Isis), while the last chapter is reserved for the Isis hymns of Medinet Madi. There is a list of texts and sculptures in which the name of Renenwetet occurs and a very long and useful list of her epithets, which extends over seven pages.

That the cult of Renenwetet could achieve the reality of the cult of a patron saint becomes evident in a relief from the Theban tomb of an 'Overseer of the provisions of Upper and Lower Egypt' (No. 91 in the typological list, pp. 53 and 65) under Amenophis III; here we find Khacemhet, the owner of the tomb, bringing offerings to Renenwetet, Mistress of the storehouses, on the birthday of the corn-god Neper (first day of the first month of the Inundation Season) with the prayer expressed that the overseer may remain in favour with the king.

This is a very useful and stimulating study, although the field is by no means exhaustively exploited. Typologically, for example, no mention has been made of a divine nurse with otherwise human body that ends in a snake's tail: a form of appearance of the crown-goddess Wedjoyet giving suck to King Tutankhamūn (a gold pendant found in the little golden shrine, no. 104c of the *Handlist*). The book is written in Dutch, but there is an English summary. The latter is very brief, however. In view of this it is good to note that the style of the Dutch is clear, factual and straightforward; certainly it provides little difficulty to a reader of German.

KATE BOSSE-GRIFFITHS

Das Auferstehungsritual der Unas-Pyramide. Beschreibung und erläuterte Übersetzung. By Joachim Spiegel. Ägyptologische Abhandlungen, 23. Pp. xii+489, 7 plans. Wiesbaden, 1971. DM 73.

Professor Spiegel's studies of the text of the pyramid of Wenis, the earliest of the Pyramid Texts, as well as his various contributions to our understanding of the first phases of Egyptian religion in general, have proved stimulating and enlightening, as the frequent discussion of them proves. Now he offers an elaborate exposé of the whole of this Fifth-Dynasty text and its religious implications; in the second part of the book he provides a translation accompanied by a commentary, the latter conveniently arranged in the form of notes on the same pages as the translation. He also provides a general introduction to each spell, and after the full indexes Dr. Karin Gödecken has added careful plans of the pyramid walls and chambers, indicating the general disposition of the whole and the location of the various spells. Piankoff's photographs have been duly utilized. His study (The Pyramid of Unas, Princeton, 1968) is indeed mainly valuable for the presentation of this visual evidence; his interpretation is sketchy, and suffers from attempts to project backwards a number of concepts which he found in the New-Kingdom material with which he was more familiar. As for the pyramids of the Sixth Dynasty, Spiegel (p. 124) promises a reconstruction of their ritual likewise, but is wisely awaiting some of the results of Leclant's researches, which are likely to restore a number of texts which have hitherto been unavailable.

Spiegel's central thesis about these texts has been discussed by me in my *Origins of Osiris* (Berlin, 1966), 155 ff., so that what was said there need not be repeated. One of the objections to the thesis is spatial: these rooms and passages are not large enough to have allowed the performance in them of any elaborate ritual. Spiegel (p. 14) stresses that only six officiants would have been necessary and he now adds medical confirmation from Prof. Witte of Göttingen that the volume of air within the pyramid would have sufficed for these persons to perform the posited rites in a given time and also to enable the necessary light-

ing to last. Even if this be conceded, there remains the difficulty of the distinctions imposed on the texts: some are said to represent fully enacted ritual, others a silent ritual, others recitation only, and others just the magical potency of an inscribed text. Whatever one's view on the question of ritual, Spiegel's exegesis of the religious ideas remains important. Sometimes his exposition is in a prophetic style that makes little attempt to consider the objections raised by others. It is more valuable, naturally, when such objections are confronted, as in the impressive discussion of the 'Cannibal Hymn', where he cogently urges the remarkable coexistence of a highly sophisticated literary technique with a gruesome picture of a fully practised magical cannibalism deriving from a much earlier age. It is thus related, one may add, to a polarity emphasized by Lévi-Strauss.

There is an instructive confrontation (pp. 109 f.) with the views of Eberhard Otto on the relation of myth and ritual and on the relevance of Jung's categories; here a pupil of Sethe disagrees with a pupil of Kees. Otto is rebuked for his rejection of the 'archetypes' of Jung and Kerenyi. If Otto is scornful of modern psychology—with an emphasis on the adjective—it is a just retort that he himself is a modern Egyptologist. Yet Otto's standpoint on the two issues raised is the more convincing; Jung's 'archetypes' do not fit easily, unless they are modified, into the Egyptian mythic material; and the indivisible unity of myth and ritual as urged by Spiegel is by no means generally valid. On the latter theme see the remarks, made on a wider front, by G. S. Kirk, Myth: Its Meaning and Functions in Ancient and Other Cultures (Cambridge, 1970), 8 ff. and my comments in CR 22 (1972), 235 f. The pyramid of Wenis, on the other hand, is the tomb of a Pharaoh, and we can be quite sure that the royal burial was ceremonially enacted. We can also be sure that the texts on the walls are all ideologically connected with the fate of the Pharaoh in death. If uncertainty remains as to the exact relationship of these texts to the enacted ritual, Spiegel's study is still a thought-provoking and important contribution.

J. Gwyn Griffiths

Textes des Pyramides: Index des Citations. By CLAUDE CROZIER-BRELOT. 2 vols. Vol. I, pp. 265. Vol. II, pp. 562. Paris, 1972. No price stated.

This methodical and assiduous Index takes the reader through the whole of the Pyramid Texts, indicating at each step the works by modern authors in which a section is cited and also giving the exact locus; for good measure, by means of a cleverly brief code, one is informed of the nature of the reference—whether a section is merely cited, or translated and transliterated, and so on. A large number of works have been used and these are first listed. Not included are such books as Edel's *Altägyptische Grammatik* and Kees's *Totenglauben*, because they are themselves equipped with detailed indexes.

A novel feature is the promise made by Madame Crozier-Brelot in her preface: there will be speedy revised editions of the work. Many pages are devoted to errors of citation by various authors, and these are also pinpointed in the body of the work. Engagingly enough, however, the work ends with a handy form which readers can use to inform the author of errors they may discover in the Index itself. This useful venture is printed by the duplication of a typescript. The reviewer is puzzled by the exclusive use of capitals, but is probably just showing his ignorance of the processes involved.

J. Gwyn Griffiths

The Literature of Ancient Egypt. An Anthology of Stories, Instructions, and Poetry. Edited, with an Introduction, by William Kelly Simpson, with translations by R. O. Faulkner, Edward F. Wente, Jr., and William Kelly Simpson. Pp. 328, 6 illustrations. Yale U.P., New Haven and London. Price £4.75.

The division of labour in this attractive volume is as follows: William Kelly Simpson: 'King Cheops and the Magicians', 'The Shipwrecked Sailor', 'The Story of Sinuhe', 'The Teaching of the Vizier Kagemni', 'The Loyalist Instruction from the Sehetepibre Stela', 'The Lamentations of Khakheperre-sonbe', 'The Instruction of Amenemope', 'Cycle of Songs in Honor of Sesostris III', 'The Hymn to the Aten', 'The Love Songs and The Song of the Harper'; R. O. Faulkner: 'The Tale of the Eloquent Peasant', 'The Maxims of Ptahhotpe', 'The Teaching for Merikare', 'The Teaching of King Ammenemes I to His Son Sesostris', 'The Man Who Was Tired of Life', 'The Admonitions of an Egyptian Sage', 'The Prophecies of Neferti', 'Poetry from the Oldest Religious Literature' (from the Pyramid Texts), 'The Victorious King' (Tuthmosis III); Edward F. Wente, Jr.: 'The Quarrel of Apophis and Seknenre', 'The Capture of Joppa',

'The Tale of the Doomed Prince', 'The Tale of the Two Brothers', 'The Contendings of Horus and Seth', 'The Blinding of Truth by Falsehood', 'Astarte and the Insatiable Sea', 'A Ghost Story', 'The Report of Wenamon'. It will be seen that the scope of the material presented is varied and representative, and the names of the triad of translators constitute a warrant of quality. Each piece is preceded by valuable bibliographical notes and there are also references at particular points in the translations to recent discussions in periodicals. Such features add up to a refreshing improvement on the collections of translations which have been available hitherto.

In a brief introduction Simpson explains that the pieces have been chosen 'on the basis of literary merit or pretensions thereto, with a few additions'. This is a wise criterion. For a brief moment he clouds the issue by stating that compositions such as the Hymn to the Aten 'belong strictly speaking to the religious literature', as though that category is necessarily removed from the orb of pure literature. The truth, of course, is that some of the masterpieces of literature are religious in character. When Simpson goes on to say that 'the literary merit and interest of these selections [religious and historical] warrant their inclusion', one must agree heartily. Discussing the aim of the book, he remarks that it is 'addressed to the general reader, the student and the specialist'. It is a tough proposition, one might think, to serve such varied groups, but each will certainly find something here to enhance their pleasure and profit.

J. Gwyn Griffiths

The Magical Texts of Papyrus Leiden I 348. By J. F. Borghouts. Oudheidkundige Mededelingen uit het Rijksmuseum van Oudheden te Leiden, 51. Pp. xvi+248, pls. 34. Leiden, 1971. No price stated.

Although the magical texts here presented have been previously published, notably by W. Pleyte in 1869 (some spells were omitted by him), they obviously needed a modern edition and commentary. In the present doctoral work they have been treated with all the desirable detail: a general introduction, a translation, commentary, and glossary as well as full indexes; and last but not least, photographic plates of the whole together with a transcription to which notes are appended. It is a pity that the transcription does not face the photographs of the original; the facing pages are occupied by the textual notes which sometimes barely take up a third of the page-space. Still the textual annotation is at least thereby saved from the rather cramped treatment it often gets.

The texts seem to derive mostly from the Nineteenth Dynasty. Their idiom is Middle Egyptian in the main; sometimes there are a few archaisms, but Dr. Borghouts has no difficulty in showing that there are numerous instances of Late-Egyptian influence. A number of words occur which are not recorded in the Wörterbuch; this is not surprising, for we are told on p. 2 that the Wörterbuch 'totally disregards the magical texts' (i.e. of the present papyrus). The Index of Egyptian usefully asterisks the hitherto-unrecorded words. Several of the spells are for the treatment of headache, and the magical system employed is to invoke the divine analogue, which principally concerns Horus. This is very clear, too, in the Budapest Magical Papyrus which Dr. L. Kákosy has now published with a valuable commentary in Acta Ant. Hung. 19 (1971), 159-77. An expression common to the Budapest and Leiden papyri is gs-tp, which Dr. Borghouts translates 'side of the head' (cf. Kákosy, 'Hälfte des Kopfes'), while admitting the tempting parallel to ἡμικρανία, from which 'migraine' derives. Since the contexts here so plainly concern headaches, the reluctance to recognize migraine is a case of carrying caution too far; it seems to be especially clear in rt. 3, 9 ('give me a head in exchange for my head, (that is), the side of my head'), where the Badal-apposition ('genauer gesagt', as Spiegel explained it) makes it quite pointed; cf. the Budapest P. IV. 9, 'your head, Horus, the side of your head.'

As for the prescriptions, the Leiden spells order 'the usual mixture of herbs, grease and the like or amulets', paralleled elsewhere; but some spells refer to a mask procured from the gods and placed on the patient's head; others invoke twigs from the 'Unique Bush' and a 'hair from the chin of Osiris'. Spells against stomach-pains again involve Horus, but in one such spell Rēc figures, for allusion is made to an occasion when Rēc 'has belly pains... to the consternation of the boat-crew' (see pp. 11 and 25). One must fervently agree that 'the mythology of these spells is very rich'. In vs. 12, 5 Nekhbet is called 'the Nubian'; this agrees with interpretations now proffered by Derchain in Elkab I (Brussels, 1971), 7 and 12 f.; in his pl. 33 Nekhbet is probably offering to Rēc-Ḥarakhty the eye which has returned from Nubia, a theme with which Hathor is closely linked.

Some blemishes should be noted. The quota of misprints is large, and goes a good deal beyond those mentioned in the Corrigenda supplied on a separate sheet. The English could be occasionally improved, but the author's handling of an acquired language is, on the whole, cause for congratulation. What impresses one is the basic presentation and rendering of the text, as well as the extensive documentation, in which the ancient and modern literatures have been ably deployed. Sometimes one could wish to be taken a step further, as in the admirable discussion on the 'wives of Horus' (pp. 149-51); the evidence is energetically garnered, but one is left wondering as to its eventual significance in myth and magic; the concept of Hrt, the 'female Horus', may well be related. Perhaps it is unfair to expect a final analysis of such problems in a commentary. Certainly the first task is to compile the primary parallel data, and this has undoubtedly been accomplished here.

J. Gwyn Griffiths

Das ägyptische Totenbuch der XVIII. bis XX. Dynastie. Assembled and edited by EDOUARD NAVILLE. 3 vols. Einleitung, pp. 204. Vol. I. Text und Vignetten, pls. 212. Vol. II. Varianten, pp. 448. Reprint of the 1886 edition. Akademische Druck- u. Verlagsanstalt, Graz, 1971. öS 1,900.

Although the best part of a century has elapsed since the first appearance of Naville's *Totenbuch*, it is a remarkable fact that it is still indispensable in any serious study of the material. That in itself speaks for the enduring qualities of the work. In his preface Naville states that he devoted ten years to the task. When we consider the extent of the material and the number of the museums in Europe and Egypt which he had to visit in his study of the papyri, as well as the private collections similarly deployed (in some cases he used copies of texts provided by individuals), then it is clear that they must have been ten very industrious years. Naville died in 1926 at the age of eighty-two, and for many years he conducted excavations for the Egypt Exploration Society; a memoir of him by H. R. Hall appeared in JEA 13 (1927), 1-6. His work on the Book of the Dead was undertaken at the suggestion of Lepsius, his former teacher, who broached the idea at an Orientalist Congress in London. Indeed Lepsius had previously thought of tackling the undertaking himself. His interest in the project led to the support given to Naville in his preparatory work by the Berlin Academy; and it secured also the valuable aid of the Prussian Ministry of Education with the problem of publication.

The difficulties of dealing with a mass of texts in Egyptian are formidable, and however desirable it may be to have complete facsimiles of all the texts, this will scarcely prove a practical proposition in a single publication with material of this extent. De Buck's admirable method of presenting parallel texts in extenso was possible when the material had certain limits. Naville's method of providing 'synoptic tables' in his second volume was a bold answer to an intractable problem. It looks better, of course, that it really is. The choice of the standard text is often difficult, and the material chosen for inclusion in the 'synoptic tables' betrays a subjective approach. There is some discussion of the reasons for selection in Ch. 4 of the introductory volume. When we recall that seventy-one papyri were used (naturally not co-extensive) and six texts from Theban tombs, the result is at least a miracle of compression. This applies also to the vignettes, where the ordering is cavalier. And what has happened in the meantime? There have been elaborate studies of selected parts, with fuller textual presentation. A great deal of material remains unpublished, and T. G. Allen's exemplary publication of the Chicago texts raises the hope that similar collections will appear from other sources.

In 1906 Naville published, with Le Page Renouf, a translation of the whole Book of the Dead accompanied by a commentary. Inevitably that work has severely dated; its interest is now almost antiquarian. Yet, this edition of the text, although earlier in date, is bound to retain its value for some time to come, and the present well-produced photomechanical reprint is therefore a boon.

J. GWYN GRIFFITHS

Elkab I. Les monuments religieux à l'entrée de l'ouady Hellal. By PHILLIPE DERCHAIN. Publications du Comité des Fouilles belges en Égypte. Pp. x+91+25 pp. of transcription, pls. 33, 3 plans. Brussels, Fondation Égyptologique Reine Élisabeth, 1971. Price 1,600 FB.

It was in 1937, as de Meulenaere explains in a preface, that the Fondation Égyptologique Reine Élisabeth was granted a concession to excavate in El-Kab. Four campaigns between 1937 and 1955 were devoted mainly to the remains of the two large temples in the area close to the Nile. There followed ten years of

inactivity, after which, in 1965, the Comité des Fouilles belges en Égypte was formed under the presidency of Pierre Gilbert. It is this committee, with De Meulenaere as director of excavations, that has resumed the undertaking; and it decided, in the first place, to entrust to Phillipe Derchain, assisted by the architect W. Verschueren, the task of recording and publishing the Ptolemaic 'hémi-speos' and the small temple of Ramesses II, the remains of which are situated in the area to the east of the principal enclosure. After two campaigns on the site this task has now been completed. The Committee is plainly fortunate in having the services, in the present juncture, of a scholar with the energy and acumen of Philippe Derchain.

After a chapter devoted to previous modern reports on the site, its ancient history is discussed, and it is shown that the evidence in the area of the Ptolemaic speos, the stela found near it, and the Ramesside chapel does not involve an era earlier than the Nineteenth Dynasty. The stela is dedicated to Ramesses II, but the dedicant's name is missing; his titles, however, correspond to those of the Setau mentioned in the Ramesside chapel, and there seems little doubt that he is the Setau who was viceroy of Nubia in the second half of the reign of Ramesses II. The chapel built by him was restored in the Ptolemaic era; it is referred to nowadays as the Hammam and Derchain mostly uses this appellation, referring to it once (p. 69) as 'cette désignation neutre'; since the word means 'bath' or 'spring' it is hard to follow this line of thought. A New-Kingdom origin is also assigned to the speos, and Derchain aptly invokes I. Jacquet's study of the Nubian rock-temples, preferring this affiliation to Sethe's theory of an abandoned Nineteenth-Dynasty tomb of the type of Paheri's tomb in El-Kab. (A trivial inconsistency, by the way, emerges in the writing of the placename: Derchain writes 'El-Kab' throughout, but de Meulenaere and the title-page use 'Elkab'.) There would possibly have been room for five statues, and Derchain suggests they might have been those of Ramesses II in company with the four deities mentioned in the neighbouring stela—Harakhty and Amūn, Nekhbet and Hathor. The only surviving wall of New-Kingdom origin in the speos contains fragments relating to a royal cult; it is natural, then, to think of Setau as the likely originator of this building also. The Ptolemaic restoration of the speos was complete by 117/116 B.C., but little can be inferred about the history of this part of the site in the preceding millennium.

In this region the desert landscape confronts huge formations of rock, and Derchain believes that a ritual attested in reliefs and inscriptions is that of welcome to the goddess who returns from Nubia in the manner of Hathor-Tefnut. Thus the central scene in the Ramesside chapel (pl. 33), fragmentary though it is, shows an object (now missing) being offered to Rē^c-Ḥarakhty; it is being presented by Nekhbet, who is followed by Onuris and Thoth. Derchain discusses this scene on p. 14 and pp. 71 f. He argues that the missing object is a wedjat-eye and that Nekhbet is restoring it to her father; he suggests also that the scene is unique in representing the return of the 'distant goddess' who is here embodied in Nekhbet. The accompanying inscriptions are also, unhappily, fragmentary, but Derchain reads among the words assigned to Nekhbet, 'Je suis ta grande fille . . . venant toujours pour être unie au seigneur mon père'. I cannot see where 'venant toujours' is. The more important words that follow are explained as 'twt·ty (part. prosp. passif) (m) nb·i it·i', where = is restored in a lacuna. I am sceptical about a prospective passive participle—here and in general—but the idea is valid without the prospective nuance, and the lacuna is convincingly filled to give a meaningful construction. Nekhbet, then, is here united with her father. That she achieves this by presenting to him his eye which has gone astray and come back is a plausible idea.

A discussion of local divinities gives special attention to the goddess Smithis mentioned in a Greek inscription. De Meulenaere and Derchain here join forces in providing a lengthy documentation of occurrences of the hieroglyphic equivalent, which they show to be Ssmtt, the goddess presented by Newberry in Griffith Studies, 316 ff., but without the present identification. The net result is that in several texts the goddesses Satis or Neith are ejected to make room for Shesmetet. In some cases a definitive dogmatism is not yet justified. On p. 17 no. 8 one could argue that a scribe has confused the signs (S 17*) and (W 18), and that this latter sign, meaning hnt, is intended to qualify Satis. On p. 22 no. 23, in P. Bremner-Rhind, 19, 27 a reading Satis could be supported by Pyr. 1116a, although geographical continuity favours Shesmetet. At the same time this excursus—for such it is—is in itself a remarkable study.

A description of the monuments is followed by a translation of the texts, and the hieroglyphs are given in the clear and attractive script of Abd el Aziz Saadek. Derchain's notes are always instructive, and among the points of mythological interest are the assimilation of Nephthys and Tefnut (p. 38), an association of Nephthys and Thoth (p. 41), the designation of Cleopatra III as 'strong bull, female Horus' (p. 49), the role

of 'Hathor with the four faces' (p. 55) which Derchain now discusses in a separate publication, and the suggestion that nhh and dt in one passage involve the idea of time-totality in the sense that day and night respectively are subsumed (p. 56). On p. 63 Derchain seems intrigued by a mention of Sothis in a context where Nesert, the uraeus, is identified with Bastet. There is a good deal of evidence for an association of Sothis and Bastet and the eye of $Reccent{e}$: see J. Bergman, 'Bastet-Sothis' in his *Isis-Seele und Osiris-Ei* (Uppsala, 1970), 52-8.

If some of these texts are fragmentary, the maximum of possible meaningful interpretation has been drawn from them in this rich and perceptive study.

J. Gwyn Griffiths

Rituels funéraires de l'ancienne Égypte. Introduction, traduction et commentaire de JEAN-CLAUDE GOYON. Littératures anciennes du Proche-Orient. Pp. 360. Paris, 1972. Price 75 F.

The works included in this volume are the Ritual of Embalmment, the Ritual of Opening the Mouth, and the *Book of Breathings*. After a brief general introduction on the principal procedures and purposes of funerary ceremonies, the three texts are presented in translation with valuable concomitants consisting, in each case, of a bibliography, an elaborate introduction, and abundant exegetical notes at the foot of the page.

Of the titles in conventional use for these texts the least illuminating is the Book of Breathings, and it is here retained only because it has established itself over a long period. In 1966 M. Goyon published a hieratic papyrus of the Roman era (P. Louvre N. 3279) which he classified as an example of the Second Book of Breathings although the titular phrase set n snsn does not occur in it; cf. the review in $\mathcal{J}EA$ 55 (1969), 231 f. In the present volume (p. 190) he points out that a conspicuous feature of these compositions, especially of those in the second group, is the great variety they show in the choice and organisation of their formulae. Clearly this will mean a measure of uncertainty in classification, although M. Goyon is quite firm in his opinion that the Demotic funerary text published by G. Botti in $\mathcal{J}EA$ 54 (Festschrift Černý, 1968), 223–30 and designated by him as an example of the Book of Breathings, should not be so regarded in spite of the fact that the titular phrase occurs on the verso (Botti, 228). M. Goyon's research into these texts and his grouping of them here make this section of the book an original and important contribution, for he is pioneering in territory that is to some extend uncharted.

Indeed it is hard to restrain one's enthusiasm for the whole work. It is a learned and lucid guide to an extensive literature.

J. Gwyn Griffiths

Antiquités égyptiennes et Verres du Proche-Orient ancien des Musées Curtius et du Verre à Liège. By MICHEL MALAISE, with Introduction by JOSEPH PHILIPPE. Pp. 187, pls. 11, 76 figs. Liège, 1971. No price stated.

An attractive guide to two collections, and one containing a great deal more information than is usual for such productions. The introduction briefly recounts the history of the Curtius Museum and its collections which, while general in their content, contain a high percentage of religious objects and are well represented in the fields of glass and faience. The author's preface also enlarges on this.

There is a chronological table based on Hornung's scheme, and a little lexicon of the principal Egyptian deities to help the reader. The sections are all neatly set out and the compiler is to be commended for the excellent system used, which is concise and gives all the needful information about the objects. Thus in the first section, which deals with coffins, we are given precise details and full statistics; dimensions, a small picture, and a detailed description that is nevertheless concise, listing date, texts, colours, and so forth. The same is done for the stone sculpture, statues, offering tables, canopics, stelae, and vases, whose provenance is given and all other particulars.

Statuettes form the third section—mostly bronze and wooden figures of deities. The fourth section deals with ushabtis and funerary figures in all kinds of materials. The fifth section is on amulets and, it should be noted, includes scarabs. The sixth section is called 'Varia' and has such items as a jewel or a wooden naos, and curiously enough includes papyrus, which one might have thought should have had a separate section to itself

Part II is concerned with objects of personal adornment and glass vases, the latter being perhaps the most fascinating items of this varied collection, but they mostly date from late times and are of Syrian rather than

Egyptian provenance in many cases. Some small moulded glass figures complete the series. There is also a collection of hieroglyphic inscriptions copied from the coffins, monuments, stelae, canopics, and ushabtis, intended for the specialist, and no translations are provided. These inscriptions are straightforward and present no difficulties, or for that matter special interest as regards the grammar and substance of the texts themselves. A helpful hieroglyphic index of names and titles of people is included, and for quick reference indexes both of objects and their museum inventory and catalogue numbers.

E. P. UPHILL

The Barkal Temples. Excavated by George Andrew Reisner. Published by Dows Dunham. Pp. xix+103, pls. 63, 6 plans in folder, 58 figs. Museum of Fine Arts, Boston, 1970. \$45.00.

The reviewer, faced with the task of assessing a work actually carried out fifty-six years ago, but only brought to completion in publication last year, is in something of a quandary as he is inevitably labouring under a dichotomy of purpose. On the one hand there is the fact that this is the last, or nearly the last, of a long series of posthumous works by one of the great figures in Egyptology, as it is also the result of much dedicated and painstaking work of his literary legatee, for both of whose labours we must indeed be grateful. But to offset this there is also the difficulty of applying archaeological standards and criticism in an age that is now far removed from the first decades of the present century, an age that must be as exacting in its standards as any philological critic is in his work, and use the rules and forms of a discipline that is essentially systematic. Hence it is with no feeling of disrespect or lack of appreciation of the great work done in the past by predecessors in the field, that this particular review will criticize this excavation report in what may at first appear to the reader as a stricter form than usual, but in fact making all allowance for much of this being the result of work done nearly sixty years ago. The editing must, however, stand by itself as a recent undertaking.

And so it is rather sadly that one must own to considerable disappointment with this publication and state quite definitely that it can add nothing to Reisner's reputation. It is a sumptuous volume very lavishly produced, but one may ask if it is really economical or feasible to produce what is really an extended article at a price like 45 dollars. Typography and presentation are superlative, but Reisner had already published several long articles in $\mathcal{F}EA$, thus reaching a wider Egyptological public than this book is likely to do, and one feels that this precedent could have been continued for the rest of the material. A number of features mar the work, and these will be dealt with below.

It is a helpful idea to have a list of abbreviations at the beginning of any archaeological or historical work, but why not use the standard ones of today? These are set out in the *Annual Egyptological Bibliography* and such archaisms as AZ instead of ZAS should surely be dropped from a publication appearing in 1970.

Again, in a note the publisher states: 'he [Reisner] adopted the practice when referring to points of the compass, of using the terminology of the local population which he had found it necessary to do to avoid confusion in the daily work on the site and in *keeping the field records*.' (My italics!) He then continues: 'This arose from the fact that at Barkal the river Nile flows in the reverse direction to its normal course. . . . Reisner, in using this terminology, enclosed them in quotation marks. This practice has sometimes led to confusion by users of his publications, and I have therefore thought it best to discontinue his practice. In this book I use the points of the compass in their true sense: "North" becomes South, "South" North, "West" East, and "East" West.' I leave archaeologists to make their own comments on all this!

This volume is a supplement to three long articles giving detailed preliminary reports published in $\mathcal{J}EA$ 4, 5, and 6; the page reference for this last, i.e. 247–64, is missing in the list of previous publications on p. xix of the present volume.

Another statement to which exception must be taken is that on page 3. 'A large number of unidentifiable small fragments of stone sculpture were found widely scattered all over the area, together with fragmentary bronzes, pottery, beads, and amulets of all periods down to and including Coptic. It would be largely meaningless to publish much of this, and the attempt to do so would render this volume far too bulky and costly.' To which must be posed the inevitable question, Why? The author does not give any very adequate reasons here for not using some of this material, which incidentally does not seem in certain cases to be represented in the published accounts at all, and in fact merely refers the interested student to the original record books of the Expedition now in the archives of the Department of Egyptian Art in Boston. Surely

some additional size or cost is not sufficient reason for this omission, unless the field records are inadequate or non-existent, or the material too far gone to make coherent published material, and this neglected corpus ought perhaps to find some representation eventually.

The main mass of archaeological data is divided into eight sections which may be taken in order. The first deals with a Building B 100. There is a reduplication of the second paragraph opening 'In the approximate center... to an entrance'. No scale is given on the plan of the building, as, to quote the editor, 'No accurate plan of the building can be found'. Unfortunate as this is, B 100 is of considerable interest and would appear to be a palace. Said to be approximately 20 m. square, and so probably laid out on the basis of 40 cubits each side (i.e. 21 m.), it is built of mud brick with relatively thin walls. Two columned halls dominate the design, which also has certain rooms that are obviously cellars or mere cells without doors, and others that are given heavy reinforced pillars for load carrying, the main halls and rooms doubtless being above on an upper floor. Shape and size seem to approximate very closely to the 'palaces' found at Meroë, or at least to an administrative building, and also interestingly to the newly discovered palace at Kasr Ibrîm. The objects recovered from it mainly consist of painted and decorated Meroïtic pottery also suggesting a domestic use, and are illustrated by drawings accompanying the text, with a surely anomalous stone celt included. Remains of an earlier building were found underneath and this relic of the Stone Age seems a little out of context here and is perhaps an intrusive find.

For a general plan of the site the publication has recourse to Lepsius. It seems a pity if Egyptology can produce no more recent plan or survey than this, although in fairness Lepsius and his assistants did work of an exceptional quality for the period and also show monuments that have sometimes vanished today. But we are again cheated of an accurate plan of temple B 200, an interesting structure partly originally rock-cut and partly built of masonry as were some of Ramesses II's Nubian temples, for here is only another sketch-plan, albeit very neat, showing the general layout north-south with a approximate length of 22 m. indicated for it. Still we must be thankful for this sketch from the expedition diary as it seems to be all that has survived. A well found in this area does not appear to be shown in the plan, yet is stated to have provided most of the finds in the southern area here, and the reader is further tantalized by the remark that these were 'of little significance, mostly sherds and other fragmentary material, they were of pre-Meroïtic date'. Since when have pre-Meroïtic sherds been of little significance?

The drawings relating to this section, although excellently reproduced, are not of a very high quality, especially the scarab, but the flask top (19–1–253) shows an interesting and original method of depicting thickness in section. The Temple of Mut, B 300, is better served in its planning, again largely thanks to Lepsius it would seem, and a section is also included, which although not very adequate does help to bring out the relationship of the earlier temples beneath its front end. Reisner believed this to be the work of Tuthmosis III, a very probable suggestion, as its blocks were re-used in the later Taharqa temple, and its outlined plan suggests the tripartite form common to many Eighteenth- and Nineteenth-Dynasty chapels and shrines. I fail to see the significance of the scale used here, which is in cms. and only runs up to 20, and cannot tell whether it is intended for metres or is the result of transference from another scale with the original plan and section used, but would assume the former alternative as this fits quite well with the apparent size of the temple. This curious anomaly also occurs elsewhere as will be seen with building B 1200.

The inventory of objects on page 12 does not state where the individual items were found except in the most general terms, or even illustrate them, and is thus rendered almost entirely valueless.

Building B 400 was found to be destroyed and too damaged to be planned so that little or nothing can be said of this section and no objects are recorded. Indeed of all the plans of this site reproduced in this section, only that numbered V dealing with the great temple and its surroundings can be called really adequate. That part of it dealing with temples B 800–900 has the advantage of being done in two colours with various shadings and hatchings, i.e. brown and black, a considerable help to the reader in quickly sorting out essential facts.

The second section dealing with royal statues is much better. These monuments are very varied and range from Tuthmosis III to Aspelta, forming a useful corpus bringing together the whole of this material. A complete description is given of each, listing the register number, material, dimensions, where previously published, etc. On the whole the photographs illustrating the stone monuments are quite good and adequate,

although some are rather heavily shadowed, and one is glad to see scales provided in some cases, making the size easier to grasp. This is an excellent practice and one which might well be used more often in other publications, the more so when the object is fragmentary as no amount of statistics on measurements can bring home the order of scale in the same way.

The inscriptions of these statues have been carefully and accurately copied and reproduced as text figures, although one may perhaps question the use of a whole page for fig. 4—a standard set of titles of Tuthmosis III, and suggest that some of the space that could have been saved might have been better devoted to the smaller unpublished material already commented on. The drawings of the reconstructed granite hawk, fig. 20, and the granite altar of Taharqa, plate 29, are excellent and a model for any Egyptological publication, likewise the photographs of the latter. Again one cannot fault the treatment given to the Meroïtic stela fragments of the doorjamb, B 501-2.

To the literature on the sandstone shrine, the so-called 'Omphalos' MFA 21.3234, should be added the article by Inge Hofmann in this Journal, vol. 56 (1970), 187-92.

Section III is one of the longest and deals with the Great Temple of Amūn B 500. It lists many objects found therein and in a more systematic way than in the first section; thus areas in the two large courts have been marked off in rectangles based on the positions of the columns indicated in plan V. But this is, of course, no real substitute for the use of an archaeological grid. Drawings here are in some cases better than those discussed previously, although those representing the pottery are in some cases not entirely satisfactory and seem to have little exterior detail shown, unlike the inner parts which are very well drawn. It may be, of course, that there was nothing of note on the outsides, but the technique employed in their reproduction gives indications of not being quite standardized.

Sections IV-VII deal with buildings B 600, B 700, B 800-900, and give a list of the not very numerous objects found associated with them, the drawing of a bronze chisel being rather poor and too much of an outline to show any detail.

The last section, VIII, is concerned with another administrative or domestic building B 1200, see Plan VI. The scale on this is incomprehensible as it only runs up to 400 cm. Is this intended for 40 m. rather than 4 m. in reality? It is an interesting structure of mud brick and Reisner made the fascinating suggestion that the two interconnecting columned halls at the north end, 1232-3, were temporary coronation halls of the two kings Aspelta and Anlamani, whose names appear carved on stone building elements here. Like building B 100 much of the complex seems to be the substructures of halls and rooms above; these have now gone, but were probably reached by staircase 1243-4.

An index is provided at the end, and all the plans are contained in a folder at the back of the book.

E. P. UPHILL

Studien zum meroitischen Königtum. By Inge Hofmann. Monographies Reine Élisabeth, 2. Pp. 90, 1 map, pls. 14. Brussels, 1971. Price c. £7·40.

This is a well produced study that has grown from an article dealing with the royal fashions of Napata and Meroë. For this reason it is divided into two parts, A dealing with the Meroïtic sovereignty in a general way, B specifically with observations on the royal dress in the two kingdoms. There are two excursuses, on the transference of the capital from Napata to Meroë, and on the role of Napata as a religious centre.

The author states in the Introduction how important were many of the religious customs and artistic motifs that were passed on from Pharaonic Egypt to her 'Colonial' territories in Africa, which must thus make this study of more than ordinary interest to the Africanist interested in the earlier periods of E. African history. It is also of some relevance to the classical historian, the more so on account of the period in which these kingdoms flourished, the millennium here dealt with lasting from c. 650 B.C. until around A.D. 320.

The first section offers a discussion on the election of kings, the sources used, in addition to the actual royal inscriptions, being both classical authors and modern anthropological material cited by way of illustration. The story of the dream of Ḥarsiotef (404–369 B.C.) and his alleged vision of Amūn of Napata who awarded him the kingship is of interest here, and although the writer does not mention it, rather recalls the story of Tuthmosis IV and Rēc-Ḥarakhty on the Sphinx stela. And there is also the case of the oracle of

Amūn marking out the young Tuthmosis III as king. The appearance of gods to the Meroïtic kings in dreams is therefore surely in the best Pharaonic tradition, although this subject has never been discussed as far as I am aware. Again, the room or shrine in which Amūn is said to have appeared to Ḥarsiotef is called *Ipt iswt*, thus recalling the great temple of Karnak. Royal genealogies and the importance accorded to the queen and royal mother are other points of similarity with Egypt, even if the actual succession was by no means confined to primogeniture, and the evidence that Hofmann cites for the mother of Aspelta bears this out.

Also of interest to the Egyptological reader will be the section dealing with the actual crowning-ceremony at the coronation. Here many old favourites appear again among the *insignia* worn and carried by the gods and royalty as depicted in the reliefs, prominent among them being the *wis*-sceptre. The royal head-dress is particularly important; that worn by Aspelta, called *sdn*, is derived from the earlier Egyptian *stw*, while the writing of *hiy* under Nastasen can be found as *hit* in Egyptian, oddly enough as far back and as remotely as the Middle-Kingdom Coffin Texts, where it is listed as a head-cloth of the king. Another name for a somewhat similar head adornment appears under Aman-nēte-yerike as *cndy*.

The journey by boat through the nomes of his kingdom, undertaken immediately after the coronation, also recalls Pharaonic practice, as does the king's conduct on the battlefield and in war generally, and these factors are also discussed at length. Finally in death and burial the Meroïtic kings aped the Pharaohs as far as lay in their power, even to the extent of allowing eighty days to elapse before their actual interment, which corresponded very closely to the seventy days required for embalming according to Herodotus. The archaeological evidence for all this, sarcophagus, pyramid, and associated chapel, has long been known and appreciated. The writer concludes this part with a discussion of the position of the priests and queens in society and of the sacral nature of the kingship.

On the question of the royal dress Hofmann begins the survey with an analysis of the head-dress and clothes worn by the Ethiopian dynasty in Egypt, which incidentally, for the record, did not rule over Egypt from 751-656 B.C. as the text implies on page 45, but only from Pi'ankhy's invasion and continuously only from the conquest of Shabaka until the expulsion of Taharqa. The writer, one feels, ought here to have made a point about it and when the king is shown in Egypt with purely Egyptian Pharaonic trappings or as an Ethiopian, and thus by inference an *alien* monarch, which is how the Egyptians themselves would have viewed him, whatever sentiments Pi'ankhy and his successors may have expressed about their supposed legitimacy and religious orthodoxy. Thus we read on page 47, 'Einige Reliefs aus dem Tempel T in Kawa zeigen König Taharqa mit einer Krone deren Unterteil nach der Zeichnung an die Kopfbedeckung der Philister errinnert'. Such an exotic diadem with a Philistine head-dress base would indeed have been a novelty for a Pharaoh in Egypt!

The full development of Napatan royal costume can be seen after the failure of the abortive attempt of Tanwetamani to reconquer Egypt, and the subsequent isolation of Kush afterwards. This section has, however, little to add to the previous material excepting certain details relating to the dress, jewellery, and wigs. In the next period, that of contact with the Greeks and Romans, 295–23 B.C., a considerable number of new influences are at work and these are discussed in some detail, as is the evidence from the final phase before the fall of this kingdom in A.D. 320. The conclusion reached is that there were three impulses influencing royal dress, and these are briefly summarized at the end of the study.

In the long excursus A the writer cites a considerable body of historical and archaeological evidence in a discussion of the effects of the expedition by Psammetichus II and the later move of the capital southwards to Meroë.

The text of this book is well annotated and the typography excellent. There is a medium-length but well-chosen bibliography, and an index with a welcome register listing all Ethiopian and Egyptian names and words used in transliteration, a very useful addition to help the reader find subjects quickly. A limited list of places is provided in a sketch map of the areas between Elephantine and Naqa, thus ennabling all the relevant towns and sites to be located quickly. It is probably inevitable in a study of this kind that the illustrations provided had to be reproductions of photographs and plans from other publications, but it may be remarked that the quality of many of these leaves something to be desired and is not up to the general standard of an otherwise very well-produced work.

E. P. UPHILL

Thousands of Years. An Archaeologist's Search for Ancient Egypt. By John A. Wilson. Pp. 218, pls. 23. New York, 1972. \$9.95.

About the year 1960 it suddenly occurred to Professor Wilson that most of his students had been born since the death of Breasted (1936), and that they had no idea what sort of man he had been. The result was the appearance of the book, Signs and Wonders upon Pharaoh in 1964, giving the 'official' story of American Egyptology. This work is now supplemented by the present book which in fact forms a much more personal account. Written in the easy and pleasant style that one has come to associate with the author, one could wish nevertheless that he had given the reader rather more anecdotes of the big figures in the story of Egyptology, for such is the stuff on which the history of a subject is made. Alas, we are treated to very few personal recollections of Breasted, and almost none at all of Carter, Reisner, Sethe, Winlock, and others whom the author knew or worked with.

Much more interesting and entertaining are the anecdotes of the writer's own life, which is traced from his birth (1899) in a Presbyterian manse in New York, until the present time. After High School and Princeton a short period in Beirut, 1920–3, led to his first experiences in the Near East and, of course, Egypt. It was due to the late Harold Nelson, however, that Wilson decided to enter Egyptology, and it is interesting to reflect on the advice given to his father at the time, namely that to do a doctor's degree in the subject one must go to Germany as there were no openings in the United States. How all this has changed since!

Studies under Breasted, Allen, Luckenbill, Ira Price, and Driver now followed.

A fellow-feeling with Sassaman, who had to earn his living by driving a taxi at weekends and who often arrived for his Monday Egyptian class both exhausted and unprepared, so that the other two students covered up for him by asking 'distracting questions on subjects that interested Breasted', will doubtless be felt by others who have undergone the same experience. Needless to say, although Breasted played up to it, he was probably not fooled. Wilson's novel way of learning to read hieratic from Papyrus Harris by having to transcribe it upside down, will also probably cause some amusement to students today. Particularly important from the point of view of the historian of the subject is the section dealing with the activities of the Oriental Institute and Chicago House between the wars. The expansion of work in the University of Chicago is also covered in considerable detail. Thus, for example, the phenomenal activity of the O.I.C. in 1935 was shown by the *Handbook*, which listed sixty-two people on nine field expeditions, and fifty-seven on the staff at home, with the then enormous budget if \$600,000. As Director of the O.I.C. Wilson was in a special position to estimate the manifold activities going on, including also the large number of major publications brought out.

Government service in Washington during the war followed this busy phase. It is obvious from these pages that the author possesses a great zest for life and takes a great interest in the committee work he has been called on to do, and also in meeting distinguished scholars in other disciplines. Recent work in Nubia and Hierakonpolis is also recounted with enthusiasm, and the autobiography closes with the writer's views on the past as a prelude to the future. Biographical notes, a full list of honours and awards, and an index, complete a well printed and produced work.

In closing, one may select one anecdote that Wilson relates against himself. While working up a ladder copying inscriptions at Medinet Habu he heard a British lady ask, 'Guide, what is that man doing up there?' 'Oh', said the dragoman with regal scorn, 'he is writing a book—but no one will read it'. We sincerely wish Professor Wilson better luck with this one.

E. P. UPHILL

Le Voyage en Égypte de Jean Palerne, Forésien, 1581. Présentation et notes de Serge Sauneron. Second vol. of La Collection des voyageurs occidentaux en Égypte, issued as no. 424 of IFAO. Pp. xv+203. Cairo, 1971. No price stated.

This is the second book in the interesting series of historical accounts of early French travellers in Egypt published by the French Institute in Cairo, and is again admirably edited by Sauneron. Jean Palerne is slightly later in date than Belon, the subject of the previous reprint, being born at la Fouillouse near St-Étienne-en-Forez in 1557. He attached himself to the Duke of Anjou and Alençon, fourth son of Henri II, serving as secretary in the latter's journeys in France and England, and afterwards went on his own to Spain. Palerne subsequently undertook a long trip in the Orient, 1581-3, of which this is really the journal,

written up before his death in 1592 at the early age of 35, but only published fourteen years later in 1606.

The text is excellently presented and provided with many footnotes, while the original frontispiece is reproduced, and the old-fashioned writing has been modernized to some extent for easier reading; thus u and v, i and j, are given in today's form. This volume gives only those parts dealing with Egypt which fill pages 22-224 of the original first edition. These are clearly marked in the margins and a table at the end gives a list of all the 131 chapter-headings contained in the account with those used here indicated by an asterisk. There are also useful indexes of geographical names, animals, plants, and local native features discussed by Palerne.

E. P. UPHILL

British Egyptology 1549–1906. By John David Wortham. Pp. xvi+171, pls. 16, 2 maps. Newton Abbot, 1972. £2.50.

This book purports in its preface to be the first specifically written history of British Egyptology and also claims to be an examination of pre-Petrie archaeological methodology. In fact it is neither, and it contains no original research or new material of any significance as far as can be ascertained. It has a pretentious title, but one may well ask how anyone can expect to deal adequately with so large a subject in 124 pages of actual text.

It is well presented and printed, but has insufficient notes and a bibliography that although quite long leaves out many essential sources including the most obvious standard reference works such as D.N.B.; and it has a curious set of illustrations. One is also rather tired of the old platitudes and jibes against Naville and the older school of Egyptologists. Each to his generation; Naville was not nearly so antiquated in his thinking as many books like to pretend, nor Petrie always so forward-thinking at the other end of the scale. Would that authors of such books read what their subjects actually said before quoting other people's opinions on them, often founded on bias or incomplete notions!

The best part of the book is undoubtedly the chapter dealing with the early figures and travellers such as Aldersey, Sandys, and Greaves. One can only deplore, however, that so much space has been allowed to pyramidologists and other cranks, and that an adequate and truly representative set of illustrations showing the development of archaeological technique in Egyptology has not been included.

The following is a list of some of the mistakes noted at random.

- p. 18 Pharaoh's Needle mis-spelt.
- p. 27 The Step Pyramid is obviously not the 'first true pyramid'.
- p. 28 The Labyrinth at Hawara was built not by Amenemhet IV but by Amenemhet III. On the same page: the Colossi of Memnon are statues not of Amenemhet but of Amenophis III.
- p. 29 Nubia is not and never was in historic times 'a land of savage Negro tribes'. These people certainly lived much further south in Norden's day.
- p. 55 Seyffarth did not 'devise' his own system of hieroglyphic decipherment, but used and expanded upon Spohn's.
- p. 63 'Sloane' should be 'Sir John Soane'.
- p. 71 'Some mastabas contained brilliant frescoes resembling those in the tombs of the Valley of the Kings.' My italics.
- p. 105 'Ebers wrote most of his historical novels in the period from 1870-1900.' In fact his most famous novel was published in 1864. Wortham seems to have been confused by dates of translations. Ebers actually died in 1898.
- p. 114 Petrie did not 'discover' Tanis or the pyramid of Amenemhet III, which had both been known for a long time. He was also born 3 June 1853, not 8 June.

T

p. 122 In para. 2, line 2, read Naucratis for Tanis in the context of Greek pottery finds.

Also on same page: Hawara pyramid is not on the Nile but at the entry to the Fayûm.

E. P. UPHILL

Altägyptische Tiergeschichte und Fabel. Gestalt und Strahlkraft. Emma Brunner-Traut. Pp. x+68, figs. 37. Darmstadt, 1968. Price DM 19·30.

This book is much more than just an account of amusing pictures of the cartoon variety designed to entertain ancient Egyptian families, and in fact raises many interesting points in connection with the world of fables and satire. The author sets about her classification in a meticulously methodical way. After a foreword and introduction there is a detailed discussion of both archaeological and literary sources, the former being grouped under five subheadings. The monuments, mainly in the form of ostraca and related objects together with papyri, are first described, and it is interesting to note that the author establishes links right back to Hierakonpolis material at the end of the Fourth Millennium B.C., although the main material for this subject dates from the Nineteenth and Twentieth Dynasties.

Next comes a summary of the principal motifs shown in the pictures arranged under sixteen sections. This is undoubtedly the most interesting part of this book, for here the author discusses the standard types of humour and stock-joke scenes used in this particular art. Thus, for example, the pictures are arranged as follows: (Motif No. 1a) Mouse army with chariots and weapons attack a Cat's town. This is derived from the famous Fairy-tale Papyrus in Turin and is one of a number of examples listed under the first motif under the general term 'The War between Mice and Cats'. Other scenes show a lady mouse served by servant cats (Motif 2), animal musicians and dancers (Motif 5), working in the fields (Motif 9), or even animals making love to one another (Motif 16). All these are, of course, folk themes and the real implication is that these are animals and birds put in the position of human beings for two reasons, first, the more obvious one of a parody on the nature of the creature itself, thus hunters like the fox guard flocks of birds, and hunted animals or cats are attacked by fierce birds; secondly, a deeper and more significant juxtaposition with human beings to express fables and allegories.

It is at this point that the literary sources become most important and the author shows many interesting and significant links with written fables, and also points to parallels with Aesop. Talking animals are a theme here, much delighted in by the not very sophisticated villagers of ancient Egypt no doubt, who living very close to nature often endowed their animals with human qualities as shown by such stories as the 'Tale of Two Brothers'. Thus these fables can be classified under three categories: Animal, Members, Plants.

To illumine these motifs further the author takes one of them, the cat and mouse war, and reconstructs the actual story. While the general account of this is fairly clear, the use of medieval sources should be drawn attention to in this context, as some readers will no doubt regard this as very secondary evidence. Nevertheless, the use of the contemporary fables is a valuable and quite justified method, and such reconstructions as that used with Leiden Papyrus I. 384 which contains the Myth of the Sun's Eye, and which shows various animals talking and holding a conference like human beings, is an admirable piece of work and a very demonstrative way of indicating a thought-process somewhat alien to the modern world. (Or is it? One thinks of Walt Disney cartoons and wonders.)

Thus there are parodies of real people and possibly actual events as well. The Deir el-Medina ostraca naturally ape and make fun of the actual type of scenes used in the tombs in which the artists were probably working, see Motif 3f (picture 3), or Motif 4f (picture 16).

Section III deals with allied literature in other countries such as Babylonia, Greece, India, and even the Old Testament. This is perhaps stretching the net a bit wide, but there can be no doubt as to the relevance of similar material from Mesopotamia and Palestine. Many of these comparisons can be quite interesting, as for example the Teaching of 'Ankhsheshongy when set alongside the fable of Phaedrus A 18.

Altogether, this is a very worth-while study and for such a small book has a great deal of information compressed within its pages. It is well annotated, has a list of abbreviations used and a short bibliography, but lacks an index.

E. P. UPHILL

Untersuchungen zur Lebenslehre des Amenope. By IRENE GRUMACH. Münchner Ägyptologische Studien, Heft 23. Pp. 198. Tables, some folding. Munich, 1972. Price DM 55.

Though the Teaching of Amenope¹ is a work often cited in connection with the Biblical Book of Proverbs

¹ The form Amenope which the author has adopted in preference to the more familiar Amenemope was advocated by Gardiner in Onomastica, I, 24 n. I, for the phonetic reason there given.

and can claim an extensive bibliography even apart from minor references, a standard modern edition incorporating all such textual sources as are so far known has yet to be produced. In this book, the author's aim has been to attempt a closer definition of the work's position in Egyptian literary history, leaving her final translation and conclusions as to its date, sources, and text to be controlled by the literary study of its structure at various levels of analysis. Perhaps an adverse judgement would characterize the results as parvum in multo, inasmuch as the main arguments could have been set forth quite briefly instead of being spread out at considerable length in the form of running commentaries on each chapter of the Teaching of Amenope.

After a general introduction, the author deals with each chapter of the work in turn, dividing the material under the headings 'Übersetzung', 'Kommentar zur Übersetzung', 'Form und Stellung', 'Quellen', and 'Kommentar zum Inhalt'. The commentary on the translation is admirably concise. In the appendix, following the bibliography and index, are transliterations demonstrating the author's hypotheses as to the sources which have contributed to the *Teaching of Amenope*, and a transliteration of the whole text, showing her analysis of its metrical structure. The methods which she has applied are those of G. Fecht. Just how far Fecht's rules and the author's application of them are valid is open to debate, and the author has provided a good object lesson for those interested in this branch of study. Fecht's principles for determining prosodic units or feet (*Kola*) indeed work well in practice, but the rejection by Fecht and Grumach of lines of one foot is still a little doubtful, and the division of a chapter into its constituent strophes is not always as cut-and-dried as a glance as the author's transcription would suggest.

The author argues on the basis of the apparently complex organization of its literary structure that we are likely to have the work in its original form, and that it must be the work of a single author, one who 'sich nicht mit einer zufälligen Sammlung von Maximen begnügte' (p. 3). She favours the Twentieth Dynasty as the period of its composition.

As for the sources, her first line of attack after considering the literary structure of the work and how it compares with earlier works which are directly known to us, is provided by the close relationship which Erman found to exist between it and Proverbs 22: 17-24: 22. Parallels to Amenope may be found throughout the first four of the five major divisions of the Book of Proverbs, but they are closest and most frequent in the first twenty-four verses of the third division (Prov. 22: 17-23: 11). The nature of this relationship has long been disputed. The author holds that both Amenope and the relevant verses of Proverbs go back to a common Egyptian source, which she has reconstructed as far as is possible under the heading 'Alte Lehre' by excerpting from Amenope those passages which have counterparts in Prov. 22: 17-23: 11 and arranging them, with some interpolations, in the order given by the latter.

The author has next selected from Amenope a number of utterances containing injunctions against the abuse of authority which might either represent parts of the 'Alte Lehre' not taken over in Proverbs, or else be derived from at least one other source. She lists those under the heading 'Alte Quelle'. For the background to the 'Alte Lehre' and 'Alte Quelle' she points to the Edict of Ḥaremḥab 'das der Korruption der Beamten wehren will und eine besondere Lehre für die Richter enthalt' (p. 6)—a felicitous suggestion.

A few comments may now be made on the translation. Amenope 5, 1-2, iir hm $div(\cdot)n(\cdot)n(\cdot)n$ ps bin iw bn $iry(\cdot)n(\cdot)n(\cdot)n$ mi $kd\cdot f$, is translated as 'steure, daß der Böse zu uns überfahre, die wir nicht wie er getan haben' (p. 30). The author explains, 'Ich folge in der Übersetzung Lange. Die Auffassung von Griffith und Wilson ("steure, daß wir den Bösen übersetzen mögen, denn wir werden nicht wie er tun") erlaubt zwar, $n \in \mathbb{N}$ wir und $n \in \mathbb{N}$ gleichzuordnen, erscheint mir aber zu gewagt, da sie auf futurischen Verständnis der $n \in \mathbb{N}$ gleichzuordnen, erscheint mir aber zu gewagt, da sie auf futurischen Verständnis der $n \in \mathbb{N}$ gleichzuordnen, erscheint mir aber zu gewagt, da sie auf futurischen Verständnis der $n \in \mathbb{N}$ granslation is to be preferred. The author probably rightly attaches 4, 19 to 5, 1-2, rendering 'Du Mond, der sein Verbrechen feststellt' (p. 30). The sense of this passage seems to be that Thoth, manifest as the moon, and the wrongdoer's accuser before Osiris (according to Griffith—but here rather before Rēc?) should mercifully guide his rescuers, who will submit him to no further punishment. D. C. Simpson will rightly have compared 5, 1-6 with Prov. 24: 29 and 25: 21.

In lines 8, 1-6 the author takes the 'Second Tense' $iir \cdot k$ si of 8, 1 as emphasizing not r p; ir sw but lines 2-8, which are taken as circumstantial clauses. This is evidently correct; compare the author's analogous

treatment of 14, 19-15, 3. But on other points her translation of this passage may be disputed. In 8, 2 hnty n kb is taken, improbably, as 'ein schwacher Feind' (p. 56) rather than 'an oppressor of the mild'; in 8, 3, m hck is emended to m hcf and n whn is treated as the semantic equivalent of a passive participle; in 8, 4 nhmw is taken as passive sdmf. The passage is clearly intended to depict the calamities which ideally befall the wicked, and by which they may be recognized, but a translation rather nearer to that of Griffith commends itself, with the rider that one might argue for the author's emendation of m hck to m hcf to give the possible translation 'in whom calamity is incarnate' (literally, 'calamitous in his body').

15, 18, r ky sp (n); 17, 3, r ky sp $in \cdot tw \cdot f$; 20, 19, r ky sp (n): these bothersome passages are convincingly explained by the author as footnotes to their respective chapters, meaning that the subject matter is dealt with elsewhere in the text as well. 26, 12, $k \cdot b \cdot (\cdot) s \cdot h \cdot t \cdot s \cdot nw \cdot k$, is rendered 'verdopple ihn vor deinen Brüdern' (p. 170). The meaning 'that it may be doubled for [lit. before] your brethren' seems demanded by the context, despite the author's objection that $k \cdot b$ 'wird nur transitiv gebraucht' (p. 171).

This book will be of interest principally to students of Wisdom Literature and of literary structure; its length, its methods, and certain of its conclusions may be criticized, but it should, I believe, be welcomed in that it has clearly set forth the particular problems of the *Teaching of Amenope*, and has given a useful demonstration of the possibilities of metrical analysis. It should serve as a stimulus to further progress in the study of Ancient Egyptian literature and its affinities with, and possible influences upon the Hebrew tradition.

P. V. Johnson

Two Hieratic Funerary Papyri of Nesmin. By F. M. H. HAIKAL. Bibliotheca Aegyptiaca, XV. Part II: Translation and Commentary. Pp. 75. Brussels, Fondation Égyptologique Reine Élisabeth, 1972. Price 420 FB.

This volume follows closely on the author's Part I, containing the texts of the Nesmin papyri B.M. nos. 10208 and 10209, and fulfils the hope expressed by the present reviewer, in his remarks on Part I, that the translations of and commentaries on these papyri would not be long delayed. Papyrus 10209 is the first to be dealt with, and it is shown to be a ritual for the 'glorifying' (sih) of the dead on the occasion of the Festival of the Valley. An unusual feature is that the manuscript bears a note by the owner directing that it should be buried with him. An analysis of the contents of this text and a summary history of the Festival lead up to the translation, which is followed by an extensive commentary. There are two points which call for remark. In 1, 16 of the text, bi-tw, old perfective 2 sing., is translated on p. 17 as 'having become an incarted soul'. Is this a misprint for 'incarnate soul'? I can think of no other likely explanation. On pp. 22-3, in the discussion of inyw, the first word in the papyrus, I am not entirely convinced by Dr. Haikal's interpretation. To me it seems possible that it may be a variant of inw 'pattern', Urk. IV, 120, 5, with \(\cappa\) as determinative, the sense of the title being 'pattern for the glorifications', etc.

Papyrus B.M. 10208 has a different content. As Dr. Haikal points out, it belongs to the same class of ritual text as the 'Lamentations' and the 'Songs' of Isis and Nephthys, but it differs considerably from either, giving much more detail regarding myth and ritual than do the two cognate manuscripts, though it too was intended to be recited during the festival of Khoiak. As before, the preliminary account of the text is followed by a translation and full commentary. The book is completed by a bibliography and by indexes; in the latter the entries, following a current trend, are made in transliteration only and no modern equivalents are given.

In general it may be remarked that this book is of real importance to the student of Egyptian religion, and one hopes that the author will go on to deal with other late religious papyri. The translation is couched in the old 'archaic' English idiom, which nowadays begins to be a trifle disconcerting, and there are several misprints which should not have passed the proof-reader. But these matters do not detract from my opinion that Dr. Haikal is to be congratulated on this book.

R. O. FAULKNER

Roman Military Records on Papyrus. By ROBERT O. FINK. The American Philological Association, Monograph 26. Pp. xvii+564. Press of Case Western Reserve University, 1971. £11.50.

The purpose of this book is to collect together all the military records relating to the Roman army which are extant on papyrus, the chronological limits being the first three centuries A.D. (the latest text bearing an

¹ This would be an attractive parallel to 'the taking of life is in his eye' (8, 4).

exact date is from A.D. 293). The term 'military' is understood in a restricted sense so as to be limited to 'records and correspondence concerned solely with the internal administration of the army' (p. 1). It thus excludes petitions to military officers, receipts issued to civilians and requisitions from them, contracts of a private nature in which soldiers appear and, perhaps more surprisingly, military diplomata and epicrisis lists. Also excluded are inscriptions which from their subject-matter would fall within this definition, although the editor has transgressed the limits he has set himself in order to include a few parchment scraps and a large group of ostraca (78). There are 134 texts in all, ranging from the huge Dura rosters, with forty-four columns on the recto and forty-five on the verso (1 and 2), down to the merest scraps. The most obvious difference between the present book and that by Daris published in 1964 (Documenti per la storia dell'esercito romano in Egitto) is that it is not limited to Egypt; in fact well over half the texts come from the find at Dura-Europos. Almost all the papyri are in Latin, as one would expect, there being only a handful which are Greek or bilingual.

The work is divided into seven sections. The first deals with the republican period (a discussion only, there are no texts); the second (1-46) contains records of individual personnel, including complete rosters (notably the Dura texts already mentioned), partial rosters and special lists of various kinds; the third (47-67) is devoted to records of military units—morning reports, monthly summaries, and the well-known pridiana (63 and 64); the fourth (68-86) has accounts, receipts and records of matériel, the fifth (87-116) official correspondence, the sixth the Feriale Duranum (117), and the seventh unclassifiable fragments. There are comprehensive indexes and a concordance of texts incorporated.

With a few insignificant exceptions all the documents have been published before, but the texts Fink presents are the result of a careful re-examination, often on the basis of the originals, and nearly always show changes, often substantial not to say violent, from those of earlier editors; nor is this confined to the older editions, but includes such comparatively recent works as ChLA and the Dura volume. It is clear from this book just how far the study of Latin cursive is from being an exact science. Fink's texts supersede all previous versions and will form the basis for all future research, so that it is obvious that the worth of his book must depend entirely on the reliability of his texts, and this is particularly true as the book is likely to be used for the most part by readers who are not experts in Latin palaeography and must therefore rely entirely on the editor's readings. Most of the texts it contains are available in facsimile (there are no plates in the book itself), and an examination of these clearly demonstrates the editor's palaeographical competence. In a number of cases he is unquestionably right as against earlier editors, a great many more must be accounted probable, and if there is a residue which can be reckoned no more than possible—some of which a more cautious editor might have relegated to a note—the book as a whole, which is obviously the fruit of long and meticulous study, is an impressive achievement, the more so as so many of the texts are mere fragments with no content to help with the reading.

Each text, and each section of the book, is accompanied by a brief introduction; translations are added wherever possible and there are extensive footnotes, mostly devoted to points of reading. More editorial guidance might have been given to the reader in interpreting the documents, which are not infrequently enigmatic. Latin texts dispense with ordinary uses of capital letters (which are used only to represent 'capital' hand as opposed to cursive) and Greek texts have no accents or breathings; both these steps seem to me retrograde. More seriously the often faulty language is not normalised in the apparatus: to cite only one example, in the first line of 50 there are no less than four errors by the scribe, and the appropriate correction of at any rate the first of these (princeps for principis) does not readily spring to mind. Furthermore on a number of occasions abbreviations are left unexpanded and the index of abbreviations and symbols (pp. 556-9) is not always very helpful: thus the reader puzzled by the expansion of n or of f (e.g. at 70 a ii 27) will find no less than seven alternatives to choose from. It is true that reference back to earlier editions will solve these problems, but this should not be necessary.

A few points of detail. Some texts (e.g. 22) are given a precise dating which depends on palaeographical considerations alone; such precision is illusory. Is it certain that the omission of a consul's name (passim) implies damnatio memoriae? On pp. 16-17 we read that in the turma of Octavius 'the total is considerably less than the number of actual names', yet there are 71 names and a total of 120-39; should we read 'than twice the number of names'? In 1 ad seems never to be used with place-names, which throws doubt on the suggestion (p. 14) that leones is a place-name. In 2 xxxi 13 singul has dropped out at the left, and at xxxiii 18

read Anto(ni)no. 9 5a: there seems to me to be room for Octavianus, and at 12a the scribe may have intended Amiso but what he wrote was surely miso. 10 3: I do not believe the traces are sufficient to rule out d[ivo. 11 bis frag. c: there are no grounds for doubting either $\mu\acute{e}\gamma\iota\sigma\tau\epsilon$ or $E\rho\mu\sigma\hat{v}$. 21 13 Asprius: p is surely impossible; perhaps Astorius? 34 recto ii 4: the papyrus has Petuceus and at 47 ii 4 we should read $ad\ hord(eum)$. 67 10: I should be content with Marichal's [ubit]. In the introduction to 73 for 'Heraclide meros' read 'Heraclidou meris'. At 76 xvii 7 read $\epsilon i\delta a[i]vai\ a\dot{v}\tau\acute{\omega}v$, and in 1. 12 $\gamma\rho\acute{a}\sigma\tau\epsilon\iota v$; FF 9: the note reports eta as impossible yet it is read in the text; GG 6: it may just be possible to read $\Phi\alpha\mu\epsilon\nu\dot{\omega}\theta$ \bar{a} . 78: the use of ostraca instead of papyrus in this remote border area of Upper Egypt is not surprising; papyrus may have been unavailable. 8 2: absence from Dornseiff-Hansen is insufficient justification for changing $Kovo\acute{v}[\phi\iota s]$ into $K\acute{o}vo\gamma[os; II6:$ the expansion $v\epsilon\dot{\omega}\tau(\epsilon\rho s)$ is guaranteed by numerous parallels, and $[\Pi\alpha\mu]\beta\hat{\eta}\kappa\iota s$ should be kept; the note to 34 6 is misplaced; 38 5: read $\sigma v\nu\tau\iota\mu\eta\theta<\epsilon\acute{e}v$. 88 2 6: read hiereum. 132 2: $in\ deposito$ looks acceptable to me. In the Index (p. 492) for Subatianus p. 000 read p. 285.

Finally a word of praise for the printer, who has coped admirably not only with the normal difficulties inherent in a papyrological work but with a variety of symbols as well.

J. David Thomas

Greek Manuscripts of the Ancient World. By E. G. TURNER. Pp. xiv+132, pls. 47. Oxford: Clarendon Press, 1971. Price £5.00.

This book is a companion volume to the same author's *Greek Papyri* (see JEA 55 (1969), 234-6), and there are frequent cross-references throughout. It can, however, be fully appreciated without any knowledge of the earlier book. The major portion is a collection of seventy-three facsimiles with accompanying descriptions, normally on a facing page, to which an introductory essay is added. Apart from its obvious interest for the professional palaeographer, the book is intended by its author to attract the 'non-specialist classical scholar'. Turner's aim has been to put him in the position of the ancient reader so that he may appreciate what a 'book' meant in antiquity. The result is a work of the first importance for palaeography and the study of Greek literary papyri.

The facsimiles are arranged not according to the normal chronological order nor palaeographically (i.e. by hands), but by literary genres; thus all examples of epic come together as do those of drama, orators, historians, etc. Turner has been very well served by his photographer: with the sole exception of 52 the plates vary from the satisfactory to the excellent, with a high proportion in the second category. He has also been well served by his printer, who has succeeded in rendering in printed form a variety of symbols, as well as coping with the normal difficulties inevitable in a work of this kind.

The plates have been carefully chosen to illustrate every variety of literary handwriting from the fourth century B.C. to the late Byzantine period, with the emphasis on the first four centuries A.D. In general well-known examples are avoided and some papyri are here reproduced for the first time. Each facsimile is accompanied by a very detailed description, which concentrates on the external format, use of punctuation, and other lectional signs, as well as giving much palaeographical information. In every case some part of the plate is transcribed, though one may regret that this rarely amounts to the whole of the portion illustrated, and it would have saved the reader's time if the lines transcribed had been marked on the plate (as for example in Harrison Thomson's Latin Bookhands). In a few places there has been a printing error in the transcription, e.g. in 7 read $C\iota\mu\omega\nu\iota\delta\epsilon\iota\omega\nu$, 29 434 $c\chio\lambda\eta^{\iota}c^{\prime}$ and 435 $\eta\mu\epsilon\iota^{c}$, 45 6 $\kappa\alpha\iota o\rho\theta\iota o\nu$ and 63 4 $\tau o\nu c\pi o$. The transcription follows the papyrus as exactly as possible, thus dispensing with word-division, punctuation, etc., except where it is given in the papyrus (though, somewhat inconsistently, certain letters are capitalized).

The dating of the texts is in each case the result of a reassessment by Turner, which occasionally leads him to dispute that hitherto current. Inevitably this is a partly subjective process (as is noted on p. 24) where different people will have different ideas (thus I should myself be inclined to put 55 earlier than the first century B.C., and I wonder whether the original editors were not nearer the mark in dating 67 to the middle of the second century A.D.), but Turner's knowledge of literary papyri is unrivalled and his judgement will very properly carry great weight. The sound caution of his views is well illustrated by his remarks on 51 (P. Derveni), by the cogent reasons advanced for a latter dating of the British Museum Bacchylides papyrus (pp. 26-7), and above all by his statement on the precision, or lack of it, which may be expected when a text

is dated on palaeographical grounds alone: 'for book hands a period of 50 years is the least acceptable spread in time' (p. 23).

The introductory essay compresses a great deal into a relatively small space. Turner begins with a discussion of terms, in which he points out the defects in the way 'book hand' and 'cursive' are usually used, and proposes to give the name 'capitals' to handwriting in which each letter 'stands independent and for itself'. This term at once suggests both a comparison with the lettering of inscriptions and an allusion to the fact that such hands may be classed as maiuscule, with a strong emphasis normally on bilinear form. The capitals may, of course, be written quickly or slowly, but what we usually find in books is 'a handwriting in capitals strictly or roughly bilinear, usually made slowly' (p. 4). A further section goes on to discuss the ruling of lines, external appearance of the papyrus and layout of script, and the scribe's equipment and posture. This is followed by detailed and erudite discussion of the use of punctuation, accents, and other lectional signs, as well as of abbreviations, title tags, and the work of the corrector or collator (one may add here that dots for expunction placed over the letter are to be found in two recently published documentary texts, P. Yale 65. 7 and P. Mich. 620. 200-1). Turner concludes with a note on the dating of papyri, which leads him to offer a classification of scripts of the first four centuries A.D. into (1) informal round hands, (2) formal round hands, and (3) formal mixed hands. Within these classifications certain distinct types can be recognized (e.g. under (2) Biblical Maiuscule and Coptic Uncial), and the conclusion is drawn that more than one style was in use at the same time.

Two features of the book are particularly worth stressing. First, in treating in detail of lectional signs, external format, and the like, Turner is tackling almost entirely new ground for papyrological studies, and is discussing papyri in a way which has hitherto been attempted only for mediaeval parchment manuscripts (and all too rarely there). Secondly, when Turner is discussing the palaeography of papyri he is working a well-tilled field; yet his work is a re-evaluation from the fundamentals upwards, with nothing taken for granted from the work of his predecessors, in short a wholly new approach. Not only, therefore, is this a book which breaks new ground, but it also brings fresh light to bear on old problems; as a whole it is a study which deepens appreciably our knowledge of literary papyri.

J. David Thomas

Euripides Papyri, I, Texts from Oxyrhynchus. By BRUCE E. DONOVAN. American Studies in Papyrology, volume 5. Pp. ix+104, pls. 23. New Haven and Toronto, 1969. Price £7.00.

This book deals with the Euripidean papyri from Oxyrhynchus (a total of twenty-three published up to 1965). Its primary aim is 'to obtain as precise information as possible on the varieties and numbers of Euripidean texts from ancient Egypt, and, more particularly, to collect as many bibliographical details as may be extracted from the papyrological remains.'

Donovan discusses the script, accidentals, and layout of each fragment in detail. The information is useful, especially the careful estimates of the original dimensions of the books. But the palaeographic descriptions are generally more florid than informative; and the value-judgements based on them necessarily tenuous, sometimes simply misguided. (Thus p. 31 'the hand is crude and unattractive . . . clumsily pretentious': so it is, seen aesthetically; but I should judge it typical of its period.) Further, Donovan makes heavy weather of quite familiar phenomena: the accommodation in $\delta co\gamma \gamma \epsilon$ and $\theta av \epsilon i\mu$ [$\mu \epsilon v$ (pp. 36, 63); the caret-mark with $\delta v \omega$ (p. 63); the apostrophe in $c\tau \epsilon v a\gamma' \mu \delta c$ (p. 73); the double point as punctuation (p. 81). Again, the study of format is of great interest; but Donovan's comparative material seems to be taken entirely at second hand from Schubart (1921) and Kenyon (1951).

Donovan also discusses the points at which each papyrus contributes to the apparatus criticus of the poet. No doubt, there is not much new to say; but even so the discussion is too thick with doxography, too thin in clarity and precision. There is no point in saying that a reading is 'acceptable', when the variants are unmetrical; or in comparing the colometry of the papyrus with that of Murray, as if Murray were ultimate authority.

Donovan then proceeds to assess the calibre of each text, considered as a cross between its bibliographical and its textual excellence (he does not always avoid the false premise that handsome manuscripts offer authoritative texts). A general introduction collates the results achieved: details of book-production (usefully tabulated), the tradition of Euripides' text (nothing new), Euripides' place in the Graeco-Egyptian

world (Donovan thinks his popularity has been exaggerated, given that we have at least as many papyri of Aeschylus from Oxyrhynchus (p. 7): he forgets that the content of P. Oxy. depends on editorial taste, not on random sampling).

Donovan has checked the readings of his papyri on photographs, not on originals. The only advance is an observation of Dr. R. A. Coles: the small fragment of P. Oxy. 2223 (*Bacchae*), hitherto tentatively assigned to the lacuna after 1. 1329, does in fact join the main fragment and provide the beginnings of 11. 1072-5.

Almost all the papyri discussed are reproduced in the plates. But the quality of reproduction is generally too poor for any but the most elementary observations.

P. J. PARSONS

Documentary Papyri from the Michigan Collection. By GERALD M. BROWNE. American Studies in Papyrology, volume 6. Pp. x+98, pls. 8. Toronto, 1970. Price c. £8.00.

This is in effect the tenth volume of the Michigan series, and carries on the publication with nos. 577-602. The documents are for the most part of familiar type. There are no sensations, but knowledge is increased: note 578, which provides new evidence for a census (on the 14-year cycle) in A.D. 19/20; 582, which carries the title πράκτωρ ἀργυρικῶν back to A.D. 49/50 and settles the meaning of ἀπολύειμος οὐείας ('exempt' from certain liturgies, because an usiac farmer: see now P. Oxy. 2837.9 note); 592 is a unit-roster, in Latin, from the early dominate; 593 is a check-list of cavalry soldiers, datable to A.D. 312 and (remarkably) in Greek; 601 is a stray from the Zeno archive.

Most interesting of all are **577** and **594**. The first is an illiterate letter, assigned palaeographically to the reign of Claudius or Nero, about the exaction of taxes from 'minors'. The second is an account of arrears for poll-, pig-, and dyke-tax, owed by inhabitants of Philadelphia for years 6 to 12 of Claudius. The editor rightly sees both documents as further evidence of the Egyptian economic crisis (**580**, and the parallel reports of flight from Oxyrhynchus, reflect the same situation): tax-collectors press those who are only just eligible to pay; more than half the male population of Philadelphia has defaulted for poll-tax in 46/7 and 47/8. The Edict of Ti. Julius Alexander shows that distress continued. Among the abuses there mentioned is ἡ λεγομένη κατὰ cύνοψιν ἀπαίτητις, οὐ πρὸς τὴν οὖςαν ἀνάβαςιν Νίλου, ἀλλὰ πρὸς cύνκριςιν ἀρχαίας ἐτέρων (ἀρχαιοτέρων?) τινῶν ἀναβάςεων (ll. 55 f.). In **594** this system seems to operate already, for the figure of Year 12 is stated πρὸς cύνοψ(ιν) ια (ἔτους): the editor translated this 'in the light of the overall estimate of the 11th year', but the parallel passage of the Edict suggests 'estimated from the figures of the 11th year'.

But even the most routine documents in this book are made interesting by the editor's treatment. He writes a full, acute, and learned commentary, which discusses general context and details of reading with equal clarity and judgement. He is widely informed about the legal and administrative processes of Roman Egypt, and takes care to site his texts within them. It is a real pleasure to read his survey of 'Orders to Arrest' (pp. 47 ff.), which squeezes every drop of actuality from the jejune materials. Altogether, this volume is worthy of the Michigan tradition: a valuable aid and a salutary example to other editors.

P. J. Parsons

Proceedings of the Twelfth International Congress of Papyrology. Edited by Deborah H. Samuel. American Studies in Papyrology, volume 7. Pp. xvi+551. Toronto, 1970. Price c. £20.00.

The XII Congress produced the usual variety of papers. Little will particularly interest readers of this Journal: Bartina publishes a handsome fragment of *John* in Sahidic; Grumach traces the survival of old Egyptian elements in the illustrations of Coptic magic. Classical scholars have more: Arnott publishes an iambic scrap, Daris a chrestomathy; Del Corno surveys the adespota of New Comedy; Hanson reassesses the textual affinities of P. Ant. 184, Manfredi the textual uses of the Euripidean papyri. Between Greek and

¹ This has its dangers. (1) p. 35 'the upper margin, about 0.4 cm. and apparently complete, is unusually small...'. These details rest on P. Oxy. IX pl. 1, where the photograph has been trimmed to fit the page. Donovan's own plate shows an upper margin of c. 1.15 cm. (actual size) and incomplete. (2) p. 69 'it is apparent from fragment 1 that the fifth line of the play initiated the preserved column...'. Line 4 is a short one, like ll. 8 and 15. There is no reason why its last letter should show on the preserved papyrus surface. I suspect that Donovan has confused the actual surface with the shadow cast by its edges in the bad photograph, pl. XV.

Egyptian, the mixture of cultures is illustrated by Welles and Samuel (Egyptians in Ptolemaic government and bureaucracy) and by Bingen (Egyptian peasants and Greek innovations in PSI 502); Koenen puts in context a nationalist document, the 'Oracle of the Potter'.

Other papers are devoted to wider or narrower aspects of Greek Egypt. Peremans and Van't Dack deal with the foreign policy of the Ptolemies, Lenger with their legislation (πρόςταγμα as edict and as divine command); two fundamental aspects of Ptolemaic economy are reconsidered, the διαγραφή τοῦ επόρου (Pikous) and the Dioecetic Instructions P. Tebt. 703 (Poláček). For the Roman Period, Thomas discusses the history of the epistrategiae, Swarney the relations between Prefect and Idios Logos; on the lower bureaucratic level, Husselman illustrates the procedures of the public registry at Caranis, Biezunska analyses public control of slave-owning; at dirt level, Cadell deals with agricultural vocabulary, and Oates presents new information on the number and size of land-holdings in Philadelphia in A.D. 216. There are novelties of prosopography for several high officials: the prefects Avidius Heliodorus (Coles) and Baienus Blastianus (Swiderek), the duces M. Aur. Zeno Ianuarius (Parsons) and Cn. Domitius Philippus (Rea). For the Byzantine era, Remondon looks again at the introduction of capitation; Fikhman treats the structure of the great feudal estates, Bonneau their irrigation. Van Haelst documents the Egyptian Church in the time of Constantine, and Wipszycka discusses religious confraternities; Galiano collates the Madrid portion of P. Ch. Beatty VII, Roca Puig gives specimens of a new Greek liturgical text, Naldini surveys Christian literature preserved in the papyri.

Some papers concentrate on new texts. Turner introduces the archive of Comon (now P. Oxy. 2834-46); Maehler explicates his new documents (BGU 2012-3, 2070-1) on the Drusilla affair. Kiessling publishes parts of a marriage-contract and a petition. Browne collects material on κρεοπωλική καὶ ταριχηρά around a new Michigan text. Crisci, Hagedorn, and Uebel report on the present state of the collections in Florence, Cologne, and Jena.

Under Law, Amelotti continues his testamentary researches into the Byzantine period. There are valuable discussions of familiar formulae by Häge ($\mu\dot{\eta}$ $\dot{\epsilon}\lambda\alpha\tau\tau\sigma\nu\mu\dot{\epsilon}\nu\sigma\nu$) and Wolff ($\pi\rho\hat{a}\xi\iota c$). Meyer-Laurin considers 'fairness' as a criterion in decisions of the Ptolemaic judiciary. Katzoff reinterprets M. Chrest. 85 (the issue is, whether Hadrian's concession was an individual privilege or a general grant). Finally, Modrzejewski gives a most comprehensive survey of the *Reichsrecht* | *Volksrecht* question in Egypt.

Two distinguished contributions in minority fields: Cavallo asks whether Greek scripts developed homogeneously all over the Greek world; Gignac presents prolegomena to his forthcoming grammar of the Roman papyri.

This volume is as handsome as it is prompt: we must congratulate the editor, Mrs. Deborah Samuel. Readers will note one sign of the age: six papers about computer applications in papyrology. Otherwise they will, as usual, find much new bibliography, some new information, and few new ideas. One paper, which chance has reserved for the end of the book, is unique in matter and form. Professor Youtie begins with the soberest analysis of procedures in the Michigan Tax rolls, ends by picturing the érudit manqué among the clerks, furtively inserting a Callimachean allusion in his interminable register. A masterpiece of scholarly imagination.

P. J. Parsons

Death and Taxes, Ostraka in the Royal Ontario Museum, I. By A. E. Samuel, W. K. Hastings, A. K. Bowman, and R. S. Bagnall. American Studies in Papyrology, volume 10. Pp. xiv+151, pls. 22. Toronto, 1971. Price £9.00.

We have a great mass of Theban ostraca, now scattered through a dozen different collections; and of these several hundred found their way (through J. G. Milne) to the Royal Ontario Museum. This book has two objects. Part I, *Death*, is concerned with drawing demographic conclusions from the whole Theban corpus. Part II, *Taxes*, begins the publication of the ostraca in Toronto.

There are 72 new texts, of which 61 are receipts for various taxes; a useful commentary discusses the matter and the personalities. Decipherment is the basic problem. What the editors print can be checked from the excellent and complete photographs provided. By and large, I think, they have carried out their task with remarkable success. The suggestions which follow are made very diffidently:

2. $2 \text{ App}\omega()$ Milne. 4. 4 read δύο. 6. 2 ω : $(\partial \tau \hat{\omega} \nu) \nu$? 7. 7 $\nu \epsilon()$: $\tau \epsilon()$? 8. 7 the repeated month is unwelcome; Milne read $M\eta\nu o\phi()$, the photograph suggests $M\eta\nu o\delta()$; in either case Picos must be a patronymic or a second signatory. 12. 2 the photograph suggests $\iota \epsilon(\tilde{\epsilon}\tau o\nu c)$ (in any case, the notation '16 Domitian' had been obsolete for more than two months already, see O. Bodl. 510). 14. 4 Ac(): $Ac\kappa()$? 23. 3 read $\upsilon i \phi \tilde{\epsilon} \epsilon \chi o\nu$. 41. 6 $\Pi a\mu\omega()$ Milne, cf. 43. 6 note. 53. 3 this line should end with the formulaic $\upsilon \pi \hat{\epsilon} \rho + \text{place-name}$; only traces are visible on the photograph (but Milne read $\upsilon \pi (\hat{\epsilon} \rho) X d(\rho a\kappa oc)$). 64. 1 omits the initial monogram $\pi \rho()$. 66. 4 the editors' original reading $[\![f]\!]$ $\upsilon \pi \hat{\epsilon} \rho$ is surely right; line 5 belongs to the same entry, as the heavy indentation shows. The sum therefore does not work; and I cannot find any group of readings which will make it work (other things being equal, I should read $\mu\theta \perp \bar{\eta} \mu \bar{\eta}$ in 1, $\iota d \kappa \bar{\beta}$ in 3 and $o\delta \perp d \bar{\mu} \bar{\eta}$ in 6). (The readings of Milne come from preliminary transcripts now preserved in Oxford. Some of the ostraca may have become less legible in the intervening sixty years.)

The more general first section deals with the problem of life-expectancy in antiquity. The authors discuss previous approaches and their defects. One way is to estimate the age of excavated skeletons; but there is no means of guaranteeing that the sample is representative, especially so small a sample. Other estimates depend on the epitaphs which record the age of death. Conclusions here are open to attack from two sides: the results achieved vary improbably from province to province, and even within provinces; and no one result matches with any theoretically likely model (see K. Hopkins, *Population Studies* 20 (1966) 245 ff.). We are forced to admit that epitaphs register only certain classes of death, determined by local custom; and so the statistics are biased. The third source has been Graeco-Egyptian census-data. Hombert and Préaux collated the ages found in surviving returns, then determined mean ages and hence survival rate. The material here is at least homogeneous, and the sample might reasonably be thought random.

The authors suggest another method. The Theban ostraca are so numerous that nearly two hundred tax-payers can be assigned a tax-paying life (that is, are attested in receipts of two or more separate years). All of them will be male, and over 14 years of age; their age at pseudo-death (disappearance from the tax-world) will be at least 14 + their tax-paying span. By regarding the whole group as a single population, it is possible to derive statistics for the age of pseudo-death, and hence survival rates and life-expectancy in the same context. The final step is to demonstrate that the figures for real deaths will have corresponded to those for pseudo-deaths: consequently the results achieved for the tax-paying world are valid for the world in general.

The conclusion, in its simplest form, is that the fifteen-year old Theban has an average life-expectancy of 14·4 years. This is not far from Hombert and Préaux's figure for mean life-expectancy in men (27·23 years). The two results will support one another; and if the new figure implies a more drastic death-rate (p. 26), we may connect the discrepancy with the geographical and social distribution of the data. Of course, assumptions have to be made, and the authors state them (pp. 46 f.). There remain two basic questions which I am not qualified to answer: (1) is the relation between rate of death and rate of pseudo-death secure? (The answer is in the technical statistical section, pp. 25-47.) (2) Does the rate of death derived from the ostraca match any demographically plausible model?

Other books received

- 1. Die Götter am Nil. By Dipl.-Ing. Dr. HEDWIG LIST GOLLOB. 202×143 mm. Pp. 99, figs. 27. Vienna, Gerald & Co., 1959. No price given.
- 2. Greek and Latin Inscriptions in the Brooklyn Museum. By Kevin Herbert. Wilbour Monographs, IV. 285×220 mm. Pp. xvii+95, pls. 28+ frontispiece. Brooklyn, N.Y., The Brooklyn Museum, 1972. Price \$8.00. Library of Congress Cd. No. 72-139772.
- 3. A Papyrus of the Late Middle Kingdom in the Brooklyn Museum (Pap. Brooklyn 35. 1446). Edited with translation and commentary by WILLIAM C. HAYES. Wilbour Monographs, V. 284×210 mm. Pp. 165, pls. 14. Brooklyn, N.Y., The Brooklyn Museum, 1972. Price \$8.00. Library of Congress Cd. No. 55-32551. This is a reprint of the 1955 edition.
- 4. H ΕΛΛΗΝΟΡΡΩΜΑΙΚΗ ΠΑΙΔΕΙΑ ΕΝ ΑΙΓΥΠΤΩ. By M. HAMDI IBRAHIM. 248×172 mm. Pp. viii+335. Athens, 1972.
- 5. The Archaeology of Ancient Egypt. By T. G. H. James. Drawings by Rosemond Naivac. A Bodley Head Archaeology. 252×190 mm. Pp. 144, numerous illustrations (some coloured). London, The Bodley Head Ltd., 1972. Price £1.95. ISBN 0 370 01566 5.
- 6. Stress in Arabic and Word Structure in the Modern Arabic Dialects. By GERARD JANSSENS. Orientalia Gandansia, V. 253×156 mm. Pp. 166. Louvain; Uitgeverij Peeters, P.B. 41,3000 Leuven (België), 1972. No price given.
- 7. Studies in the Greek Language. Some Aspects of the Development of the Greek Language up to the Present Day. By Basil G. Mandilaras. 210×140 mm. Pp. 243. Athens, 1972. No price given.
- 8. Archives in the Ancient World. By Ernst Posner. 235×180 mm. Pp. xvii+383, figs. 43 + map. London, Oxford University Press; Cambridge, Mass., Harvard University Press; 1972. Price £5. SBN 674 04463 o. Library of Congress Cd. No. 79-158426.
- 9. I sarcofagi egizi dalle origini alla fine dell' Antico Regno. By Anna Maria Donadoni Roveri. Università di Roma, Istituto di Studi del Vicino Oriente, Serie archeologica 16. 318×227 mm. Pp. 180, pls. 40 + frontispiece, 20 figs. Rome, 1969. Price not given.
- 10. Essays on Religion and the Ancient World. By ARTHUR DARBY NOCK. Selected and edited with an Introduction, Bibliography of Nock's Writings, and Indexes. 2 vols. 242×154 mm. Pp. xvii+1029. Oxford, Clarendon Press, 1972. Price £15 for set of 2 vols.
- 11. Deuteronomy and the Deuteronomic School. By Moshe Weinfeld. 222×140 mm. Pp. xviii+467. Oxford, Clarendon Press, 1972. Price £9.
- 12. Hazor. The head of all those Kingdoms, Joshua 11: 10. With a chapter on Israelite Megiddo. By YIGAEL YADIN. The Schweich Lectures of the British Academy, 1970. 250×160 mm. Pp. xxiv+211, pls. 36, 56 figs. London, published for the British Academy by the Oxford University Press, 1972. Price £3. ISBN 0 19 725925 1.

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- 52. TEBTUNIS PAPYRI, Part II. By Bernard P. Grenfell, Arthur S. Hunt, Edgar J. Goodspeed. Map and two Plates. 1907 (Reprint 1970). £9.25.
- 53. THE OXYRHYNCHUS PAPYRI, Part XXXVII. By E. LOBEL. Twelves Plates. 1971. £6:25.
- 54. THE OXYRHYNCHUS PAPYRI, Part XXXVIII. By G. M. Browne, J. D. Thomas, E. G. Turner, Marcia E. Weinstein. Eight Plates. 1971. £7.75.
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