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## EDITORIAL FOREWORD

Although no notes appeared in our last Foreword on the previous season of work in the Sacred Animal Necropolis at Saqqâra, there was, of course, the usual programme of excavation; see now the Preliminary Report by Professor H. S. Smith in the present volume. Of the season 1975-6 Professor Smith writes as follows:

During its season in the Sacred Animal Necropolis, North Saqqâra, from September to December 1975, the Society undertook the following tasks: (1) completion of the clearance of the precincts of the temple complex (H. S. Smith, K. J. Frazer, D. G. Jeffreys); (2) preparation of the archaeological report on the temples and catacombs (H. S. Smith, Mrs. H. F. Smith, K. J. Frazer); (3) final philological work on the demotic literary papyri (W. J. Tait, H. S. Smith); (4) philological study of the collections of demotic ostraca (J. D. Ray); (5) final study of the Greek papyri (E. G. Turner). These were accomplished with the courteous help of the Egyptian Antiquities Service and its representative, Mr. Said 'Amer El-Fikey, Inspector of North Saqqâra, to whom the Society extends its thanks. The Chairman of the Society's Committee, Professor E. G. Turner, and Mrs. Turner, spent a fortnight at Saqqâra in December.

The area excavated (Sector 9) lies south of the main temple complex and east of the causeway leading to its southern dependencies (Sector 7). Our purpose was to investigate the upper and lower rock scarps for further entrances, and to examine a row of pillars located in 1974/5 east of the sacred way. These stood on a stone pediment, which formed a continuation of the stone boundary wall of the southern dependencies, cleared by G. T. Martin in 1971/3. Five square pillars were in situ with intervals of 45 cm . between them. Nine more were recovered from a robbers' pit west of the wall and restored to their places. Originally sixteen pillars had supported transoms in the manner of a pillared portico. As, however, the excavation revealed no contemporary structures to the east, but only an area occupied by Third-Dynasty brick mastabas and Old-Kingdom rock tombs, the 'portico' must have served principally as a decorative feature outside the south gateway to the temple complex. A small guard-chamber has been constructed east of the causeway to supervise both those entering and leaving the temple enclosure and those approaching through the 'portico' from the necropolis to the east. These features were probably therefore constructed with the temple enclosure in the fourth century b.c.

In the scarp below the portico, a stairway dromos led to a large rock-cut tomb, which was unfortunately entirely empty and most probably unfinished. To judge by tool marks, it certainly belonged to the Late Era, though it was earlier than the 'portico' above. Through this tomb, robbers had tunnelled by way of Old-Kingdom tomb chambers into the Falcon Catacombs; it has consequently been filled in. Careful stratigraphic work and pottery analysis by D. G. Jeffreys has shown that the robbery must have taken place in the early centuries A.D. before the foundation of the Christian settlement; the latest possible date is given by some fragmentary fourth-century A.D. documents written in Greek on papyrus, found dumped with organic material in an upper stratum.

Deposits of bronzes discovered round the main temple enclosure were of the same character as those found in earlier seasons. One included a handsome bronze situla of unusual size, made in one piece with its four-legged stand, and decorated with scenes in relief. A further demotic ostracon belonging to the Hor Archive was recovered with other fragmentary texts. Though no further catacombs were discovered, the work was of real value in demonstrating the probability that the lower

## EDITORIAL FOREWORD

scarp had been used for tombs and perhaps catacombs in the Saite and Persian periods; these would presumably have been cleared when the main portions of the temple complex were built over them in the fourth century b.c.

A further season's work on the site of the Saqqâra tomb of Horemheb is thus described by Dr. Geoffrey T. Martin:

A second season of excavations has been completed in the Saqqâra tomb of Horemheb, and the complete ground-plan is now revealed. On the east a forecourt and entrance-pylon give access to a great colonnaded courtyard, on the west of which is a door leading into a statue-room, flanked by long, narrow chapels. The statue-room in turn leads into the part of the tomb cleared this season: a second, smaller colonnaded court with a main chapel centrally positioned on the west, flanked by two burial-shafts and side-chapels. The latter had been reused as charnel-houses in the Late Era. The main chapel, which was badly destroyed, has not been disturbed since the Coptic Period; above lay a rubbish dump containing fragments of textiles and Coptic papyri. The study of the contents and palaeography of the latter should give us a date for the textiles.

A number of reliefs of the highest interest are preserved on the walls of the second court, or have been restored by us to their original positions. The south side of the east wall is particularly fine, and shows Horemheb, presumably by this time King's Deputy, receiving representatives or prisoners from foreign nations, Asiatic and African. Their physiognomy is rendered in extraordinarily fine detail; it is hardly too much to say that each figure is a portrait study. A block in Bologna (no. 1887) fits on this wall. The north wall shows details of the Memphite funerary ritual, and in particular the breaking of pottery vessels. These scenes, interrupted by a fine rectangular panel and a block with offering-bearers, are continued on the north side of the east wall. The panel is similar to a pair in the British Museum, originally from the south wall of the second court. The south wall preserves a scene in which Horemheb was received by the King and Queen. A long procession of captives is shown to the left. A well-known scene in Leiden fits above this register.

A block showing Horemheb in the Fields of Iaru, found loose in the debris, fits above another Bologna block (no. 1885). The true position of other pieces in the Collections has also been ascertained this season. Evidence, too, has been found to indicate that Horemheb was married before his accession. Two pair-statues have been recovered, together with the emplacement for a third. Two of the columns in the second courtyard are inscribed with female names and titles, perhaps members of Horemheb's family. Excavation of the shafts next year will probably reveal more details.

There has been another successful season at Qaṣr Ibrîm, and Professor J. Martin Plumley summarizes it as follows.

The two main areas of excavation were: (A) an L-shaped area to the east of the Temple Church; (B) an area to the west of the Temple Church. Area (A) had been partially excavated during the 1974 season. The work in this area this season has enabled a more precise defining of the area and the various occupation phases. It now seems that there were two main phases of X-group occupation (XI and X2). In $1975 \mathrm{X}_{2}$, the later phase, was carefully worked out, leaving the earlier phase which overlies Meroitic and possibly earlier occupation, to be worked out in a later excavation. This area proved less rich in finds than the parts excavated in 1974. However, two fine examples of X-group metal work, a decorated basin and a frying pan, were recovered. But by far the most important find was the discovery of four documents, written on papyrus, which lay at the bottom of a storage crypt. Three are written in early Sahidic Coptic and the fourth, the largest, is in cursive Greek. This last document is of particular importance since it is a letter to the King of the Blemmyes from a Nobadian king, seeking help against Silko, who is otherwise known only from his triumphal inscrip-
tion on the wall of the temple of Kalabsha. Study of the palaeography of this document may settle the much disputed date of Silko.

Work alongside the Temple Church disclosed that formerly a passage ran from the Meroïtic Gate at the east end of the Church towards the Meroïtic Temple, discovered in 1974. Evidence from below the overlying debris in this section strongly suggests that the Temple Church may have been in use as a place of Christian worship much earlier than was thought hitherto.

Area (B) was covered at its south end and partially along its eastern limit by a number of Bosnian stone-built houses. After these had been systematically dismantled, it was found that in common with other areas round the Temple Church almost the whole of the space had been riddled with storage pits, some of them very deep and strongly lined with stone or mud. To the west of the area of the Meroitic Temple, found in the 1974 season, an expanse of pavement containing four column bases and two stone rectangular basins or tanks, sunk into the floor of the pavement between two of the columns, were found. The purpose of these tanks is not clear at present, but perhaps they were intended for visitors to the Temple to wash their feet before entering the building. Associated with the pavement were a few fragments of painted plaster and painted stonework of Meroïtic style. It was noticed that this pavement included a piece of carved stonework originally from the earlier temple of Taharqa and that a carved block showing his prenomen had been used as part of the foundations of the pavement.

Further to the west, in front of the pavement, but at a lower level, massive pink sandstone foundations were uncovered. Without further excavation in the adjoining areas it is not possible as yet to state what kind of superstructure stood here in former times nor what its date might have been.

Professor Plumley stresses that there is a real threat of a further rise in the level of the lake, so that time to excavate parts of the site is short.

We congratulate Dr. J. R. Baines on his election to the Chair of Egyptology at Oxford and wish him well in this important post. Before that he was Lecturer in Egyptology at Durham University and Laycock Student in Egyptology at Worcester College, Oxford. We also congratulate Dr. M. L. Bierbrier and Dr. A. J. Spencer on their appointment as Assistant Keepers in the Department of Egyptian Antiquities at the British Museum. They both hold doctorates of Liverpool University. Our felicitations go similarly to Mr. S. W. Gruen, of Balliol College, Oxford, who has been appointed to a Jane K. Sather Assistantship in Classics in the University of California at Berkeley.

Egyptology has suffered a sad loss in the death of Dr. Elise J. Baumgartel in Oxford on 28 October 1975. Mrs. Joan Crowfoot Payne contributes the following appreciation.

Elise Jenny Baumgartel was born in 1892 in Berlin, where her father, Rudolf Goldschmidt, was a well-known architect. She was educated at home, with a French governess, and then went to the University of Berlin to study medicine first, and then Egyptology under Erman and Sethe. She took her degree and a doctorate at Königsberg in 1927, working under Wreszinski; her thesis was written on the Neolithic period in Tunis, Algiers, and neighbouring countries. She continued to work in Berlin, with journeys for study and excavation to Italy, Palestine, and Egypt, until i934. Her marriage in 1914 to Hubert Baumgartel, an art historian, did not last, but her three daughters were a most important part of her life, and when she finally left Germany in 1934 her children left also, to make new lives in other countries. She went first to Paris, where she studied flints under Breuil, and then to London.

For the next twenty years she divided her time between University College, London, where she
held an honorary appointment on the staff, Manchester Museum as Assistant Keeper of Egyptology and Classical Archaeology, and Oxford. During this period her life was a continual struggle against financial insecurity, but always some kind and long-sighted person or institution stepped in. In University College she worked on the magnificent Petrie collection, and here her various fields of interest, Egyptology, the Neolithic period, and flints, coalesced in what was to become her life's work, the study of the Predynastic period in Egypt. When University College closed in the early days of the war she came to Oxford, and here the Griffith Institute published the result of her research, a major work, The Cultures of Prehistoric Egypt, in two volumes in 1947 and 1960. The importance of these books, based on the close study of important material by an acute and original mind, will continue, however much the conclusions become outdated.

She left England for America in 1957, spending most of her time with her family, but continuing to work at the Oriental Institute in Chicago. Through the following years she put the finances of the family 'candy kitchen', a small sweet factory, on a firm foundation, and this work earned her the right to a state pension. At last she also received her compensation from the German government for loss of property. The latter part of her life was thus freed from the acute financial anxiety of earlier years.

In 1964 she returned to England, and settled in Oxford to work on her final book, Petrie's Naqada Excavations, a Supplement, the publication of the research material she had collected throughout her working life. The preparation of this volume was protracted, but our weekly sessions became a continued source of interest and pleasure. Glanville described her as 'a person capable of real philosophical thought, who applies not only industry and ability and archaeological training to the work in hand, but also deep understanding'. All this she remained, and combined with it a deep interest in the young, both her own descendants and students who sought her help.
Through the death of Dr. Herbert Ricke on 22 March 1976 at Diessen, Bavaria, we have lost a scholar who made important contributions to the early history of architecture in Ancient Egypt and especially to its functional interpretation in relation to religious ceremonies. Ricke was for many years Director of the Swiss Egyptological Institute in Cairo, and he and his wife were gracious hosts to many visiting scholars, a tradition which is happily maintained by their successors, Dr. and Frau Gerhard Haeny.

Visitors to the Principality of Monaco will find that an Egyptian collection which derives from various private sources is now displayed there in the Musée d'archéologie, Place du Musée. The exhibition has been attractively arranged by M. Georges Ricard.

Mr. T. G. H. James, Keeper of Egyptian Antiquities in the British Museum and General Editor of the Society's excavation memoirs, has been elected to a Fellowship of the British Academy. We congratulate him warmly.

# EXCAVATIONS AT THE MEMPHITE TOMB OF HOREMHEB, 1975: PRELIMINARY REPORT 

By GEOFFREY T. MARTIN

This year, through the generosity of the Egyptian Antiquities Department, the Society was able to obtain permission to work in an area of the Memphite necropolis south of the causeway of the pyramid of Unas. In recent years I have been increasingly interested in that part of the Saqqâra terrain which, to all intents and purposes, has never been the subject of scientific investigation. When my responsibilities as Site Director of the excavations in the Sacred Animal Necropolis came to an end in 1974 it seemed to me that investigations in the region would yield unparalleled opportunities for acquiring new information about the Memphite area in the New Kingdom, for reasons that will be outlined below. It so happened that my own interest in the Unas area coincided with a long-standing interest of Professor Adolf Klasens, Director of the National Museum of Antiquities, Leiden. It seemed appropriate therefore to join forces with Leiden, so that the present expedition, from the point of view of personnel and finance, is a joint one, the Leiden Museum being represented by Dr. H. D. Schneider. ${ }^{1}$ The staff of the 1975 expedition was as follows: Dr. G. T. Martin (University College London, Field Director), Dr. H. D. Schneider, Mr. K. J. Frazer, M.C. (surveyor), Miss A. J. L. Smith (University College London), Mr. C. J. Eyre (Merton College, Oxford, photographer), Mr. M. J. Raven (Leiden University), Mr. R. van Walsem (Leiden University). Miss J. D. Bourriau (Fitzwilliam Museum, Cambridge) joined us for five weeks to study the pottery. The Egyptian Antiquities Department was represented by Dr. Aly el-Khouly (Chief Inspector of Saqqâra) and by Mr. Said 'Amer el-Fikey (Inspector of North Saqqâra), who, together with our other colleagues in the Department and in the Egyptian Museum, gave us every assistance. Dr. and Mrs. W. F. G. J. Stoetzer took a friendly interest in the work, and their hospitality is again recorded with appreciation.

As is well known, the Saqqâra plateau is rich in remains of most periods of Egyptian history from the First Dynasty to the Graeco-Roman period. For three millennia the neighbouring city of Memphis was one of the capitals of Egypt, and important officials of state who functioned in the northern part of the country were buried in the Saqqâra necropolis. Even during the New Kingdom, when Thebes and the Delta cities assumed increasing significance, Memphis was still an important administrative centre. All the more puzzling therefore was the lack of standing monuments of the New Kingdom at

[^0]Saqqâra. One thing was certain: tombs of that period had been visited and partly recorded by Lepsius south of the Unas causeway and in the area of the Teti pyramid. ${ }^{2}$

From my own observations of the terrain of the Unas region a fact of some interest emerged: although nothing was visible above ground, the depressions in the surface sand appeared to be roughly rectangular, whereas in the Old Kingdom necropolis in North Saqqâra the depressions were more often than not roughly circular, representing spoil and sand thrown or accumulated round the rims of tomb shafts. The rectangular depressions in Saqqâra South immediately suggested to me open courtyards, such as that represented by the Eighteenth-Dynasty tomb of Maya. ${ }^{3}$ There was no doubt in my mind that the area would prove to be rich in tombs of the New Kingdom, a circumstance already suggested by the work of Lepsius and by the evidence afforded by early collectors, agents, and travellers who turned over the area in the early decades of the nineteenth century in their search for objects for the museums of Europe. ${ }^{4}$ No record of course was kept of the exact provenance of the pieces thus acquired: holes were dug in the sand, and reliefs and other objects were extracted as they came to light.

The question arose: was there anything left? I was convinced that there was, and for these reasons: the early 'excavators' could hardly have been systematic in their work, and experience shows that a very large work-force is needed to make any impression on the deep deposit of wind-blown sand that has covered the Saqqâra necropolissince antiquity. Moreover, with a sole exception only loose blocks or partial scenes are in the collections, which indicates that the tombs have not been cleared to the foundations. Another point of interest is that hardly anything has come from the area either through official work or through the art market, since the middle of the nineteenth century.

Permission having been granted to locate and record the New-Kingdom tombs described or mentioned by Lepsius, the decision was taken to begin with the tomb of Maya (no. 27), famous statues from which are in the Leiden Museum. From Lepsius's description it seemed likely that some of the reliefs might still be in situ. Moreover he was not able to investigate the western part of the tomb, which was covered by a mound of debris. Using as a guide the map drawn by Lepsius, Mr. Frazer made a survey of the area, the selected spot coinciding with a large rectangular depression of the kind noted above, and work began on January 6, 1975 (see fig. i).

First it was necessary to remove surface mounds of sand to level the selected area, and once this was achieved the work proceeded systematically. Immediately the tops of mud-brick walls came into view, resolving themselves into the outlines of the anticipated courtyard (fig. 2). Some Late-Old-Kingdom blocks found in the debris showed that the tomb-owner had demolished an existing structure to provide building material for his own, a not uncommon procedure in Ancient Egypt. The first clue to the identity of the tomb-owner came when the top of a limestone column emerged, with the name

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Fig．i．Map showing the location of the Memphite Tomb of Horemheb


Fig. 2. Plan of the Tomb of Horemheb

I. Block from debris of Great Courtyard. $1.41 \mathrm{~m} . \times 64.0 \mathrm{~cm}$.

2. Relief in situ on north wall of Great Courtyard. Width 57.0 cm .

Plate II


2. South jamb, interior of Antechapel.

I. North jamb, interior of Antechapel.
THE MEMPHITE TOMB OF HOREMḤEB, 1975

I. Entrance to Antechapel, looking west

2. Anubis plinth in Antechapel. Ht. of Osiris figure 32.5 cm .

3. Robbed relief, west wall of Great Courtyard. $1 \cdot 0 \mathrm{~m} . \times 73 \cdot 0 \mathrm{~cm}$.
and titles of the great military commander of Tutcankhamūn, Horemheb. Fearing lest the column had been taken or re-used from another part of the necropolis, we awaited confirmatory evidence of the identification. This came shortly afterwards in the form of a magnificent relief showing Horemheb seated in state, attended by a funerary priest. It was thus clear that we had located not the tomb of Maya but the long-lost and oft-discussed tomb of Horemheb. ${ }^{5}$

Horemḥeb, after a distinguished career in the civil and military administration, himself succeeded to the throne $c .1335$ B.c. after the brief reign of Ay, Tutcankhamūn's successor. Nothing is known of his antecedents. The primary source of information about his career as a high state official is the series of reliefs in the tomb which he built as a private individual. The chronology of this monument is as yet uncertain. Possibly it was begun under Akhenaten, but there is little reason to doubt that the main part of the decoration was carried out under Tuttankhamūn. Work was still going on in the tomb when Horemheb abandoned it on becoming king, so that part of the decoration probably dates from the reign of Ay.

The whereabouts of Horemheb's private tomb has been a matter of speculation, the Saqqâra necropolis seeming probable on circumstantial grounds. Splendid blocks from it were among those which reached European collections in the nineteenth century, and others, doubtless also found at the same time, have since found their way into museums. Some of the blocks are without any doubt from the Saqqâra tomb, including the important series in Leiden. ${ }^{6}$ Others are doubtful or uncertain, having been ascribed on stylistic grounds. At the present moment none of these blocks appears to join on to those found in situ or loose in the debris of the tomb this season, but they will all have to be studied and drawn for the final publication, which will be prepared after the end of the 1976 season of excavations. By this time it may be possible to reconstruct in theory if not in practice the original appearance of the most important tomb of the Eighteenth Dynasty at Saqqâra.

Reasons of space and printing costs preclude more than a brief outline of the architecture of the tomb and of the blocks, fragments, and objects found in it this season. Owing to the nature of the terrain at Saqqâra the tomb was built as a free-standing monument directly on the surface of the desert. The depth of the sand covering the bedrock, in which the burial-chamber is presumably cut, is as yet unknown. The elements so far uncovered include a paved forecourt, entrance pylon with ribbed edges like a temple, and a peristyle court with two chambers, possibly storerooms or chapels, on the west. A short corridor leads from the courtyard to an antechapel.

The forecourt is at present only partially cleared. When found it was completely buried in a 5.0 m . deposit of rubble, sand, relief fragments, and miscellaneous disturbed

[^2]material from Late tombs. Many surface burials of the Late Period were obviously dispersed during the activities of the early collectors in the first decades of the nineteenth century.

The Great Courtyard measures $14.93(\mathrm{E}-\mathrm{W}) \times 13.12 \mathrm{~m}$. (N-S), and is paved with limestone flags. The central area is sunk, the pavestones sloping gradually towards a runnel on the north, which drained off winter rains. Originally twenty-four limestone papyriform columns supported a roofed colonnade. Of these, parts of ten survive in situ, together with the circular bases for the remainder, with the exception of the example in the north-west corner. When in position this partly masked the entrance to the burial shaft, which will be investigated next season. The columns were originally decorated with raised rectangular panels, facing inwards towards the approach axis of the court, and depicting Horemheb adoring various deities.

As noted above, a number of fine relief blocks were removed from the tomb in the last century. To judge from the present state of the monument these came mostly from the north and south walls, and from the north side of the east wall, of the courtyard. ${ }^{7}$ The southern section of the east wall is virtually intact and is blank, except for graffiti scratched by visitors. At the east end of the main south wall the outlines of the draughtsman survive. A shrine, and a procession of foreigners can be discerned. A fine drawing of a horse is preserved below. Further along are blocks showing the Window of Appearances, finely carved, though not part of the famous Leiden scene. Adjacent are some partially carved scenes, including one in which the king is shown smiting an enemy. Most of the rest of the blocks from the south wall have gone, apart from the lowest courses.
A number of loose blocks of great interest were found in the debris of the courtyard, of which the most important is illustrated in Pl. I, I. Here a great official, newly decorated with collars of honour, is supported by attendants. To the right is a figure on a much larger scale, with one hand lowered in a gesture of welcome or greeting. The figure of the official provides us with one of the finest pieces of relief carving extant from the Late Eighteenth Dynasty. It is undoubtedly an attempt at a true portrait. The identification of the two persons presents a problem. From parallels the episode should represent the honouring of Horemheb by the sovereign, in this instance by Tutcankhamūn or conceivably Ay. The absence of an added uraeus and certain stylistic and iconographic details do not necessarily militate against this interpretation. ${ }^{8}$ Although the putative king on the right is leaning on a staff, and wears a costume normally associated with private persons of rank in the Late Eighteenth Dynasty, one at least of these details can be paralleled from the monuments. ${ }^{9}$ There remains, however, the

[^3]possibility that the scene depicts Horemheb (on the right) honouring an un-named colleague. Such a representation would be unprecedented, though would not be totally unexpected in view of Horemheb's supreme position in the state as King's Deputy. It is hoped that further evidence to resolve the problem will be forthcoming next season.

The wall between the south storeroom and the antechapel entrance has been robbed away, the only part remaining being a block, part of the lowest course. The front has been sawn off, presumably in the nineteenth century. This relief is not among those listed as coming from the tomb of Horemheb, neither has a preliminary check in the literature revealed its presence in a collection. A photograph is published here (Pl. IV, 3) in the hope that colleagues will identify the relief, if it still exists. ${ }^{10}$

The east door-jambs of the antechapel entrance corridor are inscribed with some titles of Horemheb (P1. IV, I). The wall adjacent on the north preserves part of a scene depicting a procession of offering-bearers. The entrance to the north storeroom has been blocked with mud-brick in antiquity. At pavement level three canopic jars were found. These are not part of the tomb equipment of Horemheb, and must derive from a nearby tomb. The north wall of the courtyard has been completely stripped of its decorated blocks, only some lower courses and a small fragment of a scene depicting circular loaves of bread remaining (Pl. I, 2). The fragment is of crucial importance, since two blocks in Bologna (no. 1886) almost certainly were part of this scene. ${ }^{\text {II }}$

The best preserved scene in the tomb, apart from the door jambs in the antechapel itself (Pl. III) is on the south wall of the antechapel entrance corridor. This shows Horemheb seated in state and attended by a Iunmutef-priest offering incense. Above is a text of the Opening of the Mouth ritual. The carving of this scene is of the highest order. Behind the chair of Horemheb is a figure of his army scribe (Pl. II, 2), whose name has been cut over a deliberate erasure. The surviving traces of the re-cut name suggest Ramose. Almost the entire scene, when found, was protected by a wall of loosely laid mud-bricks, with a fill of clean sand behind, perhaps placed in position in the nineteenth century when the tomb was re-located. The intention doubtless was to protect the blocks, which were to have been dismantled later. The wall opposite, on the north side of the corridor, is blank, another indication that the tomb decoration was unfinished.

The antechapel itself measures $8.00(\mathrm{E}-\mathrm{W}) \times 5.34 \mathrm{~m}$. (N-S). It was doubtless originally vaulted in mud-brick. Traces of colour on the plaster of the walls shows that it was painted like the chapels of the Theban tombs. The door-jambs are very well preserved (Pl. III). Both were copied and published by Mariette, ${ }^{\text {I2 }}$ who apparently made one sketch and then duplicated it. In fact the two representations of Horemheb are quite different, and the north jamb only has an added uraeus. It is now clear that the absence of a uraeus on the brow of Horemheb cannot be a criterion for rejecting certain blocks in the museums. Neither is it easy to reject certain blocks on the basis of style, since discoveries this season have revealed blocks and fragments in more than

[^4]one style. Whether the various styles represent distinct building phases is not sure at the moment.

On the west side of the antechapel are two emplacements for statues, carved with the titles of Horemheb. In one the feet only remain; in the debris of the antechapel a torso was found, perhaps part of the same statue. The one on the north has disappeared, but in the sand fill of the emplacement some papyrus fragments came to light. Pieced together, these prove to be part of the well-known Wisdom text, The Maxims of Ani, written in a clear hand, possibly of the Twentieth Dynasty. On this and other documentary finds from the tomb Mr. Christopher Eyre writes as follows:
The largest and most interesting piece is a fifteen-line page, lacking the beginnings and ends of all the lines, representing a new variant of the Maxims of Ani. It runs parallel to the text of P . Boulaq 4, page vii, $9-18$, containing, apart from the first phrase, the maxims on careful speech, lying, behaviour to one's god, and the beginning of that on filial piety. The text is significantly different from that of the Boulaq papyrus, and, incidentally, from that of the Deir el-Medina papyrus to be published by Professor Posener. However, while it refrains from the orthographic extravagances of the former, its tradition does not seem consistently better. The hand is extremely deliberate, with clear and rather angular individual signs, and an almost complete absence of ligatures, so that the only reading difficulties are caused by the numerous breaks and holes. At first sight the style is similar to that of the very end of the Eighteenth Dynasty, but a more careful examination of individual signs sows doubt in the mind, and, awaiting a complete palaeographic analysis, prevents the exclusion of a date between the Twentieth and Twenty-sixth Dynasties.
The finding of such a literary papyrus in the necropolis is further confirmation of the Egyptians' habit of taking their treasured documents with them. More interesting are the questions raised by the discovery of a small literary ostracon. Written in the semi-hieroglyphic style common for its genre, this is a duplicate of section VIII of the didactic composition Kmit, but containing no significant new variant. Non-literary texts are represented by a sole example: a fragment of a Demotic taxation papyrus which, Dr. Reymond kindly informs me, should be dated to the late Twenty-fifth or more probably early Twenty-sixth Dynasty. The papyrus finds are completed by two tiny fragments of hieroglyphic funerary books.

Of particular interest in the antechapel are two plinths of limestone, at the entrance to the doorway leading to the chapel of the tomb. These are certainly not part of the original architecture of the tomb, but were added in the Ramesside period. The curious attachments at the western ends must represent tails, the plinths originally supporting statues of Anubis. The fronts and sides are carved with figures of families of lector-priests of Horemheb. Since the tomb was abandoned on his accession to the throne, in theory their services would not have been needed. But it is highly probable that the tomb was in a sense sacrosanct because of its owner's elevation to the divine kingship, and that it became the site of a mortuary cult of Horemheb in the Ramesside period. In this connection the personal name, $H r-m-h b-m-n t r$, of a son of one of the lectors is interesting (Pl. IV, 2). A number of blocks with texts came to light in the debris of the antechapel, one with a finely carved and painted figure of Osiris. Their original position has yet to be determined. The doorway on the west delimits our excavations this season, and was blocked by us to prevent debris from the area beyond falling down into the antechapel (P1. IV, I). In levelling the surface to the west the
abacus of a column came into view, showing that the column below was preserved to its true height. It is carved with the titles of Horemheb, and is undoubtedly part of his tomb. Another, probably small, columned courtyard or colonnade, can therefore be expected before the chapel is reached.

In clearing round the sides of the tomb other monuments and blocks were located, which will have to be dealt with at a later stage in the excavations. ${ }^{13}$ The pottery found in the debris of the tomb is predominantly of the Late Period and Coptic era, the latter undoubtedly from the Monastery of Apa Jeremias to the east of the tomb. Characteristic painted sherds of the Late Eighteenth Dynasty were also found, as well as parts of two Mycenaean stirrup-jars ${ }^{14}$ and other imported wares. The presence of the latter is encouraging, and it is to be hoped that further finds will be in closed contexts.

Much of the evidence for the history of the New Kingdom is derived from Thebes, so that it will be most instructive, in due course, to have a counterbalance from the northern part of the country. There is every indication that the necropolis south of the Unas causeway will provide a mass of new material from the historical, architectural, artistic, and religious points of view. It may be possible to isolate a distinctive Memphite school of painting and sculpture in the Eighteenth and Nineteenth Dynasties, but all these possibilities lie in the future.

[^5]
# PRELIMINARY REPORT ON EXCAVATIONS IN THE SACRED ANIMAL NECROPOLIS <br> SEASON 1974-1975 

By H. S. SMITH

The Society's expedition arrived at North Saqqâra on October 29 and left on December 22. The personnel were Prof. H. S. Smith, Mrs. H. F. Smith, Mr. K. J. Frazer (architect), and Mr. J. D. Ray. The purpose of the expedition was to complete investigation of the temples of the sacred animal cults, and to establish their architectural history. Some restoration and cleaning was undertaken to make the site safer for visitors. Mr. Said 'Amer El-Fikey acted as Antiquities Department representative and assisted in the work.

Work began with test trenches in the area of the South Gate, establishing that this gate and the sacred ways leading from it were later in date than the main temple enclosure. The shrine of the falcons was cleared, and the sections here showed that the temple site had been abandoned some considerable time before its occupation by the Copts (Pl. V, r). A trench dug inside the West Gate of the enclosure established with high probability that there had been no occupation of the site between the erection of mastabas in the Old Kingdom and the foundation of the temples.

Cleaning of the temple terrace established the system of stone causeways which gave access to the various shrines at the time of their completion in the reign of Nectanebo II. A road from the Abusir-Serapeum valley led by a ramp through the West Gate in the enclosure wall to the pylon of the central temple (Shrine A). In front of this pylon ran a sacred way from the South Gate to the Mother of Apis Catacomb. From this other stone causeways led eastwards to Gates B and D, to the Baboon Shrine and Catacombs, and to the Falcon Catacombs (fig. r).
Various test pits and sections were cut to establish the chronological relationship of these buildings. Though many details are not yet clear, the following phases in construction may perhaps be isolated:
(1) The building of the sanctuary of the central temple (Shrine A), the gates which adjoin it and the screen wall to the north.
(2) The construction of the large Mother of Apis Catacomb, followed by that of the main enclosure wall of the temple terrace.
(3) The construction of the courtyard of the central temple (Shrine A), the Baboon Gate and Chapel, the South Gate in the main enclosure, and the system of sacred ways and causeways that belong with it. Construction of the Baboon Catacomb may belong to this stage.
(4) The filling of the western and southern part of the main temple enclosure up to terrace level, and the construction of the Falcon Complex and Catacomb.

(5) The abandonment of the temple complex, which probably suffered considerable depredations.
(6) Settlement by a Christian community on the ruins of the temple site.

While the intervals between these phases cannot be assessed upon the archaeological evidence, and any absolute chronology is at present speculative, a variety of evidence from papyri, inscribed blocks, stelae, ostraca, and carbon-14 determinations perhaps suggest the following rough scheme:

Phase I completed during the end of the XXVIth Dynasty ( $663-525$ B.c.).
Phase 2 begun after the expulsion of the First Achaemenid Dynasty (404 b.c.).
Phase 3 completed in the reign of Nectanebo II.
Phase 4 probably complete not appreciably later than Phase 3 .
Phase 5 may correspond with part of an interval between the ist and 5 th centuries A.D. which at present seem poorly attested by material from the site.
Phase 6 founded not later than the 5th century A.D.
In a trench behind the Baboon Chapel a foundation deposit was found consisting of two sealed wine-jars and eleven bronzes (Antiquities Service Register Nos. 6215-29) (Pl. V, 2). The bronzes are of moderate quality; they include five figures of Osiris, one of Isis, one of the Apis bull, and one of a queen or princess offering an aegis. Clearing in front of the Baboon Chapel revealed a well-laid stone foundation under the Baboon Causeway (Pl. V, 3). Whether this was the foundation of a building or simply of a pavement is not clear: it may perhaps belong to Phase 2. The blocks from it and from the Baboon Causeway had fallen into a deep pit; the section of this suggests that it was dug by robbers after the abandonment of the temple site to gain access to a mastaba below.

Vaults in the rock behind Shrine A and Gate B had been temporarily blocked by Prof. Emery because of the danger of rock falls. With the aid of Mr. Salaḥ en-Naggar, architect at Saqqâra, these vaults were made safe for work with masonry columns and subsequently cleared. In origin they are probably chambers of the Old Kingdom, robbed at a later date. In Vault B a girl had been buried in the Ptolemaic period, but the burial was robbed: part of her coffin was recovered. Vaults A. I and 2 yielded only animal bones thrown in by the Christians.

However, during the clearance of the sanctuary of the central temple ('Shrine A'), the Christian pavement was removed in Chamber 3 in its south-east corner. Beneath it were discovered a fill of animal bones, broken stone architectural elements, and some pottery, which had evidently been thrown in by the Christians after the pillage of the ancient site. However, below these was discovered a 'box' built of stone with two compartments (Pl. V, 4); part of the lid (from an Old Kingdom stone sarcophagus, re-used) was in situ, but part had been removed. The box had apparently originally contained foundation deposits of bronzes, like those found in earlier seasons outside the temple. The deposit had been robbed, but twenty-one bronzes (Antiquities Service Registration nos. 6252-72) and other minor objects were recovered, mostly badly damaged. They included a head-dress from a large bronze statue of Isis, Mother of






1. Section above stone pavement of Falcon Chapel, showing stratified layers of drifted sand. The topmost level is that of the pavement of the Christian settlement

2. Foundation of stone building in front of the Baboon Chapel, with causeway

r. Bronze head-dress from a temple image of Isis, Mother of Apis

3. Rear portion of interior of the main catacomb of the Mother of Apis, showing sand flow through the roof of vault 15

4. Bronze head of Isis, Mother of Apis, forming the finia of a carrying pole, perhaps from a bier or shrine

5. Stone foundation with regularly spaced orthos found outside the south enclosure wall of the temple ter

Apis (Pl. VI, r), and the bronze head of a cow, possibly originally a finial for the carrying pole from a Mother of Apis shrine (Pl. VI, 2) or from the bier for a Mother of Apis burial. Other finds included two Apis bulls, two large plumes from a head-dress, bronze statuettes of Osiris, two of Isis, and a miniature wooden baboon. A very fragile demotic papyrus was recovered from the same room. Other objects found elsewhere during the excavations included a broken Carian grave stela, and some unimportant bronzes.

Work had been halted on the Mother of Apis Catacomb in 1969-70 because of an ancient roof collapse in its central portion. This season an attempt was made to excavate Vault 15 in the rear portion of the catacomb, other vaults being too dangerous to clear because of shafts and cracks in their ceilings. However, a continuous sand-flow from above showed that a large shaft broke into the gallery (Pl. VI, 3): this was located and worked. It proved to be a large stair pit on the east of Mastaba No. 3534, and to open into two sets of tomb-chambers, one to the south, another to the west. The latter opened directly into a large tomb chamber discovered by Prof. Emery in 1970-1, which probably belongs with an enlargement of Mastaba 3534. The whole complex of chambers proved to lie just one metre above the ceilings of the main gallery of the Iseum and its vaults. As the ceilings of the chambers themselves were collapsing, and were less than 1.50 m below the desert surface, it was clearly too dangerous to continue work on this catacomb. This is hardly to be regretted, as tests make it clear that the vaults have been completely plundered before or during Christian times. The area above the catacomb has been fenced off as dangerous.

During the final days of the season, the northern end of a stone wall to the east of the southern dependencies of the temple site was investigated. This proved not to be a wall, but a limestone foundation, bearing a series of equally spaced limestone pillars or orthostats 30 cm wide and 45 cm apart. This feature is clearly deliberate and very unusual in Egyptian architecture. In the foundations of the wall an offering-table dedicated to the Mother of Apis has been re-used, so the feature is at the earliest post-XXVIth Dynasty. This discovery suggests that the area to the east of the wall might repay further work.

Mr. J. D. Ray completed the description of the Baboon and Falcon Catacombs, and the philological work on the inscriptions found in them, of which he has taken over the publication, in view of Professor Barns's untimely death. He also worked upon papyri and ostraca which he is to publish for the Society.

# THE PRIVATE TOMBS OF THEBES: EXCAVATIONS BY SIR ROBERT MOND 1905 AND 1906 

By LYDIA COLLINS

The aim of this article is to give an account of the work done on the private tombs of the Theban necropolis by Sir Robert Mond in 1904-5 and 1905-6. No account of these two seasons has ever been published and this report has been assembled from a collection of Mond's papers now in the School of Archaeology and Oriental Studies at Liverpool.

At the beginning of this century, when the Royal Tombs at Thebes were attracting a good deal of interest and attention, Mond was one of the first to realize the importance of preserving the private tombs of the necropolis. At that time, most of the tombs that lay open were unprotected and many had been despoiled or just allowed to fall into decay; many more lay undiscovered and some that were once known had been forgotten and lost again. In 1903 Mond took over the concession previously held by P. E. Newberry and for four consecutive seasons did much valuable work excavating and protecting the tombs. He published accounts of the work of the first two seasons in Annales du Service des Antiquités 5 (1904) and 6 (1905), but the work of the third and fourth seasons remained unpublished. The fourth season had been brought to a premature close by the sudden death of Mrs. Mond at Luxor. ${ }^{\text {I }}$ The memory of the excavations would, no doubt, always have been associated with this tragic event and this may well be one of the reasons why the work was never published. Certainly, Mond withdrew from active excavation in Egypt for many years. He did not resume excavations at Thebes on a large scale until 1923, although in the intervening years he continued to lend considerable financial support to the work of others. ${ }^{2}$ In 1913 he sent Ernest Mackay to Thebes, but the outbreak of war caused difficulties and the work was abandoned in 1916. Mond himself returned to Thebes in 1923 where he worked until 1926, employing as his assistants S. Yeivin and W. B. Emery. ${ }^{3}$

The original field notes from the two unpublished seasons came to light only recently when they were discovered amongst the papers of the late Professor Emery. They probably came into Emery's possession when he was employed by Mond in the 1920s: Mond sent him out to Egypt when he resumed his excavations at Thebes and Emery acted as director for two seasons. The two of them even planned to write a book on the Mond excavations there, but it unfortunately never materialized. The notes, however,

[^6]remained in Emery's possession and after his death were found in his house at Dulwich. As Mond had for many years been associated with the Liverpool Institute of Archaeology, Professor H. S. Smith and Dr. G. T. Martin of University College, London, kindly handed them over to the School of Archaeology, Liverpool (successor of the old Institute).

The notes consist of a very brief general account of the work done, lists of finds from the individual tombs but no drawings or photographs of the objects, ${ }^{4}$ a large number of notes of inscriptions from both tomb walls and objects, and a few plans and photographs. Inevitably, there are gaps where some of the notes are missing, but when one remembers that they have been lying about for almost seventy years, the account which emerges is remarkably complete and it seems miraculous that so much has been preserved. The notes have had to be brought up to date in several respects: tomb numbers have been inserted; the funerary cones, numbered by Mond according to Daressy's catalogue, 5 are here numbered according to the more recent and comprehensive catalogue by Davies and Macadam; ${ }^{6}$ and those plans and inscriptions which have since been published elsewhere have been omitted to avoid needless repetition. The present whereabouts of the objects, with few exceptions, is not known. In all probability, some went to the Cairo Museum and the rest to Mond since he financed the excavation. Some would have remained in his own collection, but no doubt many were given away to museums and private collectors.

I would like to record my thanks to Professor Fairman for first suggesting that I make this the subject of an article and for permission to publish, and to Dr. K. A. Kitchen, who has autographed the inscriptions, for his constant help and guidance without which this article would never have seen the light of day.

## The Excavations

The work, all done at Sheikh Abd el-Gurneh, was almost entirely confined to three localities: (I) the group of tombs around the courtyard of Neferhotep (No. 50); (2) the tomb of Thay (No. 23), and the areas to the south and north-west of it; and (3) the area in the vicinity of the tomb of Hepusonb (No. 67). The remainder of the work was done on individual tombs scattered over a wide area to the west of the court of Neferhotep (No. 50), and will be described in a fourth section (fig. 68).
(1) The group of tombs around the courtyard of Neferhotep (No. 50) (pl. VII and fig. 69).

The work was begun by clearing out the courtyard of Neferhotep, in which the tomb of Userhet (No. 51) had been found in the previous year. The centre of the courtyard was filled with debris to a height of about 20 ft . On removing this debris, the remains of a well-built mud-brick house were discovered, the walls of which were standing to

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Fig．5：


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Fig．3：
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Fig. $8:$


Fig. q: $^{2}$


Fig.11:






Tomb +4

P-orter) Mloss), plan at (3):- Iur scenes at left of [Stela]. From KAKphoto E. 1632



P-M1, phan at (4):- Lower Register (II), left to right, Scenes 1, 3, 3 .
Fig. 15: Scene 1 Man $\rightarrow$ offersto Rem-standard of Amun Reld by its friest $\leftarrow)$. Mond cofy; OlC. 18 fis. 21. KAK
 - phto E. 1633 , left.

 ontively vandalized and lost.
(2)

buckground colour of the columns of text (3) The long line at right elge of vic. 18, fig. 21, belongs to the nest sune, q.v.
(4) $\ell .5^{3}$, a 5 is Mond's reading.

Jomb $H$
p-M. at ( 4 ) II, Contd.:- Eig. 16: Scene 2. Man i Wife $\rightarrow$ ) adore Refertem ( -1 . KAKphats, 1633-34.

(4) II,

Fig.17. Seene 3. Than and Uife $\leftrightarrow$ adre the Burque of Sokar $(\leftrightarrow)$.
Mond eopy; KAK fihhotos, E. 1635 , and hand-ctry.


Sokar-Barque.

P-M, at $(5)^{\text {I/M }}$ - Seated couple $(\rightarrow)$, offered to ly Aon $(\sigma)$; behind later, 2 rows of relatives.
Fig. 18: Gaple and AOn: Mond cofy; KAK photos $1636(-7)$, and hand-copy.


Tomb 44
$\xrightarrow{\text { P-M. at ( } 5 \text { ( }}$ "/m, Contd. Fig. 19: Two rows of seated Relatives ( $\leftarrow$ ), 5 men above, 5 woman babow. Nothing legible on K.A.K. photo E. $1637^{*}$; Hond copy has following entry only :"Names of Sons, Daughters, second register

Fig. 20 :
$\xrightarrow{0-1 / 2}$, at (7), III:- Jomb, before which Anubis $\rightarrow$, supports mumnny $\rightarrow$ ). Offerings. Officiants $(\rightarrow)$ and mourners $\leftrightarrow-$ Hond copies; KAK photos E. $1638,1639$.

"Mound:
Lower register".]

Scroll:-
[22 $2^{\frac{2}{}-x}: \delta$, Hond copy].
$\longleftarrow-12$ officiants -mourners.




Fig. 21 : $:-$



N- M1 at (11), I-II:- At left (S.) end, goddess of the West supports mummy' of deceased. Before it, a heap of offerings, then (further right) three officiants ligating, censing and reading. from a scroll [like that of Fig. 20 , but blank]. Centre section, line of bearers (above) with tomb-goods, and oxen "man (below) before That afalque [on sledge]. Behind (right of) latter, presses with potable shrine (above), and mourners (I group above, another-beloul). At right (N.) end, booths of provisions a attendants (above), and two tow-boats and funeral barque (below) "[NOT 'bark of Sokari', as P-M. State]. Portable shive a upper group of mounters, g. Borcharkt, IA "S 64 (1929), pp .12-13~hh. I (1). Jests in Fig. 22 following. from Ka photos E. 1640-43.

Comb- $1+1$


"West" Mummy,
Offerings Three officiants.
Fig 23. Central section of Scene: footers (above); man - mien] furbelow), before Catafalque.

$\leftarrow$ Seven porters with burial-goods.


Nan $O x \xrightarrow[\rightarrow]{\text { Max tumsto cense Catafalque. }}$
Fig24. Centre-right and Right (N) end of Scene : shrine, mourners, booths, boats (2 sub-registers).


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## Jombltte

Eig.25. Mond cories from PM, (7), I andfor II [location not ertion, as to Io IT].
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Jomb 105.






Fig.17:


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Fig.51: I. 'Hoizontal Line':-
 II. 'Gantre Liné:-


Fig.50:



Fig.52:
:A. $\left(\frac{1-4}{\operatorname{sic}(k)}, \frac{\text { ane cone }}{\text { einenes }}\right)$



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Fig.53:

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6. W1





Fig. 60


Man



SHEIKH ABD EL GURNEH 1905-6


AFTER PORTER AND MOSS
UNDERLINING INDICATES APPROXIMATE POSITION
Fig. 68


Fig. 69

PIT 50 YARDS BELOW NAKHT PLAN AND SECTION AFTER MOND NOT TO SCALE


Fig. 70

## LYDIA COLLINS

a height of 4 or 5 ft . It may have belonged to a guardian of the tombs, but it was not possible to determine its date.

## NEFERHotep (No. 50)

The tomb was cleared and in it was found an inclined passage leading to some destroyed pits in the courtyard. In these pits a number of objects were found, including a stela of Neferhotep and several hundred fragments of sculpture from the tomb of Neferhotep, but there is no mention in the surviving notes of objects having been found in the tomb itself. The fallen walls of the tomb were rebuilt about 6 in. back from the original surface and the pits, the ceilings of which were broken in, were filled up again after their contents had been removed. Further restoration work was done on the tomb in $1925 .{ }^{7}$ The following objects were found in the pits:
Sandstone stela of Neferhotep. 7 ft . high, 5 ft . wide, 5 in. thick. Lower registers copied, but note of inscription very fragmentary: gives title and name, God's Father of Amūn, Neferhotep, followed by a few phrases of his speech. Possibly Porter and Moss, Top. Bibl. I. r² (1960), p. 96 (5). Terracotta shabti, painted white, writing black on yellow. Belonging to Puni ${ }^{\text {口e, }}$, no title. Usual formula. Wooden shabti of Mty-Rē $\odot$ 洋. 26 cm . high. Usual formula and spell. Shabti, mother of emerald, gilt hieroglyphs. Inscribed on both sides: on front, beginning of $h t p-d i-n s w$ formula to Osiris; on back, [First?] Prophet of Amūn, Pa. . . . (name lost). 7 blue-glaze shabtis. 15 cm . high. One bearing the name Pare-em-hab, Scribe of Funerary (?) Workshop/Offerings (fig. r), and two others bearing spelling variants of the same name but no title. A further shabti bears the name Rēcem-hab and is described as a lady. There is no record in the notes of the other three shabtis. Blue-glaze shabti, belonging to the Lady of the House, Chantress of Amūn, Ta-mi( t$)^{.8}$ It is not clear from the notes whether this is one of the three unrecorded shabtis in the above group, or whether it is a separate eighth shabti. White-glaze shabti(s), belonging to the Lady of the House, Ta -?rar ${ }^{\wedge}{ }^{\wedge}$ (?) and to the Overseer of the Cattle of Amen-Rēc, name illegible. It is not clear whether there are two separate shabtis or whether both inscriptions appear on the same shabti.
A stela of the Goldworker of Amen-Rēc, Maḥu (fig. 2) held by a fragment of a small kneeling statue was found in the courtyard, and also a cone of Neferhotep (DMC no. 301).

A small chamber was discovered to the right of the tomb of Neferhotep and in it was found a fragment of an Eighteenth-Dynasty cartonnage.

## UNINSCRIBED TOMB

A tomb without inscriptions or objects was found to the left of the tomb of Neferhotep in the south-west corner of the courtyard. ${ }^{9}$

Khensmose (No. 30)
On the north-west side of the courtyard of Neferhotep, the brick vaulted arch which

[^8]

I


2
Courtyard of Neferḥotep (No. 50)
I. Looking north. Left, Khensmose (No. 30), under arch; right, Userḥet (No. 5 1)
2. Looking west. Centre left, Neferḥotep (No. 50), extreme right, Khensmose (No. 30)
leads to the tomb of Khensmose was discovered and carefully repaired. The tomb itself was excavated and the following found:
Black diorite heart scarab set in silver. Black diorite statue of a bird. Wooden shabti, painted white. $18 \frac{1}{2} \mathrm{~cm}$. high. Belonging to God's Father of Amūn, Kha-em-was, with beginning of spell. Double coffin with inscription on inner case, belonging to the Lady of the House, Chantress of Amūn, Nesmut. Late Period. Found in pit at foot of stairs. Sandstone coffin. 42 cm . high. No record of inscription. It is uncertain from the notes whether this too was found in the pit at the foot of the stairs and contained the double coffin, or whether it was in a different part of the tomb.
userhet (No. ${ }^{51}$ )
This tomb had been discovered and cleared in 1904. ${ }^{10} \mathrm{~A}$ retaining wall ro ft . high was now built outside the tomb, and the following were found in the courtyard:
Stela of Userhet. Published by Davies. ${ }^{11}$ Shabti, name illegible, with usual spell. Scarab with random hieroglyphs.
amenwahsu (No. ili)
This tomb, which stands to the right of the tomb of Userhet, was found and some of the inscriptions copied. These are as yet unpublished, but are not given here as they will appear in Kitchen, Ramesside Inscriptions, vol. III. The tomb itself was excavated and repaired by Mackay in 1913. ${ }^{12} \mathrm{~A}$ fragment of a granite stela was found outside the tomb in the courtyard. In front of the tomb there was a mummy pit in which there were no objects.

## khons (No. 3I)

To the back of the tomb of Khensmose a way was found into the tomb of Khons. Mond had entered the tomb in 1904 but had done nothing then. ${ }^{13}$ The tomb was now cleared as far as the north end of the passage and a brick inscribed with the throne name of Akhenaten was found. The complete excavation of the tomb was carried out in $1925 .{ }^{14}$

Pit below the tomb of nakht (No. 52) (fig. 70)
It is not clear where exactly this pit was situated, but it was somewhere about 50 yds. south-east of the tomb of Nakht (No. 52). ${ }^{15}$ The pit was excavated and the following found:
Sandstone statue of Nen-dju-ref, Royal Page ( $\underline{\operatorname{hr}} \mathbf{r} n \mathrm{k} s p$ ) with praise of the sun (fig. 3). Wooden painted stela. Lady on the right adoring Osiris supported by Isis and Nephthys, and inscription of a few words only. 34 cones (DMC no. in 8 ).

[^9]
## LYDIA COLLINS

## (2) The tomb of Thay No. 23 and surrounding area

THAY (No. 23)
This tomb was entered by way of the tomb of Nefersekheru (No. 107), and the tomb and courtyard were then examined and cleared. The following were found in the tomb:
Granite sarcophagus belonging to Thay. $3 \mathrm{~m} . \times 1 \mathrm{~m}$., sides 7 cm . thick, top 20 cm . thick. Griffith Institute Archives, photo. 1208A. Found in the funeral pit in the mummy chamber and brought up and placed in tomb proper. Cone (DMC no. 222). Cone (DMC no. 556). Square cone of Userhet, Steward of the Estate, son of . . . . . . u and the Lady Su. . . . . . (fig. 7). Blue-glaze shabti of [?the son of] the Third Prophet of Amūn, Chief Lector Priest, Pedi-amen-neb-nest-tawy. Usual formula. Small fragment of stela with unidentifiable inscription. A fragment of a stela was found in a side chamber in the tomb (it is not clear from the notes whether the tomb in question was that of Thay or Harsiesi) belonging to Hepet-djefa, Chantress of Amūn (fig. 5).
The following objects were found in the courtyard:
2 coffins. No record of inscriptions. Stela held by a kneeling figure (fig. 4). Fragment of limestone stela of 'Ankh-m-dif-m-Iunu (fig. 8). Fragment of white marble canopic jar of the Lady of the House, Tjepu. Lower half of wooden shabti of Wenamūn. No title. Brick with 'cartouche' [containing vineyard stamp] (fig. 6). 2 cones (DMC no. 6). Cones (DMC no. 82). 18 cones (DMC no. 109). 136 cones, painted yellow (DMC no. 117). 7 cones (DMC no. 132). Cones (DMC no. 173). 19 cones (DMC no. 180). 30 cones (DMC no. 222). I cone (possibly DMC no. 292) (fig. 9). 3 cones (DMC no. 357). Cone from behind brick wall in court (DMC no. 362). Cones (DMC no. 406). 12 cones (identified by Mond as Daressy no. 171. Probably DMC no. 438). if cones (DMC no. 458). 17 cones (identified by Mond as Daressy no. 219. Probably DMC no. 5 11). Cones (DMC no. 526). Cones (DMC no. 556). 2 cones (DMC no. 562).

A Sa-sign amulet bearing the inscription: Osiris, Royal Scribe of Correspondence of the Lord of the Two Lands, Thay, justified, was found in the debris near the tomb. Those inscriptions copied from the walls of the tomb and courtyard that are as yet unpublished are not given here as they will appear in Kitchen, Ramesside Inscriptions, vol. IV. In the debris east of Thay's tomb a box was found containing three mummies, one of which bore a seal made into a ring with a piece of string. South of Thay's tomb, a large amount of debris was cleared away in a southerly direction, re-establishing the old ground level, and in the debris eleven Late-Period coffins were discovered. One of these was inscribed down the front with the name of Mer-sheri, son of Djedamenhotep (fig. io). No record of the other ten can be found in the notes. In a large mound south of the tomb a coffin with an inscription down the centre (fig. ir) was found. Mond states that the owner of the coffin was Nefermut, but there is nothing in the inscription to corroborate this. It contained the mummy of a small man on which there were no objects. Several tombs were found in the rock south of Thay's tomb, the best preserved being that of Amenemheb (No. 44).
Harsiesi, Prophet of Amūn and Monthu (no number)
This tomb was situated to the south of Thay's tomb, but its exact position is not indicated in the notes. A stela of Harsiesi was found in the tomb (fig. 12), and in the court a blue-glaze ring bearing on the bezel the throne name of Horemheb.

Kynebu (No. ri3)
This small decorated tomb, high up south of that of Thay, was found in a destroyed condition. The inscriptions over and to the right of the door were copied and will appear in Kitchen, Ramesside Inscriptions, vol. VI.

## amenemẹeb (No. 44)

The inscriptions were copied from the east half of the south wall of the broad hall (figs. 15, 16 (line 11), 17). The wall has been partially destroyed since the copies were made. ${ }^{66}$ The inscriptions were also copied from the west half of the south wall (figs. 20 and 25) and from the west half of the north wall (figs. 18 and 19); and an inscription from the east wall of the inner room was copied (fig. 2rb). I am indebted to Dr. Kitchen for collating the Mond copies with his own photographs and hand copies from the tomb made in 1970 and for adding supplementary texts (figs. 13, 14, 16 (I-10), (12), 21a, 22, 23, 24).

A cone bearing two impressions (DMC nos. 308 and 340) may have been found in the tomb, but there is some doubt in the notes about the provenance.

## UNFINISHED TOMB

The remains of this tomb were discovered below the tomb of Amenemheb. It was unfinished and gave the impression that work on it had been suddenly interrupted. After its discovery it was filled in again. To the east of this tomb, there was a brick wall in which a cone (DMC no. 609) was found.

## tomb to right of ? $\mathrm{AMENOPET/AMENEMḤEB}$

It is not clear where this tomb was situated. It was first described as being to the right of Amenopet and this was later altered to Amenemheb. In it were found:
Painted Osiris figure of Pediamen〈neb〉nesttawy. Twenty-Second Dynasty. Inscription down front (fig. 26); on foot (fig. 33). Burnt 'stopper cylinder' $6 \times 2 \mathrm{~cm}$. (fig. 27). Cones (DMC no. 311). Limestone fragment (fig. 28). Foot of blue-glaze shabti (fig. 29).

Some work was done in the courtyard of Paser (No. 106) and on the tombs of Khaemopet (No. 105) and Nefersekheru (No. 107) which open on to it. A retaining wall was built around the courtyard, in which the following objects were found:
Cone (probably DMC no. 6). 2? cone(s) (DMC no. 171). Cone (DMC no. 556). Fragment of statuette belonging to Paser, owner of tomb no. 106, with inscription down centre (fig. 30). Roman oil lamp. Small white shabti box. Twenty-Second Dynasty. On lid drawing of a boat and an incomplete inscription. Found in pit in front of tomb of Khaemopet.

## кhaemopet (No. ro5)

This tomb was found on the south side of the courtyard of Paser. Some of the inscriptions from the tomb were copied, and I am grateful to Dr. Kitchen for collating and supplementing the Mond copies with his own photographs and handcopies

[^10]
## LYDIA COLLINS

(figs. 34-7). A stamped brick was found in the tomb, belonging to Paser, owner of tomb no. 106 (fig. 38). Further work was done by Mackay in 1913. ${ }^{17}$
nefersekheru (No. 107)
All the inscriptions copied have since been published by Helck. ${ }^{18}$

INSCRIBED TOMB NORTH OF PASER
It is not clear from the notes exactly where this tomb was situated. The only inscription copied from it contains the name Wahsu, father of the scribe Aniy (fig. 32).

An area was excavated about 20 yds. north-west of Paser and a few objects found: Cone(s) (DMC no. 367). Cone(s) (DMC no. 447). Cone(s) (DMC no. 49r). Limestone hieratic ostracon. No record of inscription. 2 ostraca with red painted inscriptions of which there is no record. Small fragment of stela. No record of inscription. Left door-jamb of Amenemhet (owner of tomb no. 53) (fig. 31).
(3) The area in the vicinity of the tomb of Hepusonb (No. 67) ب̣Epusonb (No. 67)

The courtyard was cleared and the following objects found:
Mutilated head, white limestone with eyebrows painted blue. Over life-size. Thought by Mond to belong to Hepusonb. 3 cones (DMC no. 21). 113 cones (DMC no. 517).

томв No. 227, belonging to the son of Hepu, Lector of Amūn
The horizontal strips of inscription on the ceiling were copied (fig. 39). In the debris above the tomb an ostracon with a town plan and hieratic inscription was found. ${ }^{19}$

## томв оf dja. . . . . (?), Noble and Man of the Following (no number)

To the north of Hepusonb and on the same level, this small tomb was discovered. The inscriptions on the ceiling were copied (fig. 40), and also a partially defaced inscription from the south wall, the lower register of which was destroyed (fig. 41). The following were found in the tomb:
3 defaced statues. Table of offerings (fig. 42).
PIT No. I: burial of rusa as (? RU a
This pit contained a large number of objects. Unfortunately, the notes on it present difficulties. First, it is not clear where the pit was situated: the evidence is inconsistent and conflicting. In the field notes it is stated to adjoin the tomb of Imiseba No. 65 and a plan of the pit shows it to be next to 'Tomb 66'. As Tombs 65 and 66 are close together this is not impossible. The difficulty arises because in an article written in

[^11]19ro, ${ }^{20}$ Mond states that the pit adjoined and could be entered from the tomb of Nespaneferhor (No. 68) and this tomb is too far away for the two descriptions to be reconciled. Tomb 68 may well be a later correction and certainly on the plan the socalled Tomb 66 which adjoins the pit looks more like Tomb 68, but at this point of time it is impossible to be sure which is correct. ${ }^{21}$ Second, the name of the owner of the pit is not clear. In the notes it is stated to belong to Rusa and in the 1910 article mentioned above Mond reiterates this, but there seems to be little evidence for this assertion in the surviving notes of the inscriptions. The name Rusa appears nowhere amongst them: there is a shabti inscribed with the name Ru , and a canopic jar bearing the name Ruiu, and it may be that Rusa is a misreading. In no other instance do any of these names occur although this can hardly be regarded as disproving Mond's statement when one considers the incomplete state of the notes. The lower half of a coffin was found in the pit but this bore the name Siamūn and it could be intrusive. All that can be said is that Mond seemed certain of the owner of the pit, but seventy years later we cannot see the evidence for it. The following were found in the pit:
Lower half of coffin of 2 ing throne name of Amenophis III. Heart scarab. Oval seal with cartouche. Small linen bag filled with incense, with mud seal bearing random hieroglyphs. Funeral decoration for wig, made of layers of cloth. ${ }^{23}$ Pair of plaited reed sandals. Pair of leather sandals with reed soles. Pair of baby's leather sandals. Leather ?uppers, painted red. Border of plaited leather mat. Battle-axe handle with leather strapping (bronze stolen). 6 plaited coloured reed baskets, one with cover. 3 wooden fan handles. Wooden settee with four lion-headed feet, painted white; in fragments. 2 chair backs. Fragments of hollow circular leather-bound chair legs. Fragment of three-legged stool. 2 red pots with black decoration.
8 canopic jars. These jars present a problem. In the finds list they are described as red pottery painted white, with incised hieroglyphs, 6 stoppers with ladies' heads, 2 with mens' heads, belonging to three people. Amongst the notes are the inscriptions from two canopic jars belonging to Amenhotep, described as being from the pit of Rusa, and inscriptions from (?)two jars belonging to Ruiu, described as being from the pit of Ruiu. There are inscriptions from a further (?)four jars belonging to an unknown person born of the lady Nub. ... , with no indication where the jars were found. ${ }^{24}$ Thus there are possibly 8 jars, certainly belonging to 3 people, and they are described here with the caveat that 6 of them may not in fact belong here. 2 jars of the scribe Amenhotep, with yellow inscription on black varnished ground (fig. 43). (?) 2 jars of Ruiu, daughter of Kay, with blue inscription on yellow ground (fig. 44). (?) 4 jars, belonging to the royal butler Isiu(?), born of the lady Nub-hir-(?), with blue inscription on yellow ground, last line on right added in black (fig. 45). Brown faience bottle with seal. Kohl pot and pencil. II cm. long. Bound up in cloth. Ball of string. 7 wooden cones with carnelian let into front, possibly used as burnishers. Mummified meal consisting of i saddle of beef, 3 shoulders of beef, 3 loins of beef, I rib of beef, hoof and jaw of horse, I goose, 3 pairs of chickens, I pigeon, I quail, I stalk of date palm with dates on it, fruit of Abyssinian tree and many dompalm nuts.

[^12]PIT NO. 2
There is no indication where this pit was situated although it was probably near Pit No. I. The following objects were found in it:
Coffin of Serniut(?) (fig. 47). Miniature mummy. Mummiform figure of varnished wood with black inscription to Osiris. Shabti of Sarētmut no title. Usual formula. Painted wooden box. Small and large palette. Terracotta canopic jar with black inscription on yellow ground, belonging to the scribe Amenhotep (fig. 46). 2 red heads of canopic jars. Large three-handled jar.

## PIT No. 3 (?)

A pit was discovered, south of Imiseba and above it, adjoining the tomb of Hepu No. 66. It is just possible that this is not a third pit but a further description of the pit of Rusa. In it were found:

Fragment of granite statue. Foot of late coffin belonging to Iryiryiu, Chantress of the Inner Harim of Amūn (fig. 48).

USER (No. 2I)
This tomb was cleared and in it were found:
Painted plaster stela from north wall of outer chamber. ${ }^{25}$ Shabti boxes of the Lady of the House, Ta-amūn-paui. $30 \times 12 \mathrm{~cm}$. Painted white with inscription on lid (fig. 49). Bead net with winged scarab.

In the courtyard were found:
Mud-brick with stamp of the Count, Hor (inscription identical to that of DMC no. 491). ro large square bricks with stamps (inscription identical to that of DMC no. 85). Io bricks with reversed inscription (identical to that of DMC no. 86). Cone (DMC no. 491).
A shallow pit was found in the courtyard which contained a number of objects:
Granite statue of woman. 4 stelae. No inscriptions recorded.
Several Osiris figurines belonging to $\langle\mathrm{Na}\rangle$ menkhamūn and Hetepamūn (fig. 50). 8 Twenty-Second Dynasty coffins. The inscriptions from five of the coffins survive in the notes and four of them form a family group: Disiese, daughter of Thayanhor and the lady Taronebi ${ }^{26}$ (fig. 51); Pedikhons, Chief of the Department of the Estate of Amūn, son of Hathat and the lady Disiese ${ }^{27}$ (fig. 52); $\langle\mathrm{Na}\rangle \mathrm{menk}$ hamūn, Chief of the Department of the Estate of Amūn of Opet, son of the lady Disiese (fig. 53); Djedthutefankh, son of Namenkhamūn and the lady Amenirdis. This coffin was probably usurped as the inscription on the bottom of the inner case belongs to someone else (figs. 54, 55-6); ‘Ankhi (?), daughter of Pefthauawybast (fig. 57).

There is no record in the notes of the other 3 coffins, but it is tentatively suggested that the following coffin, whose existence is known from other sources, may have formed part of this group.
Coffin of Hetepamūn, parents unknown. This coffin, now in the Liverpool City Museum, ${ }^{28}$ was formerly in the Liverpool School of Archaeology and is recorded as having come from one of Mond's

[^13]excavations. Since Hetepamūn was one of the owners of the Osiris figurines (see above) and since the name is rather an unusual one, it is just possible that the coffin was found here.

Family tree of owners of coffins from pit in court of User (No. 21):


## NEFERRONPET (No. 43)

The wall inscriptions copied from this tomb have since been published by Baud. ${ }^{29}$
In the courtyard there was a pit $12 \cdot 70 \mathrm{~m}$. deep in which a large number of objects were found:
Lower part of coffin of the priest Bakt ${ }^{30}$ (fig. 58). Cone with unidentifiable inscription (fig. 59). Shabti box of Ahmose (fig. 60). Limestone obelisk of Siamūn, Overseer of the (?) Estate/Seat of the King. $50 \times 15 \mathrm{~cm}$. (fig. 6 I ). Green glaze scarab inscribed with name of Amen-Rēc. Wooden beard inscribed on back with name and title of the scribe Thenena (cf. owner of Tomb 76?) (fig. 62). User-sceptre, painted wood inscribed in gilt on back with name and title of the scribe Thenena (fig. 63 ). 2 heads of alabaster canopic jars of Thenena. Probably portrait of deceased. Part of gilt wooden wig. Gold scarab ring. On bezel, reversed $S$ spiral between two $n f r$-signs, one inverted. Mud seal inscribed with throne name of Tuthmosis III. Mud seal with illegible inscription. String with mud seal (fig. 64). Bottle with mud seal. Bed. Wooden cankh, formerly gilt. Small sandal. Fragment of brown bread. Footstool with reed bottom.

## (4) Work in other areas

кhaemب̣et (No. 57)
The tomb and courtyard had been cleared in the season of 1904, ${ }^{31}$ and now some further necessary repairs were carried out.

## maṭu (No. C. 12 )

This small tomb was situated to the east of that of Khaemhet and was being used as a stable. An inscription (fig. 65) containing the name of Mahu and his wife (?)Isis was copied from an unspecified wall.

[^14]AMENEMḤt (No. 123)
The tomb and courtyard were cleared, completing the work of 1904.32 In the courtyard were found:
6 whole and 3 broken conical pendants. Wooden crocodile. Horse's head.
pairi (No. 139)
The courtyard was cleared and in it, lying in front of the north door, was found the sandstone door lintel from the tomb. ${ }^{33}$
amenemẹet (No. 53)
A stela of Thauenany (owner of tomb no. 134) was found in front of the tomb.

## Pit in (?) AMENEMب̣Et (No. 53)/AMENEMب̣EB (No. 44)

It is impossible to know in which of these two tombs the pit was found. The objects from it appear in the finds list of the tomb of Amenemhet but the inscriptions from the objects are labelled tomb of Amenemheb. The pit contained a number of burials, and inscriptions from a late-period coffin (fig. 66) and cartonnage (fig. 67) were recorded.

Some pits about 50 yds. north-east of the house of Skeikh Hasan Abd el-Rasul were unsuccessfully examined. The house stood near the tomb of Karakhamūn (No. 223). Below Mond's house at Gurneh a mummy pit was discovered, containing two coffins and four fine Roman vases of which there are no details. (The house Mond built for himself at Gurneh was later taken over by Davies whose name it now bears.)

[^15]

I. Standing figure

3. From behind

2. Detail of base

# A STATUETTE OF A DEVOTEE OF SETH 

By WILLIAM KELLY SIMPSON

In 1951 the Detroit Institute of Fine Arts acquired a large and interesting statuette of an official named Sebekemhet. It has previously been illustrated and commented upon by the Curator of Ancient Art, William H. Peck, to whom I am indebted for permission to illustrate and discuss it further (see pl. VIII). ${ }^{\text { }}$ The official stands with left foot advanced, his large hands placed on his long wrap-around skirt, palms inward. The lateral line of the breast is strongly marked with the nipples clearly raised. The sharp lateral delineation of the breast from the venter is seen in royal and private statues of the late Twelfth Dynasty, for example, the Amenemhet III of Berlin 17551, ${ }^{2}$ but is better represented in the Thirteenth Dynasty: Cairo JdE 43093. ${ }^{3}$ The long skirt is fringed at the top with a tab on the statue's right, the lower portion of the right fold tapering to a point overlapping the left part at the base. The overlapping of the fold from right over left is seen in Berlin 4435, the statue of Amenemhet-'ankh in the Louvre (Eiro53), British Museum 1237 (288), Heidelberg (Iymery), Cairo JdE 43093, Walters Art Gallery 22.236, Berlin 4650 (a very marked case), University Museum, Philadelphia 9216, Museum of Fine Arts Boston 1973.87 = Walters Art Gallery 22.170, Cairo 459, Louvre Eir $_{573}$ (Senpu), and frequently elsewhere. ${ }^{4}$ The fringing of the skirt is carried around to the back of the statue and interrupted by the back support. The forearm with the hands is long in proportion to the upper arm. The official wears a bag wig with striations, those at the back following the lines of an inverted $\vee$. The wig descends below and behind the shoulders on the front and rests on the back support at the rear. The face is sharply modelled in a severe, hard style, with a prominent nose, short mouth with horizontal lips, a suggestion of the philtrum, and large eyes with modelled upper lids, the line of the eyes tapering downward slightly away from the nose. The eyebrows are indicated by a ridge and not in raised relief. The large ears, flattened against the wig, are completely visible. Finger-nails and toe-nails are meticulously carved.
In the absence of an extensive series of statues of officials from the later Middle Kingdom reaching well into the Second Intermediate Period, it is difficult to date the

[^16]Detroit piece with certainty. At the earliest it may belong to the middle or latter part of the Twelfth Dynasty or to the Thirteenth Dynasty. The suggestion is made that it should be provisionally assigned to a later period, well into the Second Intermediate Period. To the question of date we shall return later.

As to the provenience of the statue, the previous owners indicated that it had been found on a private land-holding in Matariah, the suburb of Cairo in the vicinity of the temple of Heliopolis. ${ }^{5}$ Although undue credence should not be accorded such a statement, there is little reason to doubt it , and the provenience is accepted.

The texts incised on the back support and the base with its extension identify the official and present not a few points of more than cursory interest. The vertical text on the back support reads: Htp di nswt 'Inpw nb hn di•f krst nfrt n k3 $n$ mty $n$ ss htmw
 gives (to) Anubis, lord of the chest, that he may grant a goodly burial to the $k a$ of the leader of a phyle, the treasurer Sebekemhet, whom Sebekemhet has begotten, conceived by Sit-Hathor, the vindicated.' The writing in a vertical text of the htp di nswt formula thus, with the $h t p$ sign in the first group followed by the arm-with-cake writing of $d i$, is cited by Barta for the Twelfth Dynasty and in his section on Dynasties 13-14. ${ }^{6}$ For the $h n$ 'Inpw, see $W b$. II, 491. 19. The chest ( $h n$ ) of Anubis is cited frequently in later texts, at least once with the same epithet $n b h n$ (Berlin 7588, late). In the tomb of Kha'emhet (Eighteenth Dynasty) the chest of Anubis occurs in the Heliopolitan context of the title wr misw $n h n$ 'Inpw. ${ }^{7}$ The writing of $h t m w$ has the rarer writing of Sign List S20 instead of Si9; if the three strokes represent the terminal $-w$, this may be an argument for the reading of $\operatorname{htmw}$ over $s d z w t y$. The formula $m s n$ followed by the mother's name and ir $n$ followed by the father's name is not infrequently inverted with the father's name following $m s n$ and the mother's ir $n .{ }^{8}$ Entirely unexpected, and perhaps unique, is the evidently sportive writing of the Seth animal (Sign List E21, a recumbent version of E 20 ) for the expected $m s$. Although it is conceivable that it should be read as $m s$, it might represent the $s t i$, 'to beget', of $W b$. iv, 347.17 , with the development sth > swty > sty. If so, a date for the text in the late Middle Kingdom or Second Intermediate Period rather than the Twelfth Dynasty seems likely.

 'a boon which the king gives (to) Rē -Atum, lord of Heliopolis, and Osiris, lord of Busiris, the great god, lord of Abydos, that he may grant an invocation offering (of bread and beer) to the $k a$ of the leader of a phyle in Kharkheperrē$[$ [...] in the great chapel of Seth, the vindicated'. The use of an additional, second piece of stone for the last line of the text is highly unusual. It will be noted that this reading of the text results in the unusual circumstance of a title without a following personal name, the owner of the statue having been cited by name only in the text on the back support. Although the names of gods are occasionally followed by the tag mir-hrw, a cautious reading

[^17]of the text on the additional piece of the base might utilize the last elements as the personal name Sety followed by the tag m3r-hrw, 'for the $k a$ of the leader of a phyle in Khackheperrē-c[...] in the great chapel, Sety, the vindicated'. The discrepancy between this name and that on the back support, Sebekemhet, makes this rendering unlikely. Although double names are possible, they are usually so specified or directly juxtaposed.

The association of the Heliopolitan Rē with Seth goes back to the earliest times, and the personal name Seth-Rē ${ }^{\text {e }}$ is attested. ${ }^{10}$ Although various authors have posited an aboriginal cult of Seth in the eastern Delta, Goedicke and others have rejected the claim as unfounded. ${ }^{11}$ The designation hwt Sth appears in $C T$ vi, 252e, and $C C G 20030$ has the title imy-r pr hwt $n$ Sth, as Henry G. Fischer kindly points out to me. The official is apparently designated as $m t y n s s m H r-h p r-R r-[\ldots]$ in the hawt $r ; t$ of Seth, the vindicated. It seems likely that the prenomen of Sesostris II is here combined in a temple or place name, part of which is damaged, and that this element is further specified as part of the great chapel of Seth. The hwot $33 t$ is the name of the temple of Rē at Heliopolis, ${ }^{12}$ and the plan of this temple is possibly that reconstructed by Ricke from the inventory tablet. ${ }^{13}$ This circumstance might be used as an argument for regarding the Seth of the text as a personal name (see above) rather than the deity, a possibility which cannot easily be rejected. ${ }^{14}$

The $h w t-r s t S t h$ in a Heliopolitan context is known from the text of a scarab formerly in the Blanchard Collection read by Newberry as histy-¢ $n$ 'Iwnw Ny-mırt-R¢ $m$ hwt-rst Sth, 'The mayor of Heliopolis Nymaatre-em-hut-aat-Sutekh'. ${ }^{15}$ Newberry dates the scarab in the Second Intermediate Period and evidently regards the name, perhaps incorrectly, as a compound with the geographical designation. It might be better to disregard this reading. Whether or not one follows Newberry's reading, there is certainly here an indication of a $h w t-r$ s $t$ Sth connected with Heliopolis in the Second Intermediate Period.
Egyptian statues can be functionally separated into two major categories: the tomb

[^18]statue and the temple statue. Whereas to some extent these may be interchangeable, the stance of the Detroit piece with the hands held deferentially against the garment defines it as a temple statue for placement in the local shrine; a close counterpart is the Louvre statue of Amenemhet-'ankh of the reign of Amenemhet III. Presumably the Detroit statue was originally set up in a temple.

The sportive writing of sty or $m s$ with the recumbent Seth animal in the filiation on the back support and the citation of the $h w t--3 t S t h m 3 r-h r w$ may be taken, respectively, as lexical and geographical indications of the prominence of the god Seth in the Heliopolitan region at a time which may well be the eve of the Hyksos domination of the eastern Delta. Of interest also is the apparent survival of a geographical or temple designation incorporating the name of Sesostris II. Although the last sign in the cartouche is damaged, it clearly seems to be $\mathrm{Hr} \mathrm{r}-\mathrm{hpr} \mathrm{r}$ Rr. Reading the cartouche as Hr - $\mathrm{shm}-$ $R r$ (Neferḥotep I), $H\ulcorner-n f r-R r$ (Sebekhotep IV), or that of other rulers of the Thirteenth Dynasty and the Second Intermediate Period seems unlikely, unless there is an otherwise unattested $H \mathrm{H}-\mathrm{h} p \mathrm{r}-\mathrm{R} \mathrm{r}$ at this time.

# REMARKS ON THE TWO STELAE FROM THE WADI GASUS ${ }^{\text { }}$ 

By ALESSANDRA NIBBI

It has been a commonly held view for some years now that the two 'tablets' or stelae of Middle-Kingdom date ${ }^{2}$ found in the Wadi Gasus ${ }^{3}$ are proof that the ancient Egyptians used the Red Sea coast to set out for Punt and elsewhere in sea-going ships. ${ }^{4}$ On the evidence mainly of these two stelae, only one of which refers to boats and a harbour, it has been suggested by a number of scholars that the ancient Egyptians regularly used a port along the Red Sea coast and that it was probably Qoseir.

The only supporting evidence for this assumption has been quoted from the inscription of Henu of the Eleventh Dynasty from the Wadi Hammamât. ${ }^{5}$ However, a careful examination of the contents of this text will show that it has been grossly misinterpreted. ${ }^{6}$ There is absolutely no reason for claiming that the ancient Egyptians carried their boats through one hundred and sixty kilometres of hilly terrain along the Wadi Hammamât to the Red Sea. Nor has anyone found convincing the theory that they built their boats on the Red Sea coast before setting out. The total lack of evidence for either view demands that they be set aside, even though we may be reasonably sure that the eastern desert carried more timber in ancient times than it does today. Any evidence that we have for shipbuilding in the ancient Egyptian records points to the Delta only. ${ }^{7}$
${ }^{1}$ My thanks are due to the Gulbenkian Museum of Oriental Art, University of Durham, for permission to publish photographs of the two stelae; to Dr. J. Málek, for bibliographical information; to Miss Helen Murray for access to the archives of the Griffith Institute, from which Wilkinson MSS. xlv. D. 18 is reproduced here by their courtesy.
${ }_{2}$ These two stelae are now in the Gulbenkian Museum of Oriental Art in the University of Durham. They were both formerly in the collection of the Duke of Northumberland and it is from Samuel Birch's catalogue of the Alnwick Castle collection (1880) that they assumed their identities of North. 1934 and North. 1935. The former was found by James Burton and the latter by J. G. Wilkinson in the same small building in the Wadi Gasus. See A. Erman, 'Stelen aus Wâdi Gâsus bei Qosêr', ZÄS 20 (1882); G. Schweinfurth, Alte Baureste und Hieroglyphische Inschriften im Wadi Gasūs (Berlin, 1885); Porter and Moss, vir, 338 f. See also Wilkinson, Manners and Customs (1837), chapter 2, 45 f.
${ }^{3}$ Gasus is also spelt Giásoos, fasoos, and fasus among the scholars quoted here.
${ }^{4}$ This view was adopted by Björn Landström in his discussion of Egyptian ships, Ships of the Pharaohs (London, 1970), following upon the work done by Professor T. Säve-Söderbergh in his valuable and pioneering work, The Navy of the Eighteenth Egyptian Dynasty (Uppsala, 1946). However, my reconsideration of the term wid-wr in recent years has, I believe, altered the picture of Egyptian shipping. See A. Nibbi, The Sea Peoples and Egypt (New Jersey, 1975), chapter6 on Egyptian shipping; also Nibbi, 'Egyptian Anchors', FEA61 (1975), 38-41.
${ }^{5}$ J. Couyat and P. Montet, Les inscriptions hiéroglyphiques et hiératiques du Ouâdi Hammâmât, Mém. Inst. Fr. 34 (1912), 81 ff.
6 A. Nibbi, 'Henu of the Eleventh Dynasty and widd-wr', Göttinger Miszellen, 17 (1975), 39-44. We cannot sufficiently emphasize that the twelve to fifteen wells which Henu dug on his way to wsd-wr are far too many for the distance from the Nile to the Red Sea, even along an indirect route.
${ }^{7}$ See Nibbi, op. cit., 40 f.; also Nibbi, The Sea Peoples and Egypt, 134 f.

We need, therefore, to re-examine the records from the Wadi Gasus in their context after an interval of nearly one hundred years since their first publication, in order to see what we may legitimately deduce from them, taking into account the work of scholars since that time.

## The Background

We must begin by clarifying the geography of the area from which the inscriptions come. This aspect of the problem has been rather neglected; yet it is vital to the proper understanding of the significance of these two stelae. ${ }^{8}$ First and foremost it must be stressed that the Wadi Gasus site where these two monuments were found is an inland area approximately twelve miles and at the very least a three hours' journey over steep and winding paths to the sea coast. When James Burton in the Sotheby Sale Catalogue of July $1836^{9}$ referred to the finding of both these stelae 'in a small temple in the Wadi Jasoos on the shores of the Red Sea' he was explaining in general terms to the prospective buyer in London the approximate whereabouts of this Wadi. He did not mean literally that it was on the coast as he gives details of this site in his records. ${ }^{10}$ It is particularly to be noted that these two stelae are referred to by James Burton as 'having been found in the immediate vicinity of a station [i.e. a watering station] and of some extensive mines, the high antiquity of the workings of which it tends to prove'. ${ }^{11} \mathrm{He}$ also said: 'No other inscriptions having been found in this neighbourhood, it would

[^19]North. 1934
A fine-grained rock which takes a good surface to the mason's chisel. Probably an igneous rock, possibly a lava. Seems to be grey-coloured. I could see no evidence of schistose texture. This rock surface is badly stained with soot (or dust) and probably some form of dressing. It is very difficult to identify it certainly without taking a chip sample. This is not possible without removing the stela from its case.

## North. 1935

A dark rock with conspicuous white crystals in matrix. Some sub-circular hollows in the stela might be vesicles (gas cavities) in the lava. This rock seems to be porphyritic lava and the name basalt would be quite appropriate here. Again the surface is badly covered with soot (or dust) and dressing and a chip sample is needed for certain identification.
${ }^{10}$ James Burton, B.M. Add. MSS. 25.626, fol. 66, says: 'We passed the chapel of Osirtesen again [i.e the 'temple' of Wadi Gasus] and proceeded onwards to the sea winding round amongst the hills into another wady so as not to fall upon the coast too far south and arrived at a little port with ancient alams in 3 h 25 but we came out of our way and I believe we could have done it in 3 hours (as we rode).' A. Weigall, Travels in the Upper Egyptian Deserts (London, 1909), 25, says: 'One jogs along at the rate of about four and a half or five miles an hour . . . the baggage camels travel at about three miles an hour.' Weigall also says on p. 65: 'The Red Sea road from Coptos rises gradually to half way to the Red Sea, then the valley twists and turns.'
${ }^{\text {II }}$ Sotheby catalogue, July 1836, p. 33.
appear that the station and the mines were abandoned at no very remote period from this date. ${ }^{12}$ Wilkinson also recognized this as a mining area ${ }^{13}$ as did Georg Schweinfurth. ${ }^{14}$ However, we have no evidence for dating the work at these mines. Fresh and excellent water seems to have been the major feature of the Wadi Gasus. James Burton mentions in his notebooks 'water called Moy el Djasoos near the great collection of huts' and adds: 'They will have come in detachments to work here and at the neighbouring mines.' ${ }^{15}$ T. Barron and W. F. Hume reported in 1902 that 'the ruins of the old village of Jasus occur at the mouth of the Wadi of that name, all that now marks its position being a few tombs and a dilapidated house'. ${ }^{16}$ They also tell us that Gebel Gasus, from which the Wadi takes its name, is gold-bearing. ${ }^{17}$ L. A. Tregenza, ${ }^{18}$ on the other hand, suggests copper-mining in one of its branches.

Schweinfurth ${ }^{19}$ recognized three branches of this Wadi and drew a detailed geographical picture of it after camping there in January 1885 (Lager XL) during his journey through the eastern desert. Yet it seems that Wilkinson ${ }^{20}$ himself did not consider the site important enough to mark on his map of the eastern desert, even though he left us a sketch of the site showing the exact place where he found the stela North. 1935 (see fig. r). Burton, on the other hand, does include it in a pencil sketch of the eastern desert as a mining area. ${ }^{21}$

No one would deny that a number of ports must have been in use along the Red Sea coast in ancient times, but it is unlikely that it was the Egyptians who used them. With regard to Qoseir, which some scholars claim to have been a port in Pharaonic times, two important facts must be faced: (1) it is only the new town of Qoseir which lies at the outlet of the Wadi Hammamât to the sea;22 (2) the old town of Qoseir lies about three kilometres to the north of the new town and at the base of some high hills.

[^20]

Fig. I


$1035^{\circ}$ Shemhiotipe isotic.

This was not a convenient place either for the handling of cargoes or as a harbour for boats, especially as it was situated on a reef. Barron and Hume ${ }^{23}$ say of Old Qoseir:
This old site, now only represented by a series of mounds, evidently stood on a coral reef, which is now raised a few feet above sea-level. . . . The town itself has disappeared but fragments of amphorae, blue pottery, and coloured beads, rarely having figures on them, together with much selenite, appear to be not uncommon, judging from private collections at Qosseir. . . . Behind the low plateau near Qosseir, and resting directly against the dark metamorphic range, are a series of white hills with flat tops. These hills, which in some places are 150 metres above sea-level, consist at the base of a loose, green friable rock.

We may also quote the authority of Dr. Georges Goyon, ${ }^{24}$ who, in the course of his work on the Wadi Hammamât, looked at this coastline closely and in a practical way. He emphasized that the route from Coptos to Qoseir as we know it cannot have been frequented regularly in Egypt's early history. He argues that the fact that other ports had to be founded in later times like the new Qoseir, Myos Hormos, and Berenice shows that Old Qoseir cannot have been in a very useful position. He rightly stressed also that we do not have any evidence for the use of this town as a port. ${ }^{25}$ Moreover, he believes that if we are to identify Leukos Limen, this name suits Safaga, which lies on the coast in a straight line eastwards from the Wadi Gasus, better than Qoseir. ${ }^{26}$

In our inscription North. 1934 there is a reference to a place called ssww which has always been assumed to have been a seaport rather than a river port because boats are mentioned in conjunction with it on their return from Punt. It is written with a hillcountry determinative which denotes an area foreign to Egypt proper and therefore could well have been on the Red Sea coast. However, we have no way of knowing exactly where this port was.

## The Stelae

Few stelae have been more tantalizing to Egyptologists than North. 1934 and North. 1935, both because one mentions a port and because they were found in an isolated geographical context. Their isolation must lead us to the conclusion that the Wadi Gasus cannot have been a well-beaten route to the coast. We would otherwise have had some other inscriptions before the Ptolemaic period to add to these. But we have not.

The contents of these two inscriptions, coming from consecutive reigns, ${ }^{27}$ are very different (see pls. IX and X). The one refers to the return of a fleet of boats from Punt while the other affirms the establishment of the Pharaoh's monuments in God's Land. The only link between them is the link between Punt and God's Land.

[^21]
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For the following translations I am indebted to Mr. S. W. Gruen of Balliol College, Oxford, who does not necessarily share the views I express in these pages.

## 1. Northumberland 1934

A. Upper Register

The King of Upper and Lower Egypt, Lord of the Two Lands, Nubkaurēe, given life like Re$^{-}$, rejoicing on the throne of Horus, beloved of Min of Coptos, given life.
B. Lower Register
(1) Praising and giving laudation to Haroēris-R $\bar{e}^{-}$and to Min of Coptos, (2) by the hereditary prince, count, seal-bearer of the King of Lower Egypt, superintendent of the judgement-hall, (3) Khentekhtay-wer, after his return in (4) safety from Punt, his expedition (5) being with him, sound and healthy, and his fleet resting (6) at Sawu, (7) (in) Year 28.

## 2. Northumberland 1935

A. Upper Register

On either side of the Winged Sun-disk: The Behdetite.
The King: King of Upper and Lower Egypt, Kha'kheperrēé, strong-armed, lord of the cultus.
His Ka: Horus, Seshemutowē, given life like Rē eternally.
The God: (The King is) Beloved of Sopdu, Lord of Ta-Shezmet and Lord of the East. Speech of the God: (1) Recitation: I give thee all joy. (2) Recitation: I give thee all health through me. (3) All life, stability, and dominion to thy nostril, o good god!

## B. Lower Register

(1) Year 1 : establishing his monuments in God's Land. (2) The god's seal-bearer, (3) real king's-acquaintance, his beloved, belonging to his affection, the favourite of his lord; (4) knowing the laws, skilled in executing (them); treading (5) the paths of the one who has advanced him (i.e. loyal to the king), not (6) transgressing the regulations of the palace (or) the utterance of the court; (7) unique one of the king, who grew up in the palace, the disciple of (8) Horus, Lord of the Two Lands; presenting the courtiers to the king, (9) truly accurate like Thoth, the superintendent of the audience-chamber, Khnemhotpe.
Behind figure of Khnemhotpe:
The domestic of the rêis(?)*, Neferhotpe; the hall-keeper, Nebshabt.
(*Cf. Gardiner-Peet-Černý, The Inscriptions of Sinai, Part II, Index, p. 230 (s.v. hry-pr); see also pp. 17, 18 (with n. b). I am grateful to Dr. Henry G. Fischer for providing this reading and reference.)

## God's Land

Punt and God's Land are always closely related in the texts, as Charles Kuentz ${ }^{28}$ pointed out some years ago. One of the earliest associations of these two places which

[^22]we find in the texts is in the Eleventh-Dynasty inscription of Henu from the Wadi Hammamât. However, it is in the Eighteenth-Dynasty Deir El-Bahari reliefs from the time of Hatshepsut that the texts explicitly and, for the first time, indisputably, state their geographical relationship. We are told that the myrrh terraces of Punt are a part of God's Land. ${ }^{29}$ Hatshepsut's boats set out for Punt by sailing in the direction of God's Land. ${ }^{30}$ The boats are loaded in great abundance with the wonderful products of the hill country of Punt and all the excellent and sweet-smelling woods of God's Land on one and the same occasion. ${ }^{31}$ This identical picture is suggested by the text which tells us that the Pharaoh in person presents the wonderful products of the hill country of Punt and the valuable products of the hill country of God's Land. ${ }^{32}$

Yet although the countries of Punt seem to have been situated somewhere in the broader region of $t ; n t r$, a distinction is made between the products of the two, as we see in the passage quoted above. This distinction was still made in the time of Ramesses III when an inscription from Medinet Habu places the gum (kmyt) of God's Land at the top of the list of tribute, the gum of Punt coming second on the list. ${ }^{33}$ Punt was a part of God's Land, but at the same time could be distinguished from it. Although Punt cannot be discussed here, two points may usefully be made in this context. First, in spite of Rolf Herzog's excellent contribution to an analysis of the problem of Punt ${ }^{34}$ and to the contribution of his reviewers, ${ }^{35}$ the fact remains that we cannot decide on its whereabouts on the basis of present-day vegetation and animal habitat and on the present-day use of houses on piles. We know that the vegetation can change either by a change of climate or by soil erosion. This can be caused by the disappearance of ground cover which may occur for a variety of reasons and within the span of a lifetime. The specialists tell us that a change in climate of only one degree can cause considerable change in the vegetation and consequently in the fauna of an area. ${ }^{36}$ Research in these fields has been slow for Egypt and in the absence of such scientifically based information, particularly with reference to the eastern desert, our safest evidence for the moment must be the texts themselves.

Secondly, attention must be drawn to a basic fact which seems to have escaped the notice of most writers on Punt. The growing of incense trees and myrrh is very unlikely to have been confined to only one area in antiquity. There was obviously a considerable demand for incense in ancient times and there is no reason to think that it was not grown in a number of places. Unfortunately we do not possess any scientific archaeological studies of this problem. There was an abundant use of incense among the Children of Israel and this is clearly shown in chapter 30 of Exodus where we are

[^23]told of the burning of incense at the altar of the Tabernacle each morning and evening. In a study of the plants of western Asia by H. N. and A. L. Moldenke, ${ }^{37}$ there is a very long list of quotations from many books of the Old Testament concerning the use of incense. The oleo-gum-resin known as frankincense or olibanum has been obtained since ancient times from several species of Boswellia..$^{38}$ F. Nigel Hepper ${ }^{39}$ quotes from Surgeon Carter: '. . . on its first appearance the gum comes forth as white as milk'. We are told by H. N. and A. L. Moldenke ${ }^{40}$ that the Hebrew word used in the biblical references to frankincense is lebonah or levônâh which also means white (Greek díßavos meaning the frankincense tree). It is even possible that there may be a close link between the white (and best quality) incense and the name of Lebanon, but for the moment we cannot pursue that interesting line of inquiry. ${ }^{41}$
J. G. Wilkinson ${ }^{42}$ reminded us long ago that there are some biblical references to the taking of myrrh to Egypt by the northern hill countries. Genesis 37: 25 tells us:
A company of Ishmeelites came from Gilead with their camels bearing spicery and balm and myrrh, going to carry it down to Egypt.
Again with reference to their going to Egypt we find in Genesis 43: 11:
. . . take of the best fruits of the land in your vessels, and carry down the man a present, a little balm and a little honey, spices and myrrh, nuts and almonds.

It is not suggested that the myrrh was imported but that it was home-grown as were the other gifts sent to Egypt. It was usual for countries to send their own particular products to the Pharaoh. If myrrh had been an exceptional and foreign product, it would not have been included as a simple item in the middle of a list of local goods.

Incense is a regular item in the tribute from Retenu and is found in most of the undamaged lists in the Annals of Tuthmosis III. ${ }^{43}$ The ninth campaign (year 34) refers to both myrrh ( $(n t y w)$ and incense (sntr) from Retenu, the latter filling $693 m n$ - jars. There is no reason at all to suppose that it was imported material. This view is supported by a Pyramid Text which speaks of incense (srw) of the South and incense of the North. ${ }^{44}$

Until now the discussion on Punt has been based on too many assumptions. The time has come to look at this problem again in a radical way. This will take time. It will undoubtedly help us if we can first throw a little light on the concept of $t ; n t r$. Our inscription North. 1935 quite definitely states that Khnemḥotpe was sent by the king in the first year of his reign to establish his monuments in $t ; n t r$. In other words, one of the Pharaoh's first measures on his accession to the throne was to stake out his claim in this area which must have been important to him but which to us today still appears

[^24]vague and indeterminate. If this stela was found in its original position, which seems to have been the case, then the Wadi Gasus must have been part of God's Land. In the Wadi Hammamât inscriptions the quarrymen often refer to their stay in God's Land, ${ }^{45}$ suggesting that this region too was part of the area so called.

In spite of Percy Newberry's ${ }^{46}$ discussion of this term some years ago and of Charles Kuentz's ${ }^{47}$ assessment of its implications, followed by a more recent discussion by E. Hornung, ${ }^{48} t 3 n t r$ has remained a very uncertainly defined area, extending roughly from Retenu, which I believe to have begun within the eastern delta, ${ }^{49}$ to the eastern desert. The 'second' stela of Kamose clearly speaks of the prince of Retenu, Apophis, being driven out of Avaris, and his trees cut down. ${ }^{50}$ From the time of Amenophis III we have the text telling us of the rš wood which the Pharaoh caused to be cut in God's Land and hauled by the chiefs of all the hill countries of Retenu. ${ }^{51}$ We usually translate $t 3 n \underline{r} r$ as 'the east', yet it is clear from its use that it does not specifically refer to desert regions. ${ }^{52}$ No one will argue with the view that it seems to indicate an essentially fertile area and particularly one with trees. Unfortunately we still know very little about the woodlands of ancient Egypt. Valuable work has been done by Lucas and Harris, ${ }^{53}$ W. C. Hayes, ${ }^{54}$ B. G. Trigger, ${ }^{55}$ and Karl Butzer, ${ }^{56}$ the latter stressing that we do not have a scientific knowledge of the vegetation in predynastic and dynastic times. ${ }^{57} \mathrm{We}$ may safely assume varieties of acacia, tamarisk, sycamore, and willow besides the date and dom palm. ${ }^{58}$ But as to their distribution we are still waiting for archaeological scientists to study the remains by pollen analysis and other methods. It may surprise us to learn that a species of oak was growing plentifully not very far from the eastern Delta. M. B. Rowton ${ }^{59}$ has emphasized that the Gilead is attested as a forest region in the Old Testament and that ancient Bashan was 'viewed as a typical oak woodland in the Old Testament'. He also points out that across the Dead Sea, in the Jerusalem-Hebron-Jaffa region, there were remnants of oak and pine forests less than a century ago. ${ }^{60}$ Rowton stresses that, provided there is a necessary minimum of precipitation, the continued existence of a forest does not depend so much on climate as on there being sufficient soil for the trees. He also believes that the inaccessibility of the hill country areas and the lack of efficient tools in the Bronze Age would have preserved these forests. In the light of these studies of Rowton's it is no longer so startling to read in Theophrastus (and also in Pliny) ${ }^{61}$ that oak grew in the vicinity of Thebes. Oak dowelling

[^25]
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was found on the large gilt shrines enclosing the sarcophagus of Tut'ankhamūn ${ }^{62}$ and further analyses may reveal a greater use of this wood in Egypt than we should earlier have thought possible.

It may well be that some of the extensive ancient woodland known to have existed in Egypt far into the past, which in time became silicified, ${ }^{63}$ may have survived here and there in predynastic and early dynastic times in areas where erosion of the soil did not take place until later. ${ }^{64}$ In the eastern desert, we know that the introduction of the camel some time perhaps during the sixth century в.c. ${ }^{65}$ devastated the vegetation by removing the ground cover and causing rapid erosion. The goat also contributed to this devastation. Consequently it is not easy for us to imagine the environment as it must have been before this happened and also before mining activity made its demands in terms of fuel.

The enigmatic expression of $t 3 n t r$ has been referred to by Dr. Vivi Täckholm in a recent article. ${ }^{66}$ God's Land, she has said, may well have been any woodland where tall trees stood like many poles in honour of the god of the area. There can be no doubt that such a definition would explain both the breadth of the area so designated and the particular characteristic of its tree-growing capacity. However, it does not explain the persistent, singular form of $n \underline{t} r$ associated with a definite area which we know to be eastern, though at present ill-defined.

## Sopdu and his land

It is against this background of trees and vegetation that we must see the Asiaticlooking Sopdu who appears on our stela North. 1935, and who was held in such regard in the mining areas of Sinai. His Ptolemaic temple in the village known today as Saft el-Henneh, at the entrance to the Wadi Tumilât, was called 'the house of the sycamore' ${ }^{6} 7$ as well as 'the house of Sopdu'. Vegetation is associated with this residence of the god, both in the texts and in the scenes of the reliefs showing the gods who resided there with Sopdu, the 'lords of the abode of the sycamore'. ${ }^{68}$ Such connections go back to the Pyramid Texts where there are a number of references to Sopdu 'under his ksbttrees'. ${ }^{69} \mathrm{He}$ is also spoken of as journeying through his fields and passing through his woods. ${ }^{70}$

On our stela Sopdu is wearing the šsmt-girdle which was closely associated with him from early times. ${ }^{71}$ In Percy Newberry's ${ }^{72}$ study of the term šsmt he argued convincingly

[^26]that the ancient term šsmt-land was the area where the šsmt-girdle was worn. He found that this same expression persisted into Arab times for the whole of the eastern Delta in the name El-Hauf which also means girdle. ${ }^{73}$

We must accept the fact that the mining country and the fragrant land were one and the same in $t$ s šsmt. In line $456 c$ of the Pyramid Texts we find: 'thy nose breathes the fragrance of the šsmt-land'.

Sopdu's titles of $n b t$ s ssmt and $n b i z b t t$ are not shared with any other god although we find the titles Horus of sssmt and Horus of the east. As Gardiner ${ }^{74}$ pointed out long ago, Sopdu appears to have been a particular manifestation of Horus, $\mathrm{Hr} s p d$. From his temple at Saft el-Henneh, Sopdu governed the entrance to the Wadi Tumilât which was a gateway to the east from the earliest times, leading to the fragrant land and also to the mining country. ${ }^{75}$ The siting of the Ptolemaic temple in this position is no accident. There are at least two other monuments near the Wadi Tumilât, from the time of Ramesses II, which were dedicated to Sopdu in conjunction with the Asiatic gods 'Anath and Baal: at Gebel Abu Hassa and at Gebel Murr. ${ }^{76}$ Moreover, his Eighteenth-Dynasty shrine within the temple of Hathor at Serâbit el-Khâdim was believed by Petrie ${ }^{77}$ to have had an earlier chapel there dedicated to him.

The appearance of the expression $t \boldsymbol{t} \underline{\underline{t}} \mathbf{r}$ from the Eleventh Dynasty onwards (not the Twelfth, as is usually accepted) ${ }^{78}$ is interesting. It seems to replace $t 3$ šsmt, which disappears altogether from the texts of the later Middle Kingdom and the New Kingdom. ${ }^{79}$ When we are told in our inscription North. 1935, which honours Sopdu only, that Khnemhotpe has been sent to establish the Pharaoh's monuments in $t ; n \underline{t r}$, we cannot ignore the clear implication that the land of the god is the land of Sopdu. He is the only god who is ever called by the two titles of $n b t 3$ šsmt and $n b i z b t t$ together. Moreover, on several inscriptions in Sinai, he is called nb hswt. ${ }^{80}$

Sesostris II was revealing an expansionist attitude on the part of Egypt when he decided to penetrate as quickly and as peacefully as he could, immediately upon his accession, the valuable region of $t 3$ ntr. Moreover, by making an Egyptian god (closely associated with Horus) the acknowledged lord of the area, the Pharaoh could much more convincingly claim it for Egypt. With a masterly gesture of diplomacy towards the Asiatic inhabitants of these regions, Sopdu is given an Asiatic appearance. On our stela his beard extends along a part of his face, his hair is either tied in the ShosuBeduin fashion of later times, with two crowns, or else he is wearing a cap in this style. ${ }^{81}$

[^27]He is also wearing the two feathers which seem to symbolize the god's association with foreign countries, worn also by Min and sometimes by Hathor as well. It is significant that Sopdu is in no way to be connected with quarrying activity and is hardly ever mentioned in the inscriptions of Upper Egypt. It is equally significant that Min of Coptos has no dedicatory inscriptions in Sinai, although he is mentioned in texts up the Nile as far as the fourth cataract and in the western oases. The cult of Min does not appear to have extended into the eastern desert beyond the quarrying area of the Wadi Hammamât. Our stela from the Wadi Gasus mentions Min only in connection with Coptos. Hathor does not seem to have had any special sphere of influence in the eastern desert. Although she governed the adjoining foreign regions over which Egypt claimed an uncertain sovereignty, and supreme as she was in Sinai and in Punt, the texts do not suggest that she was mistress of all the eastern regions together, as they do in the case of Sopdu.

## Conclusion

It seems therefore that we must conclude that our two stelae from the Wadi Gasus do not indicate a regular route for seafaring activity by Pharaonic Egypt as has so often been suggested. There is no evidence for an exact location for siww although it was probably along the Red Sea coast. However, it is unlikely to have been Qoseir. What our two stelae really offer us is the opportunity to consider their geographical implications with regard to $t s n t r$ and Punt, two fundamental problems in the interpretation of ancient Egyptian history.

# SENENU, HIGH PRIEST OF AMŪN AT <br> DEIR EL-BAḤRI 

By EDWARD BROVARSKI

This publication of the Oriental Institute stela 8798 owes much to the labours of two scholars, the late T. G. Allen, who transcribed the stela after its arrival in Chicago, and Dr. John A. Wilson, whose translation and textual notes made in 1925 have been an invaluable aid in restoring the lacunae in the text. ${ }^{1}$

Of white limestone, the stela was broken in nine pieces which measured 105 cm . in height when fitted together and approximately 74 cm . in width (fig. r). The figures of the owner of the stela, his wife, daughter, and the attendant priests are in raised relief, as are the $w d z t$-eyes at the top of the stela. The hieroglyphic legends are in sunk relief. In sunk relief also is the peculiar device of which only the bottom half survives in the space before Senenu's face. What remains suggests the standard or perch used for carrying religious symbols and the figures or emblems of the gods (Sign List Riz). While I know of no specific parallel to this feature, it is possible that a figure of Wepwawet or Anubis stood or reclined on the standard. The stela of Senenu came to the Oriental Institute from the Egypt Exploration Fund. On page 26 of the Catalogue of the Exhibition . . . of the Egypt Exploration Fund for 1906, the stela is mentioned as having been found at Deir el-Bahri during the excavations of 1892-6. Senenu bore the high-ranking titles of High Priest of Amūn and Hathor in Dsr- $d s r w$, Hatshepsut's
 fication of which will be discussed at some length below). If the official is the same High Priest of Amūn in $H(-3 h t, S n(n) w$, cited by Helck, Materialien, Teil I, 875 (93), as seems likely, at least the lower portion of the Oriental Institute stela which bears that title was seen by Carter in the magazines of the Egypt Exploration Fund in 1899 and was later copied by Sethe. At the top of the same page, Helck draws attention to a High Priest of Amūn in $\underline{D} s r-\underline{d} s r w$ and Scribe of Recruits, Snnw. Actually, this citation is a conflation of the titles of two different officials of the Eighteenth Dynasty who bore that name and whose monuments are in the Louvre. The Senenu of Louvre C. 140/ 141/142 (=N 291) is King's Scribe, Scribe of the Army, and Scribe of Recruits. ${ }^{2}$ The

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owner of Louvre E 6.244, however, is a High Priest of Amūn in $\underline{D} s r-d s r w$ named Snnw and the piece is cited by Pierret, ${ }^{3}$ as a 'bas-relief en pierre calcaire d'Abydos'. Since it is not drawn and its provenience is given by Pierret as Abydos, only after a photograph of Louvre E 6.244 (pl. XI, 2), kindly provided by Mme Christiane DesrochesNoblecourt, arrived in Chicago was it apparent that the Louvre piece was the fragment missing from the gap in the lower right-hand corner of the Oriental Institute stela. The upper parts of the figures of the priests on the Louvre fragment join the lower parts of the figures on the Oriental Institute stela, while the top two lines of the latter complete lines 15 and 16 of the former and add a few more signs to the badly damaged line 14. The last two lines of the Louvre fragment add nothing more to the main text but provide a caption to the scene of the four phyles of priests below (pl. XI, A).

Since the provenience of the Oriental Institute fragments of the stela of Senenu is well documented and is confirmed by Senenu's own titles, it can only be assumed that Pierret's information was unreliable and that the Louvre fragment likewise derives from Deir el-Bahri. Since the second volume of Pierret's work dates from 1878, suggesting that Louvre E 6.244 had been acquired some time before that year, it is, perhaps, not too precipitous to suggest that the piece derived from one of Mariette's three seasons of excavations at Deir el-Baḥri in the years 1858, 1862, and $1866 .{ }^{4}$

Some years ago, Grapow ${ }^{5}$ collected examples of speeches of the deceased on several monuments of the New Kingdom. What was striking in the speeches was not their content, but their presentation and formulation. All had a common form composed of two clauses: one with ir wnn (in the orthography of one of the monuments ir wn), a protasis, and the other, an apodosis with futuristic sense or meaning. ${ }^{6}$ In two of Grapow's examples, the protasis after ir wnn consisted of an adverbial nominal clause ir wnn shw hr $s h$ 'if souls are transformed' and, in his other examples, of an impersonal $s \underline{d} m \cdot f$ of the verb $\mathbf{h} h$, ir wnn $s \underline{h} \cdot t w$ 'if one is transformed'. In essence, the latter is the form of the clauses of condition on the stela of Senenu. When this construction was used on Grapow's monuments, it was followed by a clause of cause, for example, ir wnn $3 h \cdot t w h r$ irt $m$; ' $t$ : 'If one is transformed because of acting justly (my ba shall follow Osiris, etc.).' Unfortunately, the clause of cause is missing in every instance on the stela of Senenu and only in line 3 is $3 h \cdot t w h r$ preserved to assure us that the other instances on the stela are probably to be restored similarly.

Both the speeches on Senenu's stela and those on the monuments published by Grapow contain brief paraphrases of the chapter headings of chapters $78,8 \mathrm{r}, 83$, and 86 of the Book of the Dead, the 'Chapters of Making Transformations' that begin with

[^29]chapter 76 and end with chapter 88.7 To give an example, the heading to chapter 8 r reads 'A spell for assuming the form of a lotus'. ${ }^{8}$ On the stela of Senenu line 5 reads 'My soul shall assume the form of a lotus', and adds 'which appears on the pure land', a phrase borrowed from chapter $174 .^{9}$ It is clear from this example that the different redactors of these New Kingdom monuments chose their phrases from the funerary papyri at random. No two of the speeches are literally identical though a number of clauses recur and at least one clause on the stela of Senenu is paralleled elsewhere only on one of the monuments included in the study by Grapow. ${ }^{10}$ Winlock ${ }^{11}$ noted a similar situation in regard to the hymn to the Sun-god on stelophorous statues of the New Kingdom. The hymn was not of set phraseology, like our hymns, but one in which the Egyptian felt free to give his fancy rein in improvisation. While copy after copy of the hymn gives us the same underlying theme, and even many recurring phrases, each scribe was at liberty to arrange it after his own taste. The same principles are discernible in the formulation of the speeches on the stela of Senenu and on Grapow's monuments.

## Translation

I. In the lunette a legend, twice repeated:

She gives all life and dominion to the Lord of the Two Lands, Menkheperrēr,
and
The Good God, Menkheperrēॅ, beloved of Amūn.
II. The main inscription:
(1) The High Priest of Amün in Djeser-djeseru, Senenu ${ }^{b}$; he says: If one is transformed [because of uprightness and silence, my soul shall be summoned to share in food in the Field ${ }^{\circ}{ }^{\circ}$ C (2) of Reeds. It will assume the form of a divine falcon ${ }^{d}[$ for whom all evil] is driven [to earthe] . . (3) The High Priest of Hathor who is in (the midst of) Djeser-djeseru, Senenu; he says: If one is transformed because of [. . ., my soul shall follow Hathor. ${ }^{f}$ It will assume] (4) the form of a swallow of God's Land in order to [. . .] on the [incense] trees. . . .g, (5) my soul will assume the form of a lotus which ap[pears in the pure land ${ }^{h}$. . .] (6) [The . . . ${ }^{i}$ ] in Djeser-djeseru, Senenu; he says: If one is transformed [because of silence and patience, my soul shall be at the front of the favoured (7) in the fol]lowing ${ }^{j}$ of Wennofer. The tow-ropes will be attached for it (i.e. the soul of the deceased) [so that it may cross in ${ }^{k}$ ] (8) the ferry-boat of the necropolis, so that it may assume the form of a phoenix, [partaking of the offering table ${ }^{l}$, (9) The Superintendent of the slaves(? $)^{m}$ of Amūn in Djeser-djeseru, Senenu; he says: If one is transformed [because of . . .,] (io) my soul shall assume the form of the Good God, of the god [ $\left.\ldots \mathrm{H}^{n}\right]$. (1) It shall be [remembered] in the Isle of the Righteous ${ }^{\circ}$ when it comes forth from there in peace, its voice justified ${ }^{p}$ (12) [so that it may rest $\left.{ }^{q}\right]$ in the

[^30]Broad Hall of the Two Truths, when favours of its Ennead have joined it. (13) [. ..$\left.^{r}\right]$ the balance on its turn in it, its limbs sound ${ }^{s}$. (14) [. . .] I did not commit a [wrong] against people ${ }^{t}$. I did not (15) [... $\left.{ }^{u}\right]$. I was not combative ${ }^{v}$ in the house of He-whose-arm-is-raised ${ }^{w}$. [My voice] was not loud [in] the house of the Lord of Silence ${ }^{x}$. I was not contentious ${ }^{y}$ over a divine possession. I did not steal ${ }^{2}$ a meat-offering(?) of my god so that I might not associate $\left[\right.$ with sinners $\left.{ }^{a d}\right]$ forever.
III. The superscription over the phyles:
(1) . . . ${ }^{\text {ab }}$ from the temple of Amūn in Djeser-djeseru by the High Priest of Amūn in Djeserdjeseru, Senenu, justified. (2) To your ka a bouquet of Amūn and of Hathor, Chieftainess of Thebes, may they favour you and love you ${ }^{a c}$ inasmuch as all your affairs ${ }^{\text {ad }}$ are safe and sound in this temple.
IV. Inscriptions before each phyle:
(1) The ordinary priest of Amūn in the first phyle ${ }^{a e}$, 'Imn-m-hut: (2) To your ka, a bouquet which came forth in the presenceaf. (3) The second phyle. (4) The third phyle. (5) The fourth phyle.
V. Inscription over wife and daughter:

The Lady of the House, his sister whom he loves, M; ${ }^{2} t-k s-r\left\ulcorner-n b t-t s \cdot w y^{a g}\right.$, and:
His daughter whom he loves, $\underset{H}{H z w}-h m w t^{a h}$.
VI. Prayer on the lower part of the stela:
(1) An offering which the king gives to Amūn, Lord of Karnak, who presides over Djeserdjeseru and (to) the Lord of the Universe ${ }^{a i}$, the Bull of the Ennead ${ }^{a j}$, (to) Atum ${ }^{a k}$, Nun, Osiris, Thoth, Lord of Sacred Writings, and Hathor, Chieftainess of Thebes, that they may give invocation offerings of meat, fowl, and cakes, and the reception of giftsal [which come forth (2) in] the presence, and offerings which come forth upon their offering-tables in the course of every day, to the ka of the High Priest of Amūn in Djeser-djeseru, Senenu he says: $O^{a m}$ god's-fathers of this temple ${ }^{a n}$, scribes, lector priests ${ }^{a 0}$, ordinary priests, acolytes, and (3) every subordinate ${ }^{\text {ap }}$ of the temple, you will pass on ${ }^{\text {aq }}$ your offices to your children, (if) you make an offering-which-the-king-gives to Amūn, Lord of Karnak, for the ka of the High Priest of Amün in Khar-akhet, Senenu, justified, whom the Overseer of the Cattle


## Commentary

(a) The presence of the third-person feminine singular suffix pronoun in the phrase di•s rnh woss $n b n n b t ? \cdot w y M n-h p r-r r$ is peculiar. To whom does it refer? It is possible that in the stela's original emplacement a figure of a goddess, carved or painted, stood to either side, and it was she who offered life and dominion to Tuthmosis. Another explanation presents itself, however: the feminine suffix may refer to the $w d s t$-eyes in the centre of the lunette. I know of no specific parallel for this feature, where the eyes, being more than a symbol of the god Horus, seem to function as a deity in their own right, giving life to the king. However, on a Middle Kingdom stela in Zagreb (see Janine

Monnet Saleh, Les Antiquities égyptiennes de Zagreb, 15, fig. 4) the symbols of the West and East are provided with arms and proffer a cup to the wd $3 t$-eyes in the centre of the lunette. Beside the head of the princess on the block statue of $S n-n-m w t$ and $N f r w-r$ in Berlin (no. 2296) is an interesting portrayal of the goddess Nekhbet. The wings of the vulture are outstretched in the gesture of protection and embrace, but the body of the goddess is replaced by a wd $3 t$-eye (G. Roeder, Aegyptische Inschriften aus den staatlichen Museen zu Berlin, II, $35=$ Urk. iV, 406; cf. Et. Drioton, 'Deux cryptogrammes de Senenmout', $A S A E 38$ [1938], 231-46). Similarly, the representations on a cartonnage coffin in Berlin (no. 8505 ; ibid. $444,448,450,452$ ) provide the single $w d s t$-eye with a pair of wings or two contraposed eyes with a single wing each, as on another coffin (no. 28; ibid. 443) where the wings are provided with pendant uraei. In similar fashion, a single wd $3 t$-eye replaces one of the wings of the Behdetite on a number of stelae of the Eighteenth and Nineteenth Dynasties in Cairo (Lacau, Steles du Nouvel Empire, I, plates, passim).
(b) H. Ranke, $P N_{\text {I, }} 3$ IO, 2 I.
(c) The presence of $i_{3} r w$ 'reeds' ( $W b .1,32,5$ ), at the beginning of line 2, suggests that we had a phrase in lines $\mathbf{1}-2$ that originally ended with Sht-izrw 'the Field of Reeds' ( $W b, 1,32,6-7$ ). The
 heart will be happy ploughing in your plot ( $\check{s} d)$ of the Field of Reeds', while another common locution on stelae of the Eighteenth Dynasty (see Hermann, Die Stelen der Thebanischen Felsgräber der I8. Dynastie, 21, 13; 25, 9; 51, 3-4) reads 'He shall ferry over in the ferry-boat of the necropolis to the islands of the Field of Reeds'. Both these sentences are too lengthy to fit the lacuna in line I , however. The words in Grapow's Speech 9, 'I shall be summoned to partake of offerings in the Field of Reeds' (Grapow, op. cit. 65) seem to provide the simplest solution, though the sentence, to my knowledge, occurs on no other monument of the Eighteenth Dynasty, while the clause of cause in the same speech fits the resultant gap after ir wnn $3 h \cdot t w h r$ on Senenu's stela.
(d) Chapter 78 of the Book of the Dead is the 'Chapter of assuming the form of a divine falcon' (Budge, The Papyrus of Ani, 154).
(e) The phrase $d r n \cdot k s d b w n b t$ does not occur in chapter 78 of the Book of the Dead. It does
 above. The restoration is that of Dr. Wilson and seems to me a good one, though in no other instance does the phrase appear to be used of the divine falcon. Also possible is a clause found in chapter 130 of the Book of the Dead, $d r \cdot n \cdot s n$ ih $m r m n \cdot n \cdot f$ 'for whom suffering and illness is driven away when he is sick' (Naville, TB II, 139). In chapter 130 the expression is used of Osiris, but the restoration of either alternative in line 2 of Senenu's stela leaves room for another short phrase at the end of the same line.
( $f$ ) The apodosis in lines $3-4$ is almost literally paralleled by that in Grapow's speech 2 and I have restored the lacuna accordingly:




Book of the Dead chapter 86 is 'A spell for assuming the form of a swallow' (T. G. Allen, The Egyptian Book of the Dead: Documents in the Oriental Institute Museum at the University of Chicago, 162). The qualifying phrase 'of the God's Land' to my knowledge only occurs here. 'God's land' is used often of Punt (e.g. Urk. Iv, 322,$7 ; 334,6$ ), as is probably the case here, given the following
mention of myrrh trees, but it can also be applied to Asia (e.g. Urk. Iv, 775, 15 ; Petrie, Six Temples, pl. xii, line 17). Hatshepsut brought back thirty-one myrrh trees ( $n h w t$ nt cntyw) from Punt to be planted in the gardens of Amūn and great heaps of red incense to be burned before the god (Naville, Deir el Bahari, inf, pls. 78-82). (For a recent discussion of African incense trees see F. Nigel Hepper, 'Arabian and African Frankincense Trees', $\mathcal{F} E A 55$ (1969), 66-72.) The mention of incense trees (nhwt nt entyw) on the stela of Senenu, a contemporary of Tuthmosis III and Hatshepsut (see below), and on the Cairo stela of Neferhotep, a possible contemporary of Senenu, is the more interesting as other and contemporary stelae, while often asserting that the $b a$ of the deceased shall sit ( hms ) or stroll (swtwt) under, or alight upon (shn) or, most commonly, refresh oneself (skbb) under trees (see Grapow, op. cit. 71; Hermann, Stelen, 22, 16; 31, 16; 38, 16; 52, 10; 56, 2; Urk. Iv, 73, 8; 918, 8; ı064, 8; etc.; Säve-Söderbergh, Einige Ägyptische Denkmäler in Schweden, Abb. 2 (Stockholm no. 55), use only the word $n h w t$, 'trees', in general ( $W b$. II, 282, 16-283, 1-2) or $m n w$, a word for 'trees' common from the Middle Kingdom (Wb. II, 71, 13-16). Unfortunately, the context here and on Cairo 34057 is obscured by a word, damaged on the stela of Senenu but preserved as $k f d$ on Cairo 34057. Grapow (op. cit. 71), finding no parallel for the verb, suggested an emendation to hfd 'to sit' ( Wb . III, 75, 10-12), but the suggestion is rendered even more doubtful by the presence of a tall damaged vertical sign on the Chicago stela, while the hand (Sign List $\mathrm{D}_{4} 6$ ) on the Cairo stela is replaced by the arm with the hand holding a stick (Sign List $\mathrm{D}_{4}$ ) on the latter. I have no solution to suggest, and until a parallel text with clearer orthography is found, the word must remain untranslated. Note also the use of the different prepositions on Cairo 34057 and Orinst 8798 ; the former uses $\underline{h r}$ 'under the incense trees' while the latter has $h r$ 'on the incense trees'. Of the examples just cited, Stockholm no. 55 and Hermann, Stelen, 52, 10; 56, 2 have $s k b b \cdot i \quad h r-h r w ~ n h w t \cdot i$ 'I shall refresh myself under my trees'. For the compound preposition $h r-h r w$, which may represent the original preposition used in the phrase on Cairo 34057 and Orinst 8798 , see $W b$. III, 392, 12.
(g) One would expect a recurrence of the protatic clause ir wnn sh.tw $h r$ etc., here, since, at least in line 6 and, probably, in line 2 , $i w b s \cdot i r$ etc. follows this construction as apodosis. The lacuna is not sufficient, however, to allow space for the clause Snnw; $\underline{d} d \cdot f$, preceded by one of Senenu's titles, which in every other instance precedes the protatic clause.
(h) Chapter 81 of the Book of the Dead is 'A spell for assuming the form of a lotus'. In the text following the chapter heading, however, 'I am the pure lotus' is modified by the clause 'which cam forth ( $p r$ ) from the sunshine and is at the nose of Rēr and at the nose of Hathor' (see Allen, The Egyptian Book of the Dead, 156). The wb . . . which is preserved after 'My soul shall assume the form of a lotus' in line 5 of our stela precludes the possibility that this modifying phrase followed.
(i) The title before $\underline{m} \underline{D} r-\underline{d} s r w$ is completely lost. The space approximates to that occupied by Senenu's title of $h m-n t r$ tpy $n$ 'Imn $m$ Dsr-d $d s w$ in line 1 and it is possible that here Senenu was assigned the title of high priest of one of the other gods resident in Deir el-Baḥri: Rēc (E. Naville, Deir el Bahari, I, pls. i and viii), Anubis (ibid. II, pls. xxxi-xlv), or the divine ka of Tuthmosis I (ibid. v, pl. cxxix) or of Hatshepsut herself (ibid. v, pls. cvii-cxvi). For further information on the cult of Tuthmosis I and Hatshepsut at Deir el-Bahri, see H. E. Winlock, 'Notes on the Reburial of Tuthmosis I', $\mathcal{F} E A$ I5 (1929), 56-67. See below for a discussion of known personnel of the temple of Hatshepsut at Deir el-Bahri.
( $j$ ) Preserved at the beginning of line 7 is the god determinative with plural strokes and before these the top of a sign which may well be the walking legs of $\check{s m s w}$, yielding a phrase ending in 'the following of Wennofer'. Grapow's speeches contain two variants of that phrase. Speech I on the Cairo stela 34057 already mentioned, reads: 'If shw are transformed, my $b$; shall follow Wennofer.' Speech 5 on Louvre A 60, a statue of the High Priest of Memphis, Meryptah, has: 'If one is transformed because of doing truth, I shall be transformed and shall follow Wennofer.' Speech 4 on Berlin stela 7272 has a phrase that, with the clause of cause hr irt gr kb on the same stela, fits well
the lacuna at the end of line 8 and may have stood there originally: iw.ir tpy $n$ hsyw $m$ šmsw $n$ $W n-n f r$, 'I shall be in front of the favoured in the following of Wennofer'. For the writing of $s m s w$ with the god determinative (Sign List A40), see Urk. iv, 1469 , 17 ( $=$ Hermann, op. cit. 46, 8), an inscription from the tomb stela of $P_{3-h}{ }_{3}-m n$ called $B n i ;$ (TT 343), a contemporary of Senenu ( $\mathcal{F E A} 46,35$ ).
( $k$ ) For the tow-ropes of the ferry-boat being attached for or by the deceased, using either the verb rkz ( $W b . \mathrm{I}, \mathbf{2 3 4}, 9$ ) or $\underline{t z}(W b . \mathrm{v}, 396-7)$, as here, see chapters $99,100,183$ of the Book of the Dead and Urk. iv, i16, i6. The lacuna after this phrase is short and $d_{3} \cdot f$ fits the gap suitably. The prepositional $m$, 'in', is not generally written after $\underline{d}_{3} m h n t$ and the initial $m$ of $m \underline{h} n t$ 'ferry-boat' ( $W b$. II, 133, 12-13) may have served double duty (see Hermann, Stelen, 21, 13; 25, 8; 5 I, 3 and, especially 36 , ro, where in the phrase $\underset{J}{\boldsymbol{d}} \cdot n \cdot i m d p t n t r$ the prepositional $m$ is clearly written).
( $l$ ) Louvre A 60 has in Speech 5: 'I shall take the form of a phoenix, partaking of [sm; $m$, see Faulkner, Dict. 226; cf. Wb. III, 447, 17] the offering-table.' If we restore the determinative of the phoenix bird (Sign List G3I) after $b n w$, as seems likely, the phrase $s m ; m w d h w$ fits the lacuna at the end of line 8.
( $m$ ) For $m r w(t)$ 'slaves', see Abd el-Mohsen Bakir, Slavery in Pharaonic Egypt, 22-9.
$(n)$ Dr. Wilson in his textual notes made the suggestion that the apodosis here may contain a paraphrase of chapter 80 of the Book of the Dead, which reads in one version (Papyrus Ryerson, Allen, Book of the Dead, 155): 'A spell for assuming the form of a god and putting light in the way of darkness.' The fuller version of the chapter heading is too lengthy for our lacuna and a shorter variant would be necessary. Papyrus Milbank (Allen, ibid.) has 'A spell for assuming the form of a god and making light', which may fit the lacuna at the end of line io. Since I can find no parallel on contemporary stelae, however, and since line io of our stela interjects the phrase 'as the good god', I have left the lacuna unrestored and offer Dr. Wilson's suggestion as a solution on which I can make no improvement. The suggestion would have the advantage of being a paraphrase of the chapter headings from the 'Chapters of Making Transformations' as our other apodoses seem to be.
(o) For the Island of the Righteous already in the Coffin Texts, see De Buck, CT iv, 218 (Spell 335), a variant of $B$ I $_{7}$ (Allen, op. cit. 89). I know of no literal parallel to the phrase in line 1 , but $S n-m n$ similarly wishes memory of him to survive in the necropolis (Urk. Iv, 412, ir).
$(p)$ The phrase at the end of line in is troublesome, but it seems possible that we have here a very abbreviated writing of m3r with the platform (Sign List Aarı) and the forearm (Sign List D36).
(q) The parallels in Urk. iv, 116, 9; 148, 3; and 498, 12; have hnm $\cdot k$ wsht nt m3r•ty while that in Urk. Iv, 520, 6 has $h t p \cdot k$. The traces at the beginning of line 12 yield $m$ wsht $n t$ mir•ty and I have restored $h t p \cdot f$ since $\underline{h n m}$ is not regularly followed by $m$ while one does commonly rest ( $h t p$ ) $m$ a place (Faulkner, Dict. 180).
( $r$ ) Book of the Dead chapter 178 (Naville, $\mathrm{I}, \mathrm{pl}$. ccii) has iw mhst m3r•ti hr $z p \cdot k$, 'the balance being balanced at your turn'. The phrase in line 13 may be a garbled version of this with the suffix pronouns hopelessly confused. Urk. iv, io-I I presents a different version of the judgement: $\underline{d} d \cdot k w i$ $h r m h s t \ldots i p \cdot k w i$, . $m h \cdot k w i$, wd $d_{3} \cdot k w i$ 'I being placed on the balance, . . ., I being examined, I being complete, I being sound'. Berlin 9320 (Älgypt. Inschr. II, 229) has prt m3r-hrw r mh3y and perhaps a similar phrase should be restored at the beginning of line 13, though 'so that it may come forth justified to the balance' seems redundant in light of the phrase at the end of line ir.
(s) The last phrase with $w d_{3}$ is similar to the end of line $\mathrm{I}_{3}$ here, $\tau w(t) \cdot f w d_{3}(w)$, 'its limbs being sound'. I have no parallel for the defective writing of $w t$ ( $W b .1,160 c{ }_{15}-17$ ) without the loaf $t$ and it seems equally possible that the scribe left out the $h$ of $h \stackrel{\sigma}{ }$ ( $W b$. III, 37, 7). The three flesh determinatives ( Sign List $\mathrm{F}_{51}$ ) at any rate make it certain that one or the other alternative was intended. The sculptor of Senenu's stela was not the most careful of craftsmen and at the end of

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the line he has incorrectly cut an $n$ in place of the book roll determinative of $w d z$, an error he repeats in line 3 on the lower part of the stela.
( $t$ ) Line 14 is badly damaged though the Louvre fragment adds a few more signs. The line ends $r r m \underline{t}$ but the absence of a stroke after the first $r$ suggests that the phrase is neither $m n h r n \cdot i m r z r m \underline{t}$ (Urk. IV, 150, 5) nor iwv.nff $m r 3 r m t(U r k$. Iv, 518,17 ) which occur on two contemporary monuments, but rather to be restored $n$ ir $\cdot \boldsymbol{i}$ isft $r r m t$ ' $I$ did not commit a wrong against people', a phrase which, with a $s d m \cdot n \cdot f$ of the verb iri, occurs twice in the tomb of the vizier Ramose (Davies, The Tomb of the Vizier Ramose, pls. xxii and xl). The traces seem to fit this phrase though the stela of Senenu consistently uses $n \mathrm{sdm} \cdot f$ in the denials of guilt that begin here or in the phrase lost at the beginning of line 14.
(u) As the next two clauses in line 15 are paralleled on the stela of the vizier $W s r$ ( $U r k$. Iv, 1031 , 8-9), one might expect the preceding clause there $n k ; r m n \cdot i m p r n b k s w$, 'I was not haughty in the house of the lord of bowings', to occur similarly on the stela of Senenu. The traces at the beginning of line 15 do not suit such a reconstruction, however, and the presence of $n \mathrm{ir}$ at the end of line 14 assures that we need a denial beginning with that verb form. Wb . does not seem to list $k_{3} r m n$ which, on the model of $k 3$ ib 'haughty' and $k ; s 3$ 'presumptuous, overweening' (Faulkner, Dict. 275), translates well as 'haughty' or the like.
(v) The Egyptian $f_{3 i}-r$, 'raised of arm', seems not far removed in meaning from the English idiom 'to raise one's hand' against someone and as the context calls for an undesirable quality, the idiom $f_{3 i} i$ r here is better translated 'combative' than 'pious' ( $W b$. I, 572, 9-10).
( $w$ ) An epithet of the god $\operatorname{Min}(W b .1,572,11$ ), undoubtedly referring to his raised right forearm in which he supports a flail; see also T. G. H. James, Hieroglyphic Texts from Egyptian Stelae, etc., rx, pl. xxxix, 2, where Min is called 'the Great, Lofty of Plumes, Raised of Arm', and Pierret, Rec. inscrs. I, 89, for 'Min-Horus of Coptos, Raised of Arm'.
( $x$ ) The Lord of Silence is, at least in the Late Period, Osiris; see Gauthier, Dict. géogr. II, 131. Already in the Eloquent Peasant, the Lord of Silence and his domain are mentioned. The villain, Nmty-nht, threatens the peasant thus: 'Don't raise your voice, peasant! Look, you are on your way to the domain ( $d m i$ ) of the Lord of Silence ( $\left.\mathrm{B}_{\mathrm{I}}, 26-7\right)^{\prime}$ '; and the peasant in his turn appeals to the Lord of Silence to return his goods which Nmty-nht had stolen (Br, 29-30).
(y) A parallel text, Urk. Iv, 64, I, has 'I was not contentious [d $\boldsymbol{d}_{3}-r$, Faulkner, Dict. 318] over the god's offerings', and Urk. IV, 1031, 12 is similar.
(z) The initial sign of the verb is a poorly cut butcher's knife (Sign List T34). The stela of Wsr (Urk. Iv, 1031, II) has $n n m \cdot i m$ wrbt $n n t r \cdot i$, 'I did not steal a meat-offering(?) of my god'. The verb $n m$ (Faulkner, Dict. 133) 'to steal' on Wsr's stela is determined with a fish, but Senenu's monument has the more common determinative, the sparrow (Sign List G37). The word wr $b t$ written with the flesh determinative (Sign List F5I) means 'meat-offering' ( $W b$. I, 284, 1 1-12). Though it is without that determinative on Wsr's stela, I believe there may be traces of the sign in the damaged area before the $t$ of wrbt on Senenu's.
(aa) A compound phrase with $s m z$ is necessary and, without a parallel text, $s m z-t z$, 'be interred' ( Wb . III, 448-9), comes most readily to mind. But a sentence that occurs on a contemporary stela $n$ smı•i isftyw, 'I did not associate with wrong-doers' (Urk. Iv, 442, 8) yields a better meaning here. Note at this point the change from indicative $n s d m \cdot f$ to the subjunctive $n n s d m \cdot f$, 'so that not . .' I assume the $n$ before the $n m$-sign in the previous phrase to be a phonetic complement as often (Wb. II, 263-72).
(ab) The in indicates some activity on Senenu's part, but whether šsp $n h$ 'receiving a bouquet', as Urk. Iv, 1500 , 5, or some such verb as $i i t$ or $p r t$, stood in the lacuna is rendered uncertain by the presence of the vertical book roll (Sign List Yi) which does not commonly occur with any of these.

## SENENU, HIGH PRIEST OF AMON

(ac) Urk. IV, $1475,{ }^{13}{ }^{-1} 5$ adds 'and cause you to endure, and save and protect you from every evil', and Urk. Iv, 1462, 3 'and may he give to you a goodly lifetime in the service of the king'.
(ad) See Gardiner, Egn. Gr. 256 (top).
(ae) The representation of the wrb-priest of Amūn in the first phyle and of the four phyles who follow him on the lower right half of the stela is of some interest. In the second century b.c. at Tebtynis in the Fayûm, in the twenty-ninth year of Ptolemy Euergetes II, there were five phyles of priests serving in the temple of Sebek, Lord of $T_{3}$-tn (Tebtynis) (S. R. K. Glanville, 'The Admission of a Priest of Soknebtynis in the Second Century b.c.' $\mathscr{F E A} 19$ [1933], 34-41). Dr. George Hughes has pointed out to me that this increase in the number of phyles from four to five took place during the reign of the first Euergetes (Canopus Decree, hierogl. text $13=$ demot. $7=$ Greek 24). In the Old Kingdom there may also have been five priestly phyles (Helck, 'Die Handwerkerund Priesterphylen des Alten Reiches in Ägypten', Die Welt des Orients 7 (1973), 1-8) whose organization was modelled on that of a boat crew. The evidence from the Middle and New Kingdoms, and the Late Period up to the reign of Ptolemy Euergetes I, however, admits of four phyles only, not named, as in the Old Kingdom, but numbered consecutively 1-4. They appear to have served for one month at a time. Thus, a priest of the Twenty-second Dynasty is 'great wrb of the temple of Amūn, who is in his month (of service), of the $3 h-m n w$, in the third phyle' ( $L D_{\text {iII, } 255 i}$ ). A Middle-Kingdom papyrus from Kahun (L. Borchardt, 'Die Zweite Papyrusfund von Kahun', $Z \ddot{A} S 37$ [1899], 89-103), providing a duty roster of the temple there, records the official transaction at the rotation of the fourth and first phyles of the temple: 'The report of the first phyle of the staff (wnwt) of this temple which is entering upon (its) monthly duties ( $m c h r m ; b d$ ) . . . we have received all the equipment of the temple . . it being intact and in good condition, from the fourth phyle of the staff of this temple which is retiring from (its) monthly duties ( $m$ smnt $m ; b d$ ).' Since there were four phyles, they presumably rotated on a regular basis three times a year, each phyle serving a total of three months annually. In the New Kingdom the phyles were composed of lectorpriests, ordinary (wrb-)priests and acolytes (imy-st-r). The phyles served the mortuary temples of the kings as well as the great state temples and the smaller shrines. It is doubtful whether we can make any generalizations about the size of the phyles based on the representation of the priests at the bottom of Senenu's stela which shows three priests to each of the four phyles. Presumably, the size of the phyles in the great temples at Thebes, Memphis, Heliopolis, and elsewhere would have been larger than those in the royal mortuary temples. However, in the Canopus Decree it was laid down (Canopus Decree, hierogl. text $15,16=$ demot. $8,9=$ Greek 29, 30; see the discussion by Glanville, op. cit. 39-40) that each of the five phyles should be composed of five priests and Blackman, at least, felt the number was consistent for even the large temples (Hastings, $E R E$, 'Priest, Priesthood (Egyptian)', p. 298). If, in the admission decree of the priest of Soknebtynis, already referred to above, it is assumed that no affiliations were given, there are exactly twenty-five persons listed (i.e. the number stipulated in the Canopus Decree). The numbers are quite unequally divided among the phylae, however. Similarly, a list of priests of Ptah and Hathor in the Ptah temple at Thebes (Orinst P $33796=$ FN 6345; P.-M. II, 200 (18)) which, because of its quartile division, may represent the phyles of the temple, lists four lector-priests but then distributes the twelve ordinary priests unequally among the four groups. Acolytes are not listed in this roster and it is tempting to add one acolyte for each of the four phyles to reach twenty, the number of priests that made up the four phyles before the Canopus Decree, but this remains only a suggestion, being completely unsubstantiated by evidence. Presumably, twelve priests would have been sufficient to staff the temple of Amūn in Deir el-Bahri, but it remains possible that the number of priests in each phyle was abbreviated in the representation on Senenu's stela to fit the space available. On the other hand, twelve is also the number of the ordinary priests in the list of priests in the Ptah
temple and the twelve priests on Senenu's stela may represent the ordinary priests minus, for some reason, the acolytes and lector priests who also made up the phyle.
(af) That the priest Amenemhat proffered a bouquet is apparent from the position of his arms on the Chicago fragment, though only the very upper part of his arms are preserved.

The presentation of bouquets to the deceased was an important part of the great Feast of the Valley in the tenth month of the year (see Siegfried Schott, Das schöne Fest des Wüstentales, pp. 48 ff .), when Amūn left Karnak and was ferried across to visit the mortuary temples of the kings on the west bank, and festivities were celebrated in the tomb chapels in which the living took part.
(ag) Since T. G. Allen copied the inscription on Senenu's stela, the last half of the wife's name has been chipped off the left edge of the stone and lost. Allen's copy is excellent in every other particular, however, and I follow it here. The name M3ct-


Fig. I $k_{3}-r e-n b t-t t_{3} \cdot w y$ 'Ma‘atkarē--is-Lady-of-the-Two-Lands' is unlisted in Ranke's $P N$. It did not originally stand after snt.fmrt•f on the stone but has been recut (see fig. r) over $n b t-p r$ and a now illegible name that followed, while $n b t-p r$ was then carved once again below, before the face of Senenu's spouse. While it is possible that Senenu remarried and that the name of his new wife was put in the place of the name of his previous spouse, it seems equally possible that Senenu's first wife adopted a name incorporating that of her husband's patroness and reflecting the latter's change in status as co-regent of Tuthmosis III.
(ah) The name $H n w t-h m w t$ is unlisted in Ranke, $P N$.
(ai) For $N b r-\underset{d}{ } r$ see $W b . v, 230,15-16$; probably here Rēc, since the gods immediately following have a part in the Heliopolitan cosmogony.
(aj) An epithet of the Lord of the Universe on Berlin 7317 (Roeder, Ägyptische Inschr. II, 140) is $k s m t p s d t$ 'the Bull who begot the Ennead'.
(ak) The front of the tm -sign (Sign List $\mathrm{U}_{15}$ ) is visible before the break.
(al) For sśp swt prt m-bsh see Urk. Iv, 1422, 11; 1461, 2; 1571, 7. The word ${ }_{3} w t(W b .1,5,2)$ is generally written with plural strokes.
(am) Written without the initial reed leaf. See Lefebvre, Gr. (2nd edn.), §576.
(an) Professor E. F. Wente pointed out the easiest solution to this group; reading the ${ }_{i}$ as ${ }_{i}$ though there is no sign of the lip of the jar. For the phrase 'god's-fathers of this temple', see Urk. IV, $1495,14^{-1} 5$ where the god's-fathers are included, along with the ordinary priests, lector-priests, and acolytes, in the regular staff ( $w n w t$ ) of the temple.
(ao) The writing of $\underline{h r y}$ - $h b t$ is defective here, lacking the $b$ while the basket (Sign List V30) incorrectly substitutes for the basin ( Sign List $\mathrm{W}_{3}$ ) and is separated from the writing of 'lector priest' by the wrb-sign (Sign List D6o).
(ap) A $d$ is clearly preserved in the damaged portion of the line and only $s m d t$ ( $W b$. Iv, 147, 2-7) 'subordinates' seems to fit the space.
(aq) From the Middle Kingdom the papyrus column (Sign List $\mathrm{M}_{13}$ ) is a frequent substitute for the cord wound on the stick (Sign List V24) (see Gardiner's Egn. Gr. 480). The phrase swd. $\underline{t} n$ $i s t \cdot \underline{\underline{n}} n \underline{h} r d / m s w \cdot \underline{t} n m i \underline{d} d \cdot \underline{t} n h \not h t p-d i-n s w t$ occurs already in the Middle Kingdom (e.g. Hieroglyphic Texts from Egyptian Stelae, etc. in the British Museum, in, pl. 13) and is the standard form of this virtual clause of asseveration on most of the stelae of the Eighteenth Dynasty. On Senenu's stela, however, the apodosis of the clause is ir $\underline{t} n h t p-d i-n s w t$ '(if) you make an offering-which-the-kinggives', omitting the preposition $m i$ before the $s d m$. $f$ form of the verb $i r i$. On the statue group of the vizier $W s r$ and his wife in Cairo ( $U r k$. iv, 1035-7), the idiom is again 'to make an offering-which-the-king-gives', though here the preposition $m i$ is included before the $s d m \cdot f$ form of the verb. A stela
of the same individual, however, has '(if) you say an offering-which-the-king-gives' (Urk. Iv, 1032, 9-10). The word for 'children' on Senenu's stela and Wsr's two monuments, along with the MiddleKingdom stela, is written with the determinative of a child seated with hand to mouth (Sign List A17). In the biographical inscription of $R h-m i-r c$ ( $U r k$. Iv, 1084, 11) $m s w$ is written, but on the stela of the scribe Djehuty-nefer $\underline{h r d w}$ is the word ( $U r k$. IV, 1610, 12). Senenu's stela asks quite simply for a $h t p-d i-n s w t$ to Amūn, Lord of Karnak for the soul of Senenu but the stela of $P_{3}$-hry at El-Kab expands the standard formulation into an interesting peroration on the invocation formula: 'You shall pass on 〈your offices〉 to your children according as you shall say an offering-which-the-kinggives, in accordance with ( $m$-snt- $r$ ) the writings, which comes forth at the voices, according as the ancestors said, as it came forth from the mouth of god.' (Urk. Iv, 121, 8-1 I ; see also Urk. IV, 509, 10.) Two of the texts add a qualifying clause after 'you shall pass on your offices to your children', namely, 'after a lengthy lifetime (Urk. IV, i084, ir)' and 'after a long old age ( $i ; w w_{3} h$ )' (Urk. IV, 1610, i2).
(as) Ranke, $P N_{\text {I }}$ 249, 1, for the name of the father. But of this particular $\underset{r}{H r-m s, ~ I ~ c a n ~ f i n d ~ n o ~}$ trace in the records.
(at) The name of the mother, Rfrf, is not listed in Ranke, PN.
All we know about Senenu's life and career are the meagre biographical details that can be gleaned from his stela. He was the son of a lady named Rfrf and her husband, $H r-m s$, who held the important office of Overseer of the Cattle of Amūn. Senenu married a woman with the cumbersome name $M_{3}\ulcorner t-k 3-r r-n b t-t 3 \cdot w y$ and the couple had at least one child, a daughter, Hnwt-hmwt, who appears with her parents on her father's stela. Neither Senenu, nor his father, mother, spouse, or daughter, seems to appear in the records elsewhere. As Senenu held several offices in Hatshepsut's mortuary temple at Deir el-Baḥri, including the paramount position of high priest, a brief summary of the history of the queen's temple will have to suffice in lieu of a detailed prosopographical study.

Hatshepsut's temple of Djeser-djeseru is mentioned already on a stela dated to Year $3^{12}$ of Tuthmosis III's reign, some few months after the queen's coronation. The founding of the queen's temple certainly antedates this time, and it seems probable that the project was conceived of before Hatshepsut was crowned in Tuthmosis' second year. ${ }^{13}$ Certainly, Senenmut had repaired to the Aswân quarries while Hatshepsut was still 'king's great wife' and by the time Hatshepsut was crowned, her two enormous obelisks were ready for erection at Thebes. ${ }^{14}$ The stela of Year 3 was found by the French mission in the Mont temple at Karnak and commemorates a gift by Senenmut (here Steward of Amūn) of 5 arourae of land and of a male and female slave to the Deir el-Bahri temple and the workhouse which Hatshepsut had built there for her father Amūn in Djeser-djeseru. ${ }^{15}$ The talented Senenmut, on a statue found in the Karnak Mut temple, claims to have been Controller of Works in Djeser-djeseru (Urk. IV, $409,5 \mathrm{ff}$.) and to have held the same office in Karnak, in Luxor, and at Hermonthis.

[^31]Breasted ${ }^{16}$ assumed that Senenmut was the actual architect of Djeser-djeseru, but the claim of the Chief Treasurer Dhwty to have been its designer is equally strong. On his stela, now in Northampton (Urk. iv, 419 ff.) Djehuty says: 'I acted as chief, giving directions, I led the craftsmen to work in the works ${ }^{17}$ in Djeser-djeseru.'

If the Karnak stela provides us with the information that Hatshepsut's temple was a-building by Year 3 of Tuthmosis, ostraca found by the Metropolitan Museum of Art's expeditions at Deir el-Baḥri between the years 1922 and 1936 and published by Hayes, ${ }^{18}$ carry us through construction work on the upper portions of the temple in year io of Tuthmosis III, the cutting of the sanctuary, the grading of the forecourt, and the erection of its gateway. Another ostracon found in a temple dump is dated to the king's twentieth year when the temple had been built and decorated and Hatshepsut's own end was not far off. Tuthmosis, of course, effaced Hatshepsut's name throughout the temple and also many of her portraits. As J. Lipinska ${ }^{19}$ has pointed out, Tuthmosis III's determination to deprive the temple of Hatshepsut of its predominance at Deir el-Bahri seems to be the explanation for the existence of the Djeser-akhet temple on its inconvenient site. After Hatshepsut's demise, Tuthmosis' new temple was the goal of the procession of the Feast of the Valley, ${ }^{20}$ and the procession may well have by-passed Hatshepsut's temple completely. The cult of Amūn in Djeser-djeseru was maintained till the end of the Twentieth Dynasty. In the tomb of $I i-m i-s b 3$, it is listed alongside that of Amūn in Djeser-akhet. ${ }^{21}$ But after the queen's death and subsequent disgrace, Djeser-djeseru ceased to function as the queen's mortuary temple and undoubtedly suffered a consequent decline in importance and prestige. No priests of Hatshepsut's mortuary cult are known ${ }^{22}$ and it seems likely that Tuthmosis suppressed her cult also. Indeed, with the exception of Sen-nefer, Mayor of Thebes, who held the office of Controller of Young Cows of Amūn in Djeser-djeseru (Urk. iv, 1418, i2) under Amenophis II, the personnel of Hatshepsut's temple known to us belong to the reign of Hatshepsut herself or to that of her co-regent Tuthmosis. ${ }^{23}$ Senenu, then, may have been the only holder of the office of High Priest in Djeser-djeseru. ${ }^{24}$ It even seems possible that he shared the fate of others closely associated with the queen. His stela was smashed and thrown out from his now lost tomb, ${ }^{25}$ apparently in antiquity. If the

[^32]stela was still in place in Senenu's open chapel in the time of the Atenist iconoclasts, it would certainly have suffered the same attentions to the name of Amūn as the monuments of other contemporaries of Senenu. ${ }^{26}$

Senenu exercised the office of High Priest of Amūn in Djeser-djeseru, but was also High Priest of Hathor 'in (the midst of) Djeser-djeseru'. Hatshepsut tells us that she built the Hathor shrine for her mother, Hathor, Chieftainess of Thebes ( $h r y-t p W_{3 s} t^{27}$ ) and in a number of places on the walls of the Hathor shrine Hathor, Chieftainess of Thebes is $h r t-i b$ Djeser-djeseru. ${ }^{28}$ Hathor, Chieftainess of Thebes, was worshipped at Thebes already in the time of the Twelfth Dynasty. King Sesostris I dedicated a basalt dyad of himself together with the goddess. ${ }^{29}$ On its base, he is 'Beloved of Hathor, Chieftainess of Thebes'. The find-spot of the statue, Karnak, suggests that in Sesostris' day a shrine to that goddess stood in the Karnak precinct. In the time of Tuthmosis III, Hathor, Chieftainess of Thebes, had a shrine at Karnak where she was worshipped as a consort of Ptah. ${ }^{30}$ The surviving shrine of Hathor, the southern chapel of the Ptah temple at Karnak, dates to the time of Tuthmosis, who constructed it when he rebuilt the Ptah temple some time after his twenty-third year. ${ }^{31}$ On its walls Tuthmosis is shown seven times offering to the goddess (Chic. Or. Inst. photos 9624-31; P.-M. II, 201). Five of the representations of Hathor have been destroyed above the waist and their inscriptions are gone. In the two figures preserved Hathor appears as she does at Deir el-Bahri ${ }^{32}$ with the sun-disk and cow's horns on her head, and is named in the
of Tuthmosis III (P.-M. i 19 (1960), 325). Dr. William Murnane of the Epigraphic Survey staff was kind enough to examine tomb 225 for me, a task which included the removal of the stone blockage from its entrance, in April 1974. The only text that remains is behind the figure of the tomb owner on the eastern half of the south wall and reads $h m-n t r t p y ~ n H t h r ~ . ~ . ~ D r . ~ M u r n a n e ~ f o u n d ~ n o ~ t r a c e ~ w h a t s o e v e r ~ o f ~ t h e ~ n a m e ~ o f ~ t h e ~ w i f e, ~$ given by Porter and Moss, and was under the strong impression that the tomb was never finished, both the rear part of the chamber and its statue niche being incompletely excavated.
${ }^{26}$ As, for instance, did the tomb of Dhwty (see Davies, Griffith Studies, 281, 284; pls. 41, 42), the tomb of 'Imn-htp(?) (Säve-Söderbergh, Four Eighteenth Dynasty Tombs, 2), and that of 'Imn-m-ḩst (Davies and Gardiner, The Tomb of Amenemhēt, 21).
${ }_{27}$ Naville, Deir el Bahari, iv, pls. 88 and 90.
${ }^{28}$ Urk. Iv, 301, 7; on the northern wall of the entrance hall, Chic. Or. Inst. photo 40596.
${ }^{29}$ Cairo 42008, Legrain, Statues, I, 6-7, pl. 4; P.-M., II, 108.
${ }^{30}$ Maj. Sandman Holmberg, The God Ptah (Copenhagen, 1946), 26.
${ }^{31}$ Breasted, Anc. Rec. II, 609. To the list of Ptah priests (compiled by Helck, Materialien, I, 63), add a son of P3-iry, owner of Theban Tomb No. 139. This son was named B3k-n-wrl and had the titles wrb, $\underline{\underline{h} r y-h b(t)}$ $n$ Pth $n b$ W3st (seen on a colour transparency of Dr. Charles F. Nims). Helck lists two incumbents of the office of High Priest of Ptah at Thebes, the P3-iry just mentioned, who served under Tuthmosis IV, and a K3-m-Wist who dates to the igth Dynasty. To this list we should, perhaps, add a certain $S n-k d$ who, on an ushabti from his tomb, is named $i d n w n$ pr 'Imn, hm-ntr tpy $n$ Pth (Sotheby Parke Bernet, Inc., Antiquities, catalogue of a public auction, May 4, 1974, pp. 38-9, no. 41). The ushabti dates stylistically to the early 19th Dynasty, between the reigns of Horemheb and Ramesses II. That the joint worship of Ptah and Hathor in the Karnak Ptah temple continued into, or was resumed in, Saïte times, is indicated by a title of a Theban vizier, a contemporary of Psammetichus I (ASAE 7 (1906), 50-2), who was hm ntr Pth Ḥtḥr nb W3st.
${ }^{32}$ On walls throughout the five chambers of the Hathor shrine (Naville, op. cit., pls. 92, 93, 97, 99, 100, 102, 106) and on the end wall of the sanctuary itself ( pl . 106). Where the inscriptions over these figures are original and not obscured by Atenist erasures the anthropomorphic Hathor, with sun-disk and cow's horns on her head, is regularly labelled Hathor, Chieftainess of Thebes, while Hathor in her bovine form is Hathor of Dendera (pls. 87, 94, 104). Somtus, Son of Hathor and Chief of Dendera also appears on the walls of the shrine (Naville, op. cit., pl. 98) as does Horus hery-ib 'Iwnt (Orinst P 40643). Hathor, Mistress of Tepiḥu appears
one complete inscription remaining (Chic. Or. Inst. photo 9631) 'Hathor, Lady of Heaven, Mistress of the Gods, Beautiful of Face, Chieftainess of Thebes'. Above the doorway to the central shrine, Tuthmosis is shown yet again (Chic. Or. Inst. photo 9658), offering to Amūn, Ptaḥ, and Mut of Ishru on the right, and to Amūn, Ptah, and Hathor, Chieftainess of Thebes on the left. Before this temple, there was a still older temple of Ptah, for Tuthmosis tells us that he found it built of bricks with doors and pillars of wood. ${ }^{33}$ Undoubtedly this temple had a chapel to Hathor, for on the same stela in which he commemorates his rebuilding of the Ptah temple Tuthmosis ordered Hathor's customary ceremonies ( $n t-\ulcorner n t \underline{h} n w, W b$. II, 197) to be carried out. This earlier temple may well have been of Middle-Kingdom date and that it was the principal shrine of Hathor in Hatshepsut's time is suggested by a scene and an inscription on the northern wall of the entrance hall of the Deir el-Bahri shrine. ${ }^{34}$ Here is depicted the arrival of the great annual river procession of Amūn on the west side of the river. Accompanying the bark of Amūn (now destroyed) is that of Hathor. ${ }^{35}$ The superscription indicates that, like Amūn of Karnak, Hathor, Chieftainess of Thebes, dwelt at Deir el-Bahri only at specified times of the year: 'Shouting by the crews of the royal boats, the youths of Thebes, the fair lads of the army of the entire land, of praises in greeting this god, Amūn, Lord of Karnak, in his procession of $t p-r n p t,{ }^{36}$ on behalf of the life, prosperity, and health of the King of Upper and Lower Egypt, Ms ${ }^{2} t-k s-r c$, and on behalf of the life, prosperity, and health of the King of Upper and Lower Egypt, $M n-h p r-k s-r r^{37}$ given life forever, at the time of causing this great goddess [i.e.

[^33]Hathor] to proceed to rest in her temple in Djeser-djeseru-Amūn, so that they [Hatshepsut and Tuthmosis III] might achieve life forever' (Urk. Iv, $308, \mathrm{r}-8=$ Naville, Deir el Bahari, iv, pls. 90-1).

In an article on the 'Names and History of the Sanctuaries Built by Tuthmosis III at Deir el-Bahri', Jadwiga Lipinska ${ }^{38}$ suggested that the Hathor shrine of Tuthmosis III, built in the north-western corner of the platform of the Mentuhotep temple, was connected with the temple of Tuthmosis III above, forming part of the temple complex, in the same way as the chapel of Hathor was incorporated into the temple complex of Hatshepsut, and that the name of Djeser-akhet was applied to the whole Tuthmosis III complex, including the Hathor shrine in the Eleventh-Dynasty temple. While Tuthmosis III built the Hathor speos and incorporated it into the platform of his new temple above, ${ }^{39}$ there is some evidence that the Hathor shrine in the Mentuhotep temple was considered as an integral part of $3 h$-swt. The Hathor cow of Amenophis II, for instance, found in the speos by Maspero, has the identifying label $H t h r n b t ~ D s r ~ h r t-i b ~ s h-s w t$, 'Hathor, the Lady of Djeser, who is in the midst of 3 h-swt', ${ }^{40}$ while a New-Kingdom stela found at Deir el-Bahri in $1904^{41}$ and showing a representation of the Hathor cow emerging from the cliff, has the same label. Amūn was worshipped at 3 h-swt until the end of the Twentieth Dynasty ${ }^{42}$ and was served by a priesthood whose members are attested on some half-dozen monuments. ${ }^{43}$ That the cult of Hathor in Tuthmosis III's speos was similarly served is indicated by a statue of one of her clergy, an ${ }^{3} 3-h p r-k$; who was ' $w r b$-priest of Hathor in 3 h-swt'. ${ }^{44}$

The inscription on the knees of a statue of Teti ${ }^{45}$ cited by Lipinska ${ }^{46}$ as indicating that the name Djeser-akhet was applied to the Hathor shrine reads in full: 'Executing the laws, establishing the regulations, causing every office to know its duty in every rite in the temple ( $p r$ ) of Amūn in Djeser-akhet for Hathor, Chieftainess of the Desert.' The inscription shows that a form of Hathor was worshipped in Djeser-akhet, but the invocation formula around the base of the statue draws a careful distinction between Hathor of Tuthmosis III's temple, who is called 'Hathor, Mistress of Manu, who is in (the midst) of Djeser-akhet', and the Hathor of the speos who is 'Hathor, Mistress of $3 \underline{h}$-swt'. ${ }^{47}$ If Tuthmosis built Djeser-akhet to deprive Hatshepsut's temple of its predominance in the Deir el-Bahri bay and of its part in the festivities of Amūn's Feast of the Valley, it seems equally likely that he built the speos to replace Hatshepsut's chapel in the affections of Hathor's devotees, for Tuthmosis' building was dedicated, as was Hatshepsut's chapel, to Hathor in her bovine form of Chieftainess of Thebes.

Senenu adds another dignity to his offices of High Priest of Amūn and High priest of Hathor in Hatshepsut's Deir el-Bahri temple on the lower part of his stela; that of High Priest of Amūn in Khat-akhet. The name of the edifice written

[^34] quartzite chapel of Hatshepsut rescued from the third pylon. Here it occurs after the temple of Djeser-djeseru and before (after a gap) that of Mut, Lady of Ishru. ${ }^{49}$ Khacakhet is again associated with the name of Hatshepsut on a stone from a foundation deposit (Urk. iv, 381, io) whose inscription reads: 'May the good god Maratkarḗ, beloved of Amūn who presides over (hnty) Djeser-djeseru and is in (the midst of) $\emptyset$ 亿ิ live.' In the tomb of Djehuty who built many monuments for the queen ion $_{\text {a }}^{\text {a }}$ again and is mentioned also in the tomb of Puyemrē̌ as $4 \omega 0$ where it occurs between Djeser-djeseru and Henket-cankh, the mortuary temple of Tuthmosis III. ${ }^{50}$ Most recently the name has been found on a statue of Senenmut discovered by the Polish expedition between Tuthmosis III's temple of Djeser-akhet and the EleventhDynasty temple of Mentuhotep. ${ }^{51}$ Here Hathor receives the epithets 'Chieftainess of Thebes, who is in (the midst of) $\stackrel{O}{0}^{\prime}$.

From the above it seems clear that Khar-akhet was a structure erected by Hatshepsut and dedicated to Amūn. Its location between the Deir el-Baḥri temple of Hatshepsut and the mortuary temple of Tuthmosis III on the edge of the cultivation somewhat south of the Deir el-Bahri bay suggests that Khar-akhet was erected in the neighbourhood of Deir el-Baḥri. Indeed, Davies identified Deir el-Baḥri with the middle terrace of the Deir el-Bahri temple. ${ }^{52}$ Marciniak, ${ }^{53}$ however, assumed Khar-akhet to be a small chapel which Hatshepsut built in the neighbourhood of Deir el-Bahri and Helck ${ }^{54}$ suggests that it was dedicated to the cult of the princess Nefrurē.

The fullest description of Khar-akhet is given in the autobiography of Djehuty (Urk. Iv, 422, 17-423, 3), who calls the edifice 'the great seat (st wrt) of Amūn, his horizon which is in the west'. In an article on building terminology in Papyrus Harris, Christophe ${ }^{55}$ shows that the term st wrt in the great papyrus had two applications in addition to its original meaning as the throne on which the king or god sits; it can denote both the entire temple and its sanctuary alone. While the three usages can be illustrated in the texts of the New Kingdom, in the Eighteenth Dynasty st wrt seems to have had a specialized connotation. It means 'shrine, sanctuary', but specifically the characteristic Eighteenth-Dynasty form of the shrine, the 'bark shrine' which contained the low pedestal on which the portable bark of the god rested between processions. ${ }^{56}$ This special connotation of st wrt probably derives from the application of the term to the bark pedestal. In more than one instance, on the bark shrine of Hatshepsut and Tuthmosis $h t p$ her st wrt is carved under the bark of Amūn and beside its support. ${ }^{57}$ On the same red quartzite shrine of Tuthmosis and Hatshepsut the term st-wrt is extended to the entire bark shrine. Named 'the Place of the Heart of Amūn'5 8 on the shrine itself, it is called by Tuthmosis elsewhere (Urk. Iv, 167, 1-4) 'the splendid shrine (hm) (named) "the Place of the Heart of Amūn", his great seat (st wrt) like the horizon

[^35]
## Plate XI A



THE STELA OF SENENU: RECONSTRUCTION DRAWING


1. The stela of Senenu, High Priest of Amūn (Oriental Institute, Chicago 8798)

## Courtesy of the Institute


of heaven'. Tuthmosis replaced this sanctuary with a granite shrine ${ }^{59}$ and some thousand years later Philip Arrhidaeus replaced Tuthmosis' shrine with a sanctuary which was a faithful copy. ${ }^{60}$ Significantly, it is the second of the two rooms of this sanctuary, the actual bark room, which received the dedication of the king where the shrine is called a st wrt. In the Twentieth Dynasty, too, at Medinet Habu, the term was used to designate a bark shrine; the bark shrines of Amūn, of Mont, and of Khons ${ }^{61}$ are all called 'great seats'. In the inscription of Djehuty, then, Kha'-akhet may be identified as a bark shrine. The inscription on the stone from the foundation deposit of Khar-akhet (Urk. iv, 381, io) which mentions Amūn of Djeser-djeseru as dwelling in Khac-akhet suggests to the writer that 'The mansion of Maratkarē' (named) Kha'-akhet-Amūn', is the name of the central sanctuary at Deir el-Bahri with its outer bark room and inner sanctuaryOtto ${ }^{62}$ thought that the name of the central sanctuary at Djeser-djeseru was the hwot $M_{3} r t-k s-r e G m-s h t-I m n$, whose name appears twice on the heads of two women carrying vases on both sides of the doorway leading into the first room of the central sanctuary at Deir el-Baḥri. ${ }^{63}$ These figures, however, are certainly personifications of estates of Hatshepsut in Upper Egypt and the Delta as the inscriptions before the two figures declare them to be: 'the mansion of Macatkarē' (named) Gem-akhet-Amūn, which is in the Northland/Southland.' On the bark shrine of Hatshepsut and Tuthmosis, Khar-akhet is called the 'mansion (hwt) of Maratkarēc'. In a number of instances in inscriptions of the New Kingdom hwo (Urk. iv, 766, 2; 859, 2; 879, 2) replaces $h w t-n t r$ ( $U r k$. Iv, 765,$7 ; 858,11 ; 879,7$ ) and the latter term is used with the restricted meaning of 'sanctuary' both of the central sanctuary of Hatshepsut's temple ${ }^{64}$ and of the red quartzite bark shrine of Tuthmosis and Hatshepsut. ${ }^{65}$ The term hwt, too, can be used both of a free-standing temple ${ }^{66}$ and of a rock-cut chamber, whether a quarry chamber ${ }^{67}$ or a rock-cut tomb (Urk. Iv, 1183, 15) or a sanctuary as was Khat-akhet. ${ }^{68}$

[^36]
# MORE LARGE COMMEMORATIVE SGARABS OF AMENOPHIS III 

By C. BLANKENBERG-VAN DELDEN

SInce the publication of my book ${ }^{1}$ more scarabs have come to light and been brought to my attention, with the result that a small supplement can now be added to the list already known. It is remarkable that only one of the 'Lost Scarabs', a superb Gilukhepa scarab, has been found again after having been lost for nearly a hundred years.

In his review in $\mathfrak{f} E A 58,172$, Dr. G. T. Martin called the lack of illustration of the typological detail of the scarabs disappointing because it would have been possible to ascertain from it whether the types changed significantly in the first eleven years of Amenophis' reign. Unfortunately it was inevitable as this would have entailed a minute description, preferably a drawing, impossible to base on photographs which were the only means at my disposal. All I can say is that as far as I can ascertain from the photographs-always a precarious basis for study-the types did not change. Had there been great changes these would have been mentioned. As it is, there are the same variations among the 'marriage' scarabs themselves as between 'marriage' scarabs and 'lake' scarabs, the latest dated series.

It is a great pleasure for me to be allowed to incorporate a photograph of A27 (a 'marriage' scarab in a private Swiss collection, p. 40, pl. v) that now replaces the drawing by Professor H. W. Müller. The entire collection is in the ‘Ägyptologisches Seminar der Basler Universität' for scientific purposes. This scarab is, as already indicated in my book, remarkable for the fact that it is the only specimen in which, on mentioning the names of Queen Tiy's parents, the name of her mother Tuya precedes that of her father Yuya (see pl. XII, 6). Additional data of this scarab are: dimensions $6 \cdot 16 \times 4.83 \times 2.38 \mathrm{~cm}$.; preservation: back, a small part of the right wing-case at the bottom, and an even smaller part of the left wing-case showing that the end of one line between the wing-cases are still preserved; the cartouche of the Pharaoh (the $r$-sign broken off) is preserved on the right side only (not on both sides).

Nearly every scarab of the five series is pierced longitudinally, but not all: for example A32, Chicago no. 19540, is not.

The Royal Pump Room Museum, Harrogate, has accepted the bequest of the late Mr. B. J. W. Kent, Beckwithshaw, Harrogate, so that C24 (p. 77) is now in the possession of this Museum.
$\mathrm{A}_{51}$ and $\mathrm{C}_{107}$ (pp. 56 and 127) also changed hands. Formerly in the collection of Mr. G. Michailidis they are now in the possession of the 'Staatliche Museen', West

[^37]Berlin, bearing the numbers resp. $1 / 1973$ and $2 / 1973$. Professor J. Settgast kindly informed me that he purchased the entire scarab collection from Mr. Michailidis in 1973.

The Wellcome collection (p. ix), presented to University College, London, by the Trustees of the late Sir Henry Wellcome, was dispersed with their consent to the City of Liverpool Museums, Liverpool, University College of Swansea, Swansea, City Museums and Art Gallery, Birmingham, and the Gulbenkian Museum of Oriental Art, Durham. There are no commemorative scarabs of Amenophis III among the articles distributed.

On the 'lion-hunt' scarab Mi2402 (C26) in the possession of the Mersey-side County Museums (formerly City of Liverpool Museums), Liverpool, F. L1. Griffith read the first cartouche as $n b-m 3 r t-r \subset s t p-n-r \subset$ (by error not mentioned in the description of the scarab, but only in the Vocabulary, p. 185). Dr. Dorothy Downes wrote in her letters to me dated October 16 and December 5, 1974: 'It looks to me as if $s t p-n-r$ ' was read in error. Unfortunately the stone is coarse-grained and so the details are difficult to make out. However, the cartouche seems to be $\odot \odot \odot .$. . One of the lines slipped in the cutting, so that part of the outline of looks like $\sim$. However, there is very little room at the left of the cartouche for $s t p-n-r$ r, so that I think that tit-rr is much more likely.'

No fakes would have been incorporated into this article were it not that for the first time the scarab or rather the reproduction of the scarab that served as a model is known. This reproduction can be found in The Timins Collection of Ancient Egyptian Scarabs and Cylinder Seals (London, 1907), pl. xxi, no. 16, by P. E. Newberry. The authentic scarab is in the Metropolitan Museum of Art, New York (no. C8o). The scarab C45 of my book may have to be placed in the same category.

The large scarabs of Amenophis IV, nos. 2 and 3 mentioned in the Appendix on pp. 166/7, are, in fact, one and the same, found in the collection of the late Dr. Stern.

## Deviations in the text, and some scribes' errors

These prove once more that the scarabs were hand-made:

$\mathrm{D}_{5}$ (British Museum) line 4, $n b-\mathrm{irt}$ - $h t$ is added to the title $n s w-b i t$.
line 4 , in the cartouche of the prenomen tit-r is added, not stp-n-re.
line 6, $r n(n i t \cdot s) \varnothing$ instead of $\infty$.
line 9 , sstirns 号184 (without the stroke between $\varnothing$ and mm ).
EII (Boston) line 8, the words hm•f are omitted.
line 9, the month of inauguration is here the fourth of Akhet instead of the third, as on all other scarabs of this series.
line io, of $h n i$, 諒

## Acknowledgements

I would like to express my grateful thanks to the following institutions and individuals for their courtesy in supplying information, details and photographs of the scarabs, and for permitting me to publish them: Berkeley, Cal., The Lowie Museum of Anthropology, University of California; J. Baines, Durham; Dr. Kate Bosse-Griffiths, Swansea; Boston, Mass., Museum of Fine Arts;

Dr. Dorothy Downes, Liverpool; A. Fatatri, Leiden; Harrogate, The Royal Pump Room Museum; Professor E. Hornung, Basel; London, The Trustees of the British Museum; London, University College, London; Dr. R. Paret, New York, N.Y.; J. Ruffe, Birmingham; Prof. J. Settgast, W. Berlin; P. Sharrer, Ridgewood, N.J.; H. E. P. Spencer, Ipswich.
I am most grateful to Miss Carol A. R. Andrews for her kindness in correcting my English text.
In a future article I hope to publish new acquisitions of the late Dr. K. J. Stern when permission of the new owner has been received, as well as some others.

## Errata

p. 6 line 3 of the notes, third word: read $\mathcal{2} \boldsymbol{2} \pi$ instead of $20 \pi$.
p. 12 sub 5: read 'after $h m \cdot f$ ' instead of 'after the title $w r$ '.
p. 22 Bibliography A2, 1832 : read 'pl.' instead of 'p.'.
p. 66 Bibliography C6, Descr.: read ' 1823 ' instead of ' 1822 '.
p. 77 C24, Bibliography: delete ' 180 '.
p. i63 Forgeries, first line of text: read 'beside' instead of 'out of'.
p. 164 Forgeries, FA2, Brussels: insert 'Royaux' after 'Musées'.
p. 185 Vocabulary, under $n b$, second line: read ' $n b-h / w^{〔}$ ' instead of ' $n b-i r t-h$ ' $w$ '.
p. 189 Vocabulary, šз ${ }^{\prime}-m$ : read 'prep.' instead of 'det.'.
p. 191 Vocabulary, $d s$ : read 2 instead of ${ }^{2}$.
p. 197 List of names, $R e$ : add II and 18 .
'Marriage' scarab
United States of America, New York, N.Y.
A52. Dr. R. Paret, private collection.
Plate XII, I
Description: steatite; green glaze abraded and slightly faded; well cut; no cartouche of the Pharaoh on the sides between the legs; io lines of text.
Dimensions: $7 \times 5.2 \times 3.2 \mathrm{~cm}$.
Type: one line between the wing-cases; one line dividing the wing-cases and prothorax, with triangular notches below this line at the outer corners.
Preservation: in good condition, slightly chipped.
Provenance: unknown; purchased at an auction in New York, N.Y., Messrs. ParkeBernet, 84th Street, February 3, 197r, lot number 193.

## Bibliography:

1971 Sale cat. Parke-Bernet, 'Chinese Provincial Porcelain \& . . . Antiquities', p. 30, lot no. 193.
1974 W. K. Simpson, $\mathscr{F} E A$ 60, 'A comm. Scarab of Amenophis III . . .', p. 140, pl. xxxii, 2, photograph of base.

## Lion-hunt scarabs

## Netherlands, Leiden

C109. A. Fatatri, private collection Plate XII, 2
Description: hypersthene; dirty white; traces of blue-green glaze; fine, deep cutting; no cartouche of the Pharaoh on the sides between the legs; originally 8 lines of text.

Dimensions: $8.2 \times 5.5 \times 3.5-3.8 \mathrm{~cm}$.
Type: one line dividing the wing-cases; two lines dividing the wing-cases and prothorax, with triangular notches below the lower line at the outer corners.
Preservation: back, head, and part of prothorax broken off; base, weathered and damaged.
Provenance: location of find unknown; acquired in 1972.
No Bibliography.

## United States of America, Berkeley, Cal.

C110. The Lowie Museum of Anthropology, University of California, no. 6-17306 Plate XII, 3
Description: steatite; greyish-white; remnants of green glaze; hieroglyphs finely and deeply cut; in line 6 in the word 'beginning', ${ }_{s}{ }_{3}\ulcorner-m$, the hieroglyph mis omitted; no cartouche of the Pharaoh on the sides between the legs; 8 lines of text.
Dimensions: $6.7 \times 4.8 \times 2.9 \mathrm{~cm}$.
Type: three lines between the wing-cases; two lines dividing the wing-cases and prothorax, with double-lined triangular notches below the lower line at the outer corners.
Preservation: in very good condition; back, slightly chipped-there is a split, or crack, which runs three-quarters of the way around the legs of the beetle.
Provenance: circumstances of find unknown; donated by Mrs. P. A. Hearst who supplied the funds for G. A. Reisner's excavations in Egypt for the University of California c. 1900-5. Reisner acquired (probably purchased) the scarab around 1903. Because of the 1906 San Francisco earthquake the collections were confused, therefore no exact date can be given.
No Bibliography.
C111. The Lowie Museum of Anthropology, University of California, no. 6-19100
Plate XII, 4
Description: probably a quartz-muscovite phyllite; grey-white; remnants of green glaze; no cartouche of the Pharaoh on the sides between the legs; 8 lines of text.
Dimensions: $8.9 \times 5.8 \times 3.6 \mathrm{~cm}$.
Type: one line between the wing-cases; one line dividing the wing-cases and prothorax, with triangular notches below this line at the outer corners.
Preservation: in poor condition; back, chipped and weathered, small pieces broken off; base, weathered, right side of lines $\mathrm{I}-5$ broken off.
Provenance: as for Cirz.
No Bibliography.

C112. The Lowie Museum of Anthropology, University of California, no. 6-1910I Plate XII, 5
Description: probably a quartz-muscovite phyllite; grey-white; remnants of green glaze; no cartouche of the Pharaoh on the sides between the legs; 8 lines of text.
Dimensions: $6.5 \times 4.6 \times 2.9 \mathrm{~cm}$.
Type: one line between the wing-cases; one line between the wing-cases and prothorax, with triangular notches below this line at the outer corners.
Preservation: in very poor condition; back, complete but weathered and chipped; base. edges chipped, lines 4-6 of the text damaged.
Provenance: as for $\mathrm{Ciri}_{3}$.
No Bibliography.
U.S.A., Ridgewood, N.J.

C113. P. Sharrer
Plate XIII, I
Description: steatite; white-brown on remaining original surfaces, grey-white on fractured surfaces; no traces of glaze; remaining hieroglyphs well cut; the cartouche of the Pharaoh $\odot$ is on both sides between the legs; the lower lines of inscription are still preserved.
Dimensions: $4.7 \times 3.4 \times \mathrm{I} .6 \mathrm{~cm}$.
Type: impossible to give any detail.
Preservation: back completely sheared off; base, the last two lines of the text and the greater part of the two preceding lines are still preserved.
Provenance: location of find unknown; orig. in the possession of A. L. Owens, Salisbury, Conn.; sold by Messrs. Sotheby Barke-Bernet, New York, in their Los Angeles sale February 25, 1973 to the present owner.
Bibliography:
1973 Sale cat. SPB 70, 'American Indian Pre-Colombian and Big Game Trophies', lot no. 314 .
n.d. A. G. Malloy, Egyptian Scarabs, catalogued by P. Sharrer, p. io, no. 44, p. iI photograph of base.

## Gilukhepa Scarab

## Great Britain, London

D5. The British Museum, no. 68507
Plate XIII, 2
Description: steatite; white-grey; no glaze; scarab well cut, text cut well and moderately deeply; in line 4 in the first cartouche tit $r \boldsymbol{r}$ is added to the prenomen; unique in the five series is the addition of the epithet $n b-i r t-h t$ to the title $n s w$ bit in line 4 ; the cartouche of the Pharaoh © ( ) is on both sides between the legs; in lines of text.
Dimensions: $7.5 \times 5.5 \times 2.8 \mathrm{~cm}$.

Type: two lines between the wing-cases; two lines dividing the wing-cases and prothorax, with triangular notches below the lower line at the outer corners.
Preservation: in very good condition, a few pieces broken off the back.
Provenance: location of find unknown; purchased in Egypt by a Mme Hoffmann (pp. 161-2, pl. xxxiv); since then it was lost from sight; acquired by the British Museum at the Sotheby sale April 29, 1974, lot number 238. It is certain that, notwithstanding the differences in length and width, the British Museum scarab and Mme Hoffmann's specimen is one and the same. Emil Brugsch in 1880 made several paper squeezes of the Hoffmann scarab which he sent to his brother Heinrich Brugsch and G. Maspero. H. Brugsch published a text based on these squeezes in $Z \ddot{A} S$ 18 (1880), 81, and Thesaurus 6 (1891), p. 1413, as did Maspero in Rec. Trav. 15 (1893), 200. Comparison points out the conformity. The deviation stp-n-rc $\sim \odot\left(\right.$ (Thesaurus $\left.₫ \mathrm{H}^{\circ}\right)$ from tit-re ${ }^{\circ}$ may be due to misreading the squeeze. The mistake on the scarab in rendering $r n(n i t \cdot s)$ by instead of by was correctly copied by Maspero, and can be seen on the B.M. scarab. The difference in dimensions may also be due to the measuring of a paper squeeze.

## Bibliography:

1880-1957, see pp. 16ı-2.
1974 Sale Cat. Sotheby, p. 52, no. 238; pl. xxxii photographs of back (three-quarters) and base.

## Lake scarab

United States of America, Boston, Mass.
E11. Museum of Fine Arts, no. 1972.873
Plate XIII, 3
Description: steatite; green glaze abraded and faded to yellow; well cut; no cartouche of the Pharaoh on the sides between the legs; in contrast to the other scarabs of this series the inauguration of the lake took place in the fourth month of Akhet; in line 8 the words 'His Majesty' are omitted; originally io lines of text, the greater part of the last 9 lines and a few signs of the first line of text which must have contained the date are still preserved.
Dimensions: 5.75-6×4×2.6 cm.
Type: two lines between the wing-cases; two lines dividing the wing-cases and prothorax.
Preservation: in rather bad condition; front part of head, front left leg missing; base, the top, upper right and left side of lines 2-9 broken away.
Provenance: location of find unknown; there is good reason to assume that the scarab was found in the Levant; purchased in Europe in 1972 and previously offered by a dealer in Beirut.

## Bibliography:

[1971] F. S. Matouk, Corpus du Scarabée égyptien, Tome premier: 'Les Scarabées royaux', p. 89, no. 522 c, p. 215 photograph of base.

1973 The Museum Year, 'The Ninety-Seventh Annual Report of the Museum of Fine Arts', 1972-3, p. 49.
1974 W. K. Simpson, $\mathfrak{f} E A 60$, 'A Comm. Scarab of Amenophis III . . .', p. 140, pl. xxxii, I, photograph of base.

## Lost lion-hunt scarab

## Great Britain, London

LSC18. Owner unidentified, plaster-cast in University College London
Plate XIII, 4
The plaster-cast and a squeeze were sent to University College in 1949 by Mr. H. E. P. Spencer, Ipswich, formerly Assistant Curator at the Ipswich Museum. Mr. Spencer, who specialized in the Early Pleistocene Vertebrata, saw this scarab at a house when inspecting some fossils and gave the following information without mentioning the name of the owner. Quite understandably Mr. Spencer does not remember the name of the owner. It has not been possible to locate the scarab.
This scarab unfortunately is damaged and the inscription not too well cut. The stone is a hard schistose one and has seemingly been coated with something before polishing.

## Forged lion-hunt scarab

This fake ${ }^{\mathrm{I}}$ has been in several hands, several countries and continents. As it is not an authentic scarab I abstain from mentioning a name. I do not know its present location.
FC2.
Plate XIII, 5
Description: light greenish stone; traces of green glaze; 8 lines of text.
Dimensions: $5.9 \times 4.9 \times 2 \mathrm{~cm}$.
Type: two lines between the wing-cases; two lines dividing the wing-cases and prothorax; no triangular notches on the wing-cases.
The reproduction that served as a model can be found in The Timins Collection of Ancient Egyptian Scarabs and Cylinder Seals (1907), pl. xxi, no. 16, by P. E. Newberry. Plate XIII, 6

[^38]
I. (A 52)

2. (C 109)

5. (C II2)

3. (C 110)

4. (C III)

6. (A 27)

## Plate XIII


I. ( $\mathrm{Clin}_{1}$ )

2. (D 5)

3. (E II)

4. (LSC 18)

5. (FC 2)

6. ( $\mathrm{FC}_{2}$ )

# THE WINDOW OF APPEARANCE AT EL-AMARNA, AND THE BASIC STRUCTURE OF THIS CITY 

By BARRY J. KEMP

The problem of locating at El-Amarna the whereabouts of the Window or Windows of Appearance, so frequently included in the subject-matter of the El-Amarna tomb decoration, raises in acute form the difficulty of reconciling the way in which a situation was perceived by contemporaries, in this case its artists, with a modern perception based heavily on small-scale ground plans. These latter present their information following an accepted modern convention, but must lead us to an experience of the city of an artificial character somewhat removed from the way in which it was experienced by those who actually lived there. In this particular case the difficulty is illustrated by the two approaches which have been adopted: on the one hand by attempting to convert the ancient representations directly into architectural drawings of modern style, which produces buildings which have no counterparts in the excavated ground plans; ${ }^{1}$ on the other, by choosing locations which might seem appropriate on the plans, yet conflict with some of the essential details of the tomb scenes. The latter category is comprised essentially of Pendlebury's siting of Windows in the centre of the bridge crossing the Royal Road, and above one of the entrances to the main court of the Great Palace. ${ }^{2}$

I believe it is possible, however, to avoid this conflict by making a deduction direct from an analogy between the one unequivocal Window of Appearance which has survived, that of Ramesses III at Medinet Habu, and one particular point at El-Amarna which offers an appropriate basis for comparison. The tomb scenes can then be examined both to derive additional information about the setting, and also to discover the degree to which the artist has departed from a modern presentation of the same building.

The location I propose is within the King's House on the Royal Estate, in the room in the north-east corner of this building. ${ }^{3}$ Against the north wall stood a low rectangular platform. A short ramp or staircase led up to it on the south, and the two side projections opposite doorways may have served the same purpose, though this part of the building seems to have been too ruined for one to be sure even of basic features like this. Pendlebury wrote: 'The supporting walls of the ramp or steps have a whitewashed

[^39]roll-top, a white band along the base and, as far as we could make out, some fresco showing kneeling figures.' ${ }^{4} \mathrm{He}$ identified it as an altar. On the other side of the wall lay the 'garden', a great courtyard with a formal avenue of trees running down its centre from a pylon entrance, but otherwise 'covered with a thick layer of plaster and chips of stone'. 5 Exactly opposite the platform, the outside wall facing this courtyard possessed a small expanse of painted decoration. Pendlebury commented on this: 'It is the only elaborate piece of painting known to have been in so exposed a position.' ${ }^{\prime}$ By his time all that appears to have been left were the 'feet of human figures', but he suggested that it should probably be identified with a painting from this building described briefly by Petrie, 7 who had excavated here some years before, as 'the legs of two kneeling captives (Asiatic and Negro), with a bowl on a stand between them'. This motif becomes intelligible by reference to some of the glazed tiles from a throne dais of Ramesses II from Qantîr which depict kneeling foreigners, their hands raised in adoration, with tables of offerings before or beside them. ${ }^{8}$ This combination of platform and courtyard, of paintings on an outside wall, and of the imperialist theme in the decorative subject-matter are best explained, I believe, as deriving from a Window of Appearance built along similar lines to that at Medinet Habu. The 'altar' would have been the platform on which the king would have stood, with the Window passing through the wall at waist height above the platform.

I examined and photographed the place in March 1975, but this added nothing to the available information. The wall outlines are visible, but the edges have become blurred by weathering and in modern times have probably never been more than a few courses high, thus well below the likely base of the Window itself. The remains of the painting noted by Pendlebury have gone completely, the wall face standing now exposed and blank.

At Medinet Habu the setting is more grandiose, befitting the location within the temple itself, but the form is essentially the same. ${ }^{9}$ As with the earlier Theban examples the Window was approached at ground level from the outside, without any ramps to elevate a person who was receiving rewards from the king. This is an important aspect to bear in mind when examining the El-Amarna representational evidence. In the second building stage at Medinet Habu the platform behind the Window rose 2 metres above the floor, and was reached by flights of steps on either side. It then passed through the thickness of the massive stone wall, allowing the king to emerge on the far side and to take his place in a wooden kiosk built out in front, in which was incorporated the Window with its balcony. This replaced an earlier arrangement where the balcony was built flush with the outside wall surface itself. The decorative themes on the surrounding walls are predominantly those of the king victorious over foreign enemies.

[^40]The setting at El-Amarna for this suggested Window is the King's House in the central part of the city. ${ }^{10} \mathrm{Fig}$. I is an attempt to reduce this building to its basic elements and elevations, though some of the latter, as well as some of the suggested functions for various parts, are naturally somewhat speculative. The feature labelled ( I ) is the well-known bridge linking the King's House to the Great Palace across the Royal Road. I have assumed that the ramps were open to the sky, but that the central platform was roofed to form a roughly square chamber, probably necessitating the introduction of columns and column bases. Whilst rejecting Pendlebury's placing of the Window of Appearance in it, the commanding view from here down the full length of the Royal Road makes some form of central window highly likely. From the Royal Road, the entrance for the king and his family when arriving by chariot would have been, after passing under the bridge, by the broad ramp and up into the courtyard (2) provided for dismounting and presumably for parking the chariots. A small set of rooms for guards on duty and perhaps for attendants for the horses stands on its north side. The king would then have passed through the doorway opposite on foot, into the great whitened courtyard, and turned sharp right into the vestibule of the House. This last part of his journey is marked by a broken line.

The guards, when not on duty, and the permanent domestic staff who in the tomb scenes are shown cleaning floors and dealing with furniture and stores dwelt, I suggest, in the two groups of small apartments (3). The western group communicated with the dismounting court, and the eastern directly with the vestibule of the House, a distinction which may indeed signify that the latter were for internal domestic servants and the former for guards. Behind the House stands a separate house of standard El-Amarna plan (4), with access to the back of the House via a passage. It is tempting to regard this as the accommodation for the permanent steward in charge of the domestic organization. Also behind the House stands an isolated block of rooms (5), six of which appear to be one-room apartments. With access to both the back door of the House and to the roof above the Window of Appearance, and with an interesting parallel at the much later palace of Ramesses III at Medinet Habu, I would suggest that they were for the royal family's personal servants who travelled with them, consisting of women. A group of female musicians is shown in some tomb scenes in attendance on the royal family, ${ }^{11}$ and is perhaps the same as the group of girls seen in some of the more elaborate representations of the palace, ${ }^{12}$ occupying a small and apparently quite separate group of rooms where they play musical instruments, dress their hair, and so on. The same scenes show adjacent to this feature another apparently separate building which might, if one wishes to take the scenes fairly literally, be seen as a house (4), but this may already be straying beyond the permissible limits of interpretation with these highly subjective compositions whose problems will be discussed shortly. That female attendants travelled with the royal family on their chariot journeys is made clear from other representations in the El-Amarna tombs. ${ }^{13}$

[^41]

Fig. i. The King's House at El-Amarna


The King's House itself (6) is an interesting modification of the standard El-Amarna house type, apparently substituting on the ground floor for the normal bedroom and private chambers two somewhat similar suites, one of which contained the Window, see fig. 2 A . The main hall $(a)$ is perhaps where the scenes of the royal family eating or relaxing ${ }^{14}$ should be envisaged as taking place. It was probably intended that it and the columned anteroom $(b)$ should be reached by visitors from the entrance vestibule (c) along the slightly circuitous route through the originally columned hall (d). Doors from the main hall led to two similar suites on either side, one of them $(f)$ containing the Window of Appearance. This was in two parts, separated by a corridor. The Window itself opened from a hall which must once have been columned, with three or four storage rooms on one side, three of them fitted out with the short partition walls to support shelves. Presumably the gifts which the king was to distribute were collected and kept in them, and then as the reward ceremony took its course, were brought out by an official, and doubtless checked off on a list. A regular component of these reward scenes is a group of scribes making annotations. ${ }^{15}$ But these, together with the depictions of boxes and stands for further gifts, and servants carrying them, appear at first sight to be outside the Window, in company with the recipient. This may, however, be a demonstration of the artist's own logic, with preference given to a grouping based on their common involvement in the act of rewarding and in an equally subordinate capacity to the king rather than on their correct spatial arrangement. Encouragement for this interpretation can be found in the tomb of Parennefer ${ }^{16}$ where a group of servants appears, to judge from the way the artist has arranged their bodies, to be taking gifts from a chest for presentation, whilst a scribe makes a tally. It seems more natural to visualize this taking place before Parennefer is rewarded, thus inside the palace.

Behind the dividing corridor is a second group of rooms, one of which contained the celebrated painting of Akhenaten's daughters. ${ }^{17}$ They formed part of a well-executed but nevertheless standard composition of the royal family within a columned hall. This is part of the basic repertoire of the artists of the day and need not be taken as indicative of the function of this suite of rooms. Two of the rooms were provided at the back with screen walls which, in private houses, usually signify a bathroom, and in one case here is confirmed by the presence of a stone bath slab. When considered in their setting they might be explained as dressing-rooms for the king and queen when the Window of Appearance was to be used by them. When the smaller Window in its own building is discussed below it will be seen that an important feature of the suite of smaller rooms was a couch or bed. In the detailed representations of the palace housing the main Window a bedroom is likewise figured prominently, ${ }^{18}$ frequently with a roof projection of roughly triangular shape. This shape has sometimes been taken literally for a roof

[^42]ventilator, but in fact has more the appearance of a canopy top such as was used in the design of chest lids, ${ }^{19}$ and more specifically architectural, as appears rather incongruously in the centre part of what is probably a depiction of a magazine block in the tomb of Huya, ${ }^{20}$ and above the external portico of the house or office of Machu. ${ }^{21}$ This latter is very much a piece of symbolism since external porticoes are not a part of the El-Amarna house designs. The motif above the room containing the couch in the palace scenes may be nothing more than a way of drawing attention to an important part of the building. In terms of fig. 2 a I would place it in one of the rear chambers of suite $(f)$, the alternative being to place it on an upstairs floor.

Suite ( $e$ ) on the west side of the main hall is strikingly similar, though without a Window platform. In searching for an explanation one might recall that an alternative reward scene is set inside the palace, in a columned hall, ${ }^{22}$ and this suite may perhaps have been set aside for such occasions.
The restoration of the upper part of the King's House is almost entirely conjectural. Two staircases lead up from the ground floor. In fig. I the roof over the central halls has been made higher than the rooms to the east, to allow space for clerestory lighting. On the western side it has been assumed that the staircase led to at least one upper storey. On the eastern side a second staircase rose from the courtyard of building (5), to what I have assumed was a roof area. If the roof of the central halls was in fact higher then there can have been no ready communication between this roof and the upper storey(s) on the west, which would leave this roof area exclusively and privately for the use of the occupants of building (5).

Finally, the King's House possessed, on the east, a group of storehouses (7) of considerable capacity. Their space must have been partly utilized for holding the more bulky and less valuable commodities, including wine and food, which one of the tomb scenes shows being distributed to officials. ${ }^{23}$ This must obviously have been a supplementary distribution not done via the Window of Appearance.

It will be noticed that the Window of Appearance does not lie at the end of the main axis of the courtyard, marked by the lines of trees. This axis ends exactly at the centre line of the main hall, something which might have been apparent from the symmetrical placing of clerestory window grills. Nevertheless, an intelligible explanation for this off-centre placing of the Window can be found in considering the form which the reward ceremony might have taken. The official to be rewarded would have entered by the north gate and made his way down the avenue of trees set in the great whitened courtyard, to an assembly point at the end. Some tomb scenes seem to suggest that chariots would have been used even within the courtyard, so this might also have served as a dismounting point. One might imagine that this would also have been an appropriate point for the official to receive some instruction or reminder of what to do and of what to say to the king, and here he may have waited, perhaps with others, to be called by a herald. He would then have walked the 13 metres or so to the Window, there to be rewarded. Meanwhile a member of his household might be supervising the

[^43]collection of the supplementary distribution outside one of the entrances to the storehouse group.

In attempting to reconstruct for the King's House a possible way in which it could have been used, recourse has been made to some of the details of the scenes in the El-Amarna tombs which depict palace and Window of Appearance. ${ }^{24}$ But whilst this comparison is helpful, indeed the two types of evidence must at some stage be compared, it has to be admitted that there are important divergences in detail. This is particularly true where the Window itself is concerned, though every known alternative site would seem to have some major flaw. Differences in detail amongst the various depictions might even lead one to suppose that more than one Window is depicted, though this has to be set against the considerable number of features which they share. The space beneath the Window, for example, is shown decorated with a floral motif in two instances, ${ }^{25}$ and in others with a group of standing captives tied to the heraldic device of lotus and papyrus plants intertwined with the 'unification' sign. ${ }^{26}$ It might be argued that at some point the front of the Window was redecorated, or simply that, as can be frequently observed in these scenes, the artist has not felt himself to be too rigidly bound by actuality. Furthermore, whilst the subject-matter of the submissive foreigners is the same as that described by Petrie for the painting at the King's House, the arrangement of the figures is obviously different and again requires that a degree of artistic licence be allowed for the identification proposed here to be acceptable. ${ }^{27}$ The elaborate framing of the top of the Window may also be telling us that, as in the second stage of the Window of Appearance at Medinet Habu, a wooden kiosk was erected in front of the wall, although if there was a permanent feature from the beginning it would have covered the external wall painting which provided the starting point for this article. But there are two features which, in particular, seem to conflict with the basic architectural form of the Window proposed here at the King's House : the external portico which seems to cover it, and the shape of the wall beneath the Window. This lower part, beneath the decorative motif, is portrayed as a façade with its own coping, and at each end a door is indicated above a wedge-shaped projection. This is present in most of the large-scale depictions which show the Window in use. ${ }^{28}$ That the wedgeshaped projections are ramps or stairs is evident partly from the use of the same shape for the ascent to the great altar in the Aten temple, and more particularly from the sketched Window in the tomb of Mache ${ }^{29}$ where one of them has been replaced by a flight of four steps.

[^44]In trying to unravel the elements in any of the El-Amarna architectural scenes it must constantly be borne in mind that they are truly impressionistic, attempting to convey the totality of a man's experience of the building-its characteristic elements, the furnishings, the life lived within it, the impression of depth and complexity of layoutbut presented in such a way that the elements are reduced to a scheme which also satisfied the artist's sense of composition. It was suggested above that in the grouping of some of the subsidiary figures in the reward scenes the logic is not a spatial one at all. The very motif of the low pedestal reached by a ramp appears in one case ${ }^{30}$ to have been employed as a symbolic device beneath a representation of the façade of the Aten temple, conveying the elevated status of the building, and this thought may have been in the minds of the artists who used it in the Window scenes. With many depictions of the Window the prominence given to the figure of the king introduces a form of distortion into the architectural parts of the composition, especially into the relative size of the Window itself. It is perhaps more useful, therefore, to concentrate attention on the six or seven cases where it is depicted merely as one background feature of the palace and not in use. These occur in the tombs of Meryrē (twice), Paneḥsy, possibly Meryrē $\operatorname{II}$, Huya, Pentu, and Tutu. ${ }^{31}$ Further examples are known from some of the Hermopolis blocks originally from one of the state buildings at El-Amarna, ${ }^{32}$ and just to underline the possibility that not all of them may be depicting the same building, a closely similar scene is known from some of the blocks deriving from the Aten temple complex at Karnak. ${ }^{33}$ Additionally, the great scene in the tomb of Meryrēc of the royal visit to the temple seems to show a second Window of Appearance in a small pavilion attached to the temple, ${ }^{34}$ and the significance of this will be discussed below. The same scene shows yet a third shuttered window in a small pavilion within a large magazine block, but by this point one has probably passed beyond the limits of what is strictly to be understood by the term Window of Appearance, and is now dealing with an architectural feature of no symbolic significance. The window in the so-called Green Room of the North Palace was presumably closed with shutters, ${ }^{35}$ and an artist may well have depicted it in a manner no different.

With the exceptions of these last two, all depictions agree in making the Window an integral part of a palace, a sign, at least, that the location proposed here is on the right lines. In the tombs of Pentu and Tutu the king is shown giving rewards inside

[^45]the palace whilst the Window, its shutters closed, stands in the background. In this group of scenes one important variation can be observed in the basic appearance of the Window: in three cases (Tutu, Pentu, and Paneḥsy) the 'basement' part, with its ramps and doors, has been expanded to more or less the same height as the Window itself; but in the two Meryrḗ versions it is omitted altogether. This might lead one to conclude that the first group are combining both the inside and the outside views of the Window. Thus the lower part with its ramps, when included to illustrate the mechanism of the Window, is the view seen from within of the platform on which the King stood. The reduction from the three ramps of the original building to two is an easily acceptable piece of artistic abbreviation. The doorways at the top may, if they are to be accepted literally, imply that the edges of the platform supported a screen.

If, for the sake of argument, one feels that the ancient representations are just too far removed from the identification proposed here for reconciliation to be possible, a more literal interpretation soon raises problems of its own which are probably just as serious. This can most readily be appreciated by referring to the fine architectural reconstructions of the Karnak scenes made by Anus and Greener ${ }^{36}$ which attempt to project the same basic elements as are present in the El-Amarna scenes. Their reconstructions place the ramp outside, and sheltered beneath an open external portico or porch. But this latter feature is virtually unknown in the architecture of El-Amarna outside the various temples. Where it appears in scenes of private houses at El-Amarna ${ }^{37}$ a literal interpretation of the artist's scheme cannot be accepted in view of the extensive evidence for private house design which offers no parallels. One can only interpret these particular external porticos as attempts by the artist to convey the essence of the columned entrance hall, ignoring the walls which, from his point of view, obscured the essential character of the place. I see no reason why the same convention should not have been operative in the representations of the Window of Appearance, particularly since none of the residential palaces at El-Amarna seems to have employed this device. Thus the variations and distortions or artistic devices which can be witnessed in various of the El-Amarna tomb scenes, together with the parallel provided by the Medinet Habu temple palace, enable both the portico and the ramps of the lower part to be regarded legitimately as attempts to combine the total architectural context with an external view in a way which also symbolically enhanced the status of the Window.

Nevertheless, if one persists in preferring a literal interpretation of the artistic evidence, and assumes that the building housing the Window does not still remain to be discovered, ${ }^{38}$ the only possible candidate is one of a pair of structures ( 0.42 .2 ) standing at the southern end of the Great Palace, facing the head of the southern continuation of the royal road. ${ }^{39}$ Although originally built of stone it seems to have possessed both platform with ramps and external portico. What it does lack is the context suggested

[^46]by the tomb scenes for it is set within a group of entirely formal structures which cannot easily have been characterized in the manner chosen by the artists who composed the Window of Appearance scenes. Nor does it fit at all well the two depictions of the Window in the tomb of Meryrēe.

In whatever way one's discussion proceeds, it seems inevitable that sooner or later the point is reached where a literal acceptance of the artistic evidence becomes untenable, if only because it is itself inconsistent. The location of the Window proposed here would seem to score over others because it depends more on comparison with the least equivocal example known, that of Ramesses III at Medinet Habu. It also has the advantage of itself providing the basis for identifying the lesser Window which, as noted above, can be observed in a scene in the tomb of Meryrē situated in a small pavilion near the entrance to the temple (fig. 2 B ). This temple has been identified as the Great Temple, but nothing from the excavation of this building can be regarded as the housing for this lesser Window. With the form of the Window in the King's House in mind an obvious candidate can be found in the smaller temple, the Hat-Aten, ${ }^{40}$ and this might suggest that the Meryrē scene is really a conflation of the features of both temples. The little building in question (fig. 2 c ) stands between the second and third pylons, facing perpendicularly the main temple axis. As in the Meryrē scene it has three chambers at the back, one of them apparently, so both the niche found during excavation and the Meryrē scene tell us, intended for a couch or bed. Across the narrow corridor was a more or less square hall, presumably originally with columns, and at the far end, facing the temple axis, the base of a platform with ramps of a plan similar to that in the King's House. Fig. 2 is intended to make the close similarity evident, and it should be apparent that the only important feature lacking from the plan of the lesser Window is the group of cupboards, something very understandable since this was probably not a place for distributing presents. In terms of fig. 2 B I would suggest the following interpretation of the Meryrē` picture: the vertical divisions $1-3$ represent the same columned hall, I and 3 the columned interior with a window high up in I . Section 2, in the centre of the exterior, is itself divided into two separate parts whose vertical relationship is merely a graphic convention, i.e. the lower panel with the doorway and the upper with the Window are parts of the same exterior elevation quite likely at the same real level, thus side by side. This might, therefore, be a good example of the mixing of external and internal views with which to compare the representations of the main Window. Section 4 depicts the three rooms at the rear of the little building.

This leads to a consideration of a recent article by R. Stadelmann ${ }^{4 \mathrm{I}}$ on the Windows of Appearance and small palaces to be found in the New Kingdom mortuary temples at western Thebes. These have been positively identified from the reign of Sethos I to that of Ramesses III, and an earlier example inferred at the temple of Ay and Horemheb. Stadelmann's main contribution is to identify a still earlier Window in Hatshepsut's temple at Deir el-Bahri, not as a part of a small palace, but forming an

[^47]integral part of the temple itself. This implies that initially the Window had a purely religious function, being the place where the king made a ceremonial appearance during services at the temple. ${ }^{42}$ Only later, after Akhenaten's reign, can it be definitely seen that this formal appearance was used as an opportunity to reward retainers. In this way a small palace came to be added and the whole ensemble moved to the outer courtyard of the temple. Stadelmann devotes some space to the El-Amarna evidence, though expressing doubts on any literal interpretation of the artistic details, and locates the main Window with some hesitation at some point in the Great Palace. His observation that in three representations of the royal journey, at first sight being made between palace and temple, the direction from which the artist is viewing the buildings indicates that they lay at right angles to each other, applies equally to the identification proposed here since the main entrance to the King's House for all but the royal family would presumably have been through the pylon on the north side of the great courtyard. But this aside, Stadelmann's most interesting point with regard to El-Amarna is that the little building with the Window which, in Meryrē's scene, stands near the entrance to the Aten temple, should be seen as a logical stage in the development from Hatshepsut to Ay and Sethos I. This agrees very well with the identification of the lesser Window proposed here. The building in the second court of the smaller temple occupies the position one would expect from the Theban evidence: in one of the courts, facing the main axis, and on the south side, too. Furthermore, its design seems to have served as a model for the suites of rooms built into Akhenaten's palace where, perhaps for the first time, the god-king could make a formal appearance to selected subjects and bestow favours upon them.

The use of the word 'palace' in the foregoing discussion raises an important point which touches on the underlying structure of El-Amarna as a city: there is nowhere in the centre of the city where one can seriously imagine the royal family permanently residing. The King's House, even if part of it possessed an upper storey, is far too small to have served as anything but a reception suite, possibly with overnight accommodation; the Great Palace, if palace it is, ${ }^{43}$ is manifestly non-residential, though one might argue that the domestic part lay beside the waterfront and is now buried beneath the cultivation. But there is, too, the theme in the El-Amarna tomb scenes of the royal chariot drive to consider. Along what route should one envisage this taking place? One end of the journey was evidently one of the temples, but if the other end was the Great Palace or King's House, the maximum distance of some 450 metres would hardly have allowed one to start cantering along before one arrived.

If one examines a map of all the known parts of El-Amarna the basic feature of its layout readily emerges, as has been noted by others. From the central area northwards the city is built around a 40 -metre broad avenue whose line, though much of the avenue is now beneath the cultivation, is marked in the north by the North Palace, and ultimately by the North Riverside Palace and extra large estates lying opposite (see figs. 3

[^48]and 4). By this point it has swung north-west by about $20^{\circ}$ to adjust to the topography of river bank and approaching cliffs. At its southern end its course is interrupted beyond the Great Palace by a large unexcavated building visible clearly on aerial photographs and marked on some of the early plans of the city. ${ }^{44}$ It occupies most of square 0.43 . At this point the avenue turns at right angles to run west along the southern end of the Great Palace, and then turns again to head off southwards at an angle of about $10^{\circ}$ to its original course, presumably towards Maru-Aten, its change of angle again occasioned by the westward curve of the river bank. The beginning of this southern stretch was punctuated by two formal kiosks, 0.42.1 and 2.45 This avenue, called the Royal Road by the excavators of El-Amarna, forms the backbone of the city and, together with its flanking buildings, represents more or less the limit of its deliberate formal planning. It is an early example of the concept which city planners term a 'shaft of space', a linear design force which brings a degree of order to a city and impinges itself as such on the minds of the people who live there. ${ }^{46}$ If we take the building which terminates the North City and Maru-Aten as the limits of the Royal Road and of the city proper, the Great Palace occupies the mid point, presumably by intention. But, as far as can be judged today, it was intended that the greatest impact would be made by the stretch between the bridge in the central area and the great ramp to the north, both of which probably crossed the road and provided formal end stops. As to why the city occupies the northern part of the great desert bay rather than the centre where the Royal Road could have been laid out with less need to deflect its course from a straight line, part of the answer may lie in the geology of the site. For although the cultivated strip now extends the full length of the desert bay, in ancient times the desert may well have run down to the water's edge along the northern part, beginning at least from the central area of the city. The evidence for this is the observation which can be made at the village of et-Till, where the desert surface, consisting of cemented Pleistocene gravel, emerges from beneath the thin cover of cultivated alluvial soil and still forms the waterfront at this point. Given a rise in the river bed and flood plain of something in excess of 2 metres since the Eighteenth Dynasty, ${ }^{47}$ the likelihood is increased that the veneer of alluvial soil along the northern part is relatively recent.

The great avenue of the Royal Road seems to invite public display, and when this is set against the prominence given to scenes of the royal chariot drive one has the setting for something more dramatic in the way of royal journeys. I would therefore suggest that when the king is shown leaving the temple his true destination was much more distant than the nearby 'palaces', namely the palace complex at the northern end of the Royal Road.
The North City has never made much of an impact because no over-all plan has ever
${ }^{44}$ C. R. Lepsius, Denkmäler, I, Taf. 63 (lower), 64; J. G. Wilkinson, Manners and customs of the ancient Egyptians, in (London, 1837), pl. 6 opposite p. 106, and reproduced with greater clarity in C. R. Williams, 'Two Egyptian torsos from the main temple of the sun at el 'Amarneh', Metropolitan Museum Studies, 3 (1930), fig. io opposite p. 94.
${ }^{45}$ See note 39.
${ }^{46}$ See particularly E. N. Bacon, Design of cities (2nd edn., London, 1974).
${ }^{47}$ B. J. Kemp and D. O'Connor, 'An ancient Nile harbour. University Museum excavations at the "Birket Habu"', Int. f. Nautical Archaeol. 3 (1974), 101-36, esp. 127-8.


Fig. 3. Sketch of the central and northern parts of El-Amarna


Fig. 4

## BARRY J. KEMP

been published, nor have the excavations there been completely finished..$^{8}$ Nevertheless, the main outlines can be reconstructed using such of the excavation documents as have survived (see fig. 4). ${ }^{49} \mathrm{~A}$ person going north along the Royal Road would, as he approached it, have first passed on his right the North Palace, a self-contained formal building with altars and zoological gardens. Beyond it the start of the North City proper seems to have been marked by a peculiar structure, misleadingly named by the excavators 'The Great Northern Granary'. Only part was preserved, and this consisted of the beginning of a brick-paved ramp rising from the desert and pointing towards the nearby Royal Road which presumably it crossed by means of a bridge. Its width of 7.50 metres compares with the 9.00 metres of the bridge in the central area. Its desert end was, however, completely hidden by thick parallel flanking walls whose line was continued westwards by the ends of long closely set buttresses running out perpendicularly from the ramp itself. These may or may not have been floored over at the top to create flanking promenades to the ramp, but would in any case, if continued across the Royal Road with appropriately placed arches, have formed a striking architectural feature, complementing the bridge at the other end of this section of the road. It is impossible to guess how its other end terminated, unless it was in some way connected to the southern end of the North Riverside Palace whose full southward extent is equally unknown.

This last Palace was undoubtedly the principal building of the North City. Practically all of the main building now lies beneath the fields, but the double enclosure wall with its external towers and substantial gateway is still one of the more impressive sights of the city. It is, apart from the smaller temple, the only building in the whole city whose walls have a really business-like character, evidently to enclose a building complex of some magnitude. This seems to me to be the one site at El-Amarna sufficiently pretentious and secure to warrant identification as the main residence of the king and such of his family as lived at El-Amarna, bearing in mind that the harîm-palace at Medinet el-Ghurab was in use during Akhenaten's reign and could thus have housed some of the female complement. Across the road from this building is a group of houses, some of them unusually large and well-appointed, which could well have served as an annexe to the North Riverside Palace. This suggestion ignores the idea advanced by the excavators that the North City was built late in Akhenaten's reign. The evidence for this is not fully published and I have not tried to assess it; but it must nevertheless be set against the fact that the Royal Road itself was conceived as the major alignment of the city from the beginning. One might argue that the North Riverside Palace was an addition, prolonging the great avenue, but one is then left without a suitable home for the royal household.

[^49]I think, too, that the situation suggested here can be used to explain one of the more baffling of the El-Amarna tomb scenes. It occurs in the tomb of Marhu, who was a Chief of Police at Akhetaten..$^{50}$ On the rear wall of the decorated chamber, to the right of the doorway leading to the inner and undecorated room, are two registers showing the royal chariot drive. In the upper one the king and Nefertiti leave the temple, which is abbreviated simply to a pylon entrance. Their journey is accompanied by groups of runners including Machau himself. The destination is a fortress-like building, with battlements along the top, and external towers. ${ }^{51}$ Just as the temple has been reduced to a single set of pylons so I would suggest that the North Riverside Palace has been reduced to a schematic section of fortified wall, presenting the essential aspect with which Machuu or his artist would have been most familiar. In the register below, which logically should be examined first, the outward journey is depicted. No buildings stand at either end, but instead the artist depicts the route itself, in the form of rows of little rectangular buildings with doors in one case, and in the other, in the form of larger doors on their own, standing on what at first sight look like posts. Since so little has been excavated along the edges of the Royal Road one cannot attempt to explain these with much confidence. It would, however, be in keeping with the abbreviated style of the artist responsible for this particular tomb to see in them nothing more than extremely schematized representations of the multitude of buildings, mostly domestic and including the North Suburb, through which the Royal Road passed. As for the curious lines punctuated at short intervals with small holes drilled deeper into the wall, it is hard to better Davies's suggestion that they depict a fence or some other boundary line.

Further to the right of these scenes, on a separate wall, is a related composition. In one of four registers a similar fortress-like building appears, stacked partly with weapons and partly with provisions. Further provisions appear on the left, whilst to the right a group of men and women appear to be making deliveries of yet more supplies. This is one of a group of scenes on this wall devoted solely to Marhu's own activities. If his duties were those of outdoor policing I see no great objection to the idea of his having rendered the North Riverside Palace in this scene as if it were part stores and part armoury. This may well have been the character of that part which lay immediately behind the wall-the plan supports this-whilst the palace proper, lying yet further behind and screened off behind its own walls of which one corner appears on the plan, may have been beyond Machu's sphere of influence. It is, of course, possible too that a part of the palace, perhaps lying closer to the great ramp and now beneath the fields, did have the character of a separate fortified guard post.

Machu's scenes do not prove the correctness of the basic theory advanced here-that Akhenaten's chariot journeys took him to the North City-but the identification with

[^50]the North Riverside Palace does have the merit of explaining these scenes in terms of the known architecture of the site. There is here the implication that in all those other scenes of Akhenaten's chariot drives all the depicted buildings belong to the one end of the journey in the city centre, which is reasonable since Machu's policing activities in the north represent an interest in this more distant part of the city which other officials would not have had.
I would like to conclude by putting forward a sketch of the over-all life pattern of El-Amarna as a city, into which this suggested pattern of royal activity can be fitted. This is a very tentative and preliminary statement which requires a great deal of detailed study. ${ }^{52}$ The houses of the 'officials' were dispersed through the North and South Suburbs, in a series of relatively unzoned neighbourhood units which were probably largely self-contained in the sense that the houses of people providing goods and services were mixed with the large houses and compounds of those who had the greatest need for them. A degree of social contact among officials based on their homes must be regarded as likely, but the extent to which such a circle of contact would have extended beyond a neighbourhood is obviously impossible to determine, though one might guess that the official quarter in the city centre might have acted as a restraint on social contact between the North and South Suburbs.

Official contact was provided for in the city centre, partly in the offices of the 'records area'. The broad north-south thoroughfares running through the suburbs served mainly to facilitate journeys to and from work. The alignment of the streets in the North Suburb suggests that they continued southwards in such a way as to enable the Great Temple to be skirted easily around the back en route for the city centre. For important people these journeys would often have been by chariot. This is suggested partly by the tomb scenes, but also by the provision of short baffle walls flanking the entrances to the courtyards of a great many El-Amarna houses as well as some of the central administrative buildings. These, I would suggest, were intended to prevent chariots from being driven through a gateway at anything other than a right angle, so reducing the risk of the axle ends catching the wall corners. The city centre offices included a number of buildings based on the standard house plan, some of them larger than one might expect for caretakers. If they were, in fact, houses for junior officials they would seem to have lived in a degree of social isolation, and it may be preferable to regard them as adaptations of the standard house plan to serve as offices for officials who would have used the central reception room for receiving official instead of social visitors. There seems to be some basis in the plans, too, for considering the 'clerks' houses'53 as really office blocks. If this is so then the central city, apart from guards and caretakers whose accommodation would probably be quite rudimentary, may have been largely deserted at night.

[^51]The king would have followed an essentially similar pattern of life. His main palace lay in the north, beyond the residential part of the city, and he and his family would have spent there much of their time which was not given over to official contacts, surrounded by their own domestic establishment including palace officials not directly involved in bureaucratic administration, many of whom could have resided in the houses and estates opposite the North Riverside Palace. Behind the great fortified wall this part of the royal family's life would have been largely isolated from the life of the city. At intervals-how frequent we cannot tell-the king drove to the city centre along the Royal Road, making this the occasion for a public display of the monarchy. His duties on arrival would have been primarily threefold: worship at the temple, contact with officials for policy decisions and for audiences and for the distribution of rewards, and the occasional reception of a foreign prince or envoy. Since, for the latter, a fine and impressive display was an important adjunct to foreign policy-impressing on the visitor at a vulnerable moment the power and splendour of the king of Egypt, and in this particular case the personal innovations of the king in art and religion-it may be that the Great Palace was used for this, amongst other roles. The King's House would have served as the focal point for his time spent in the centre, and perhaps also possessed overnight accommodation, though this is not altogether clear from the evidence. To judge from the location of the house of the vizier Nakht at the far southern end of the city, contact between even king and his highest ministers of state was formalized through the offices of the central area. From time to time the South Suburb would also witness a royal progress down the continuation of the Royal Road, ending at Maru-Aten which, in view of its lack of overnight accommodation except for the caretaker houses, would have been the object only of day excursions.

This separation between palace and government, between the domestic life of the king and his official duties as head of state, would be a striking illustration of the extent to which the role of the king had been rationalized by the mid New Kingdom. This routine would also align functionally the King's House even more closely with the temple palaces at western Thebes, though it was presumably intended for more regular use.

# LA GRANDE-EN-MAGIE ET LA STÈLE DU TEMPLE DE PTAH À KARNAK 

By ROBERT HARI

Dans un article récent du $\mathcal{Y} E A$, ${ }^{\text {D }}$ Dr. Kate Bosse-Griffiths étudie la petite chapelle dorée appartenant au trésor de Toutankhamon. ${ }^{2}$ Elle tire deux conclusions essentielles de son étude: (a) La déesse Ouret-Hekaou, citée à plusieurs reprises dans les inscriptions de cette chapelle, est à identifier avec la déesse-cobra du Nord, Ouadjet. (b) La chapelle est liée étroitement au cérémonial du couronnement.

Ces deux affirmations méritent un examen plus attentif, et, en partie en tout cas, appellent la controverse. Nous reviendrons plus loin sur l'interprétation des scènes figurant sur la chapelle. En ce qui concerne la déesse Ouret-Hekaou, et son assimilation à Ouadjet, Dr. Bosse-Griffiths se base sur un pendentif, qui proviendrait de la chapelle même, et qu'elle publie comme inédit. ${ }^{3} \mathrm{Il}$ représente une déesse à tête humaine et à corps de serpent, allaitant un roi en casque bleu, debout. Le malheur est qu'il ne s'agit pas de Ouret-Hekaou, mais de Ouret-Hekaout ${ }^{4}$ (souvent confondues par l'Egyptien, et on le verra, généralement de manière délibérée), fréquemment assimilée ou identifiée à la déesse nourricière Renenet, et liée au dieu du grain Nepri. Cette Ouret-Hekaout est parfois représentée sous les traits d'une déesse à tête de serpent.

La stèle No. 44 de Leyde, ${ }^{5}$ représentant Séti Ier faisant l'offrande du vin à OuretHekaout, qui tient un épi de blé à la main, est un exemple caractéristique de cette déesse et de ses attributions nourricières. La légende dit notamment:
 $m$ wrw shpr tswy $m k_{3} w \cdot f$ (etc.): Vive le dieu vivant, fils aimé de Nepri, qu'aime Wahyt-Renenet-

[^52]
La graphie de Ouret-Hekaout est curieuse; volontairement ou non, le graveur a joué sur hkswt (cf. supra) et sur $L_{11} k s w\left(W b\right.$. v 9I, 14), nourriture (cf. infra la stèle de Séti $I^{\text {er }}$ ). En tout état de cause, il ne saurait être question de nbt pt.
${ }^{5}$ Boeser, Denkmäler des Neuen Reiches, pl. 24. La déesse a un corps de femme et une tête de serpent.

Ouret-Hekaout, maîtresse de la nourriture, grande en aliment; il est venu, Hapy parmi les Grands(?), faisant venir da l'existence le Double-Pays par sa nourriture, (etc.).

L'inscription est intéressante à plus d'un titre. Tout d'abord, Nepri est associé à Ouret-Hekaout, elle-même assimilant deux autres divinités nourricières, Ouahyt, ${ }^{6}$ personnification de la récolte, et Renenet, 'La Nourrice'. Le roi lui-même se présente en Hapy nourrissant son peuple, selon une image qui n'est pas rare, mais qui donne au verbe shpr un sens concret-celui, au propre, de 'faire vivre' (mieux que 'faire venir à l'existence'). On constatera enfin que l'expression shpr tzwy, appliquée comme je viens de le dire, au rôle nourricier du roi, n'est autre que le nom d'Horus d'or d'Horemheb dont il va être question dans un instant.

Si, réellement, le pendentif ro8 c provient bien de la chapelle, il ne lui est pas nécessairement lié, puisqu'il représente la déesse Ouret-Hekaout-et non OuretHekaou mentionnée à dix reprises dans les textes de cette chapelle, quelle que soit par ailleurs la confusion entretenue, même au niveau de l'écriture, entre ces deux divinités distinctes. ${ }^{7}$

Ce qui précède montre qu'il ne saurait donc s'agir, ni dans les inscriptions de la chapelle, ni dans le pendentif, de la déesse-cobra Ouadjet. Cependant Dr. BosseGriffiths pense trouver corroboration de son identification dans la $15^{e}$ ligne de l'édit du couronnement d'Horemheb, ${ }^{8}$ où Amon conduit le roi $r$ pr-wr $n$ sst.f špsst $W r t$ [Hksw]: vers le Per-Our de sa fille, la noble Grande-en-Magie qui elle-même hpt $\cdot n \cdot s$ $n f r w \cdot f m n \cdot n \cdot s s(y) m$ hit $f:$ : embrassa sa beauté et s'installa sur son front. Ouret-Hekaou, dit Dr. Bosse-Griffiths, est donc le surnom de Ouadjet.

Certes, en de fréquentes occasions, l'uraeus est assimilé à la déesse-cobra. Mais il
 (Wb. I 328, 6). De nombreux documents associent Ouret-Hekaou, sous sa forme traditionnelle de déesse léontocéphale, à l'uraeus, ou au double uraeus. Deux exemples suffiront. Au Spéos Artemidos, dans la chapelle exécutée par Hatshepsout et continuée par Séti Ir , la divinité honorée est précisément Ouret-Hekaou, syncrétisée en l'occurrence avec la déesse locale ${ }_{0}{ }_{0}$ sas Pakhet, elle aussi léontocéphale. Elle déclare: ${ }^{9}$ di $\cdot n \cdot(i)$ $n \cdot k$ wrrty hr tp$\cdot k$ : je t'ai placé le double-uraeus sur ta tête. Dans la salle hypostyle de Karnak, sur la paroi gauche adjacente au troisième pylône, ${ }^{10}$ le roi (Séti $I^{\text {er }}$ ) est

[^53]agenouillé devant Ré-Harakhti; Ouret-Hekaou léontocéphale, derrière laquelle Thot inscrit le nom du roi sur les feuilles du perséa, tend une main protectrice au-dessus du roi, en prononçant des paroles identiques (à cette différence que l'uraeus est dit placé $h r$ wpt•k: sur ton front).

Enfin-dernier argument du Dr. Bosse-Griffiths-le fait que l'on parle du pr wr d'Ouret-Hekaou (même si c'était Ouadjet) dans l'édit d'Horemheb, et le fait qu'OuretHekaou dans la chapelle de Toutankhamon soit dite nbt ch n'ont pas de signification; au contraire: Ouret-Hekaou léontine est fréquemment qualifiée de ce dernier titre. ${ }^{\text {II }}$

On remarquera, par ailleurs, que la chapelle dorée de Toutankhamon adopte la forme du sanctuaire de Nekhbet-pas de Ouadjet; que le nom de Nekhbet est répété quatorze fois sur le panneau supérieur de la chapelle; il y aurait donc quelque inconséquence chez le réalisateur de cette chapelle, voire quelque incongruité, à prôner Ouadjet, dans un monument si nettement marqué par Nekhbet! ${ }^{12}$

Dans la chapelle dorée, les dix mentions de la déesse donnent indubitablement le nom d'Ouret-Hekaou, la Grande-en-magie, avec des variantes d'écriture insignifiantes



On peut, bien sûr, imaginer que 'Ouret-Hekaou' n'est que le surnom d'une divinité non explicitement mentionnée (Isis, Mout, Sekhmet, etc.), encore que l'adjonction mentionnée ci-dessus de l'épithète $n b t ~ c h ~ m e ~ p a r a i s s e ~ d e v o i r ~ e ́ l i m i n e r ~ u n e ~ t e l l e ~ p o s s i-~$ bilité: l'emploi de deux épithètes, sans nom propre, serait un procédé inattendu. En revanche, si la chapelle dorée de Toutankhamon a bien une relation avec le couronnement (ou avec les cérémonies commémoratives du couronnement-nous y reviendrons), un document presque contemporain peut nous permettre d'affirmer qu'il s'agit bien de la déesse léontocéphale Ouret-Hekaou, qui a sa propre existence (pl. XIV).

C'est une stèle qui, curieusement, n'a jamais été publiée, bien qu'elle ait été installée près du $4^{e}$ pylône du temple de Ptah à Karnak par Legrain lors de sa découverte en 1900 et qu'elle y soit restée; elle a fait l'objet d'une rapide description par Legrain ${ }^{13}$ et d'une brève présentation par Maspero, la même année, à l'Institut égyptien. ${ }^{14}$

Contrairement à l'opinion admise, ${ }^{15}$ et comme Maspero l'avait déjà relevé, cette stèle est sans rapport avec le Temple de Ptah, et ne constitue nullement une fondation pieuse
${ }^{11}$ Salle hypostyle, $2^{e}$ pylône: Seele, Coregency, fig. 7. Deuxième Hall du Grand Temple d'Abou-Simbel: $L D_{\text {iII, }} 189 \mathrm{c}$ et d.
${ }^{12}$ On notera à ce propos que la décoration de la frise du toit (un serpent ailé tenant le signe Q ) donné comme une représentation de Ouadjet par Dr. Bosse-Griffiths, est en fait un syncrétisme du cobra Ouadjet et du vautour Nekhbet, au même titre qu'à l'intérieur des portes, de part et d'autre du double cartouche du roi, on a deux cobras portant respectivement la couronne rouge et la couronne blanche. Au mieux Ouadjet et Nekhbet sont associées dans ce monument. Mais elles n'ont rien à voir, en termes d'identification, avec l'OuretHekaou des inscriptions. Dr. Bosse-Griffiths s'avance beaucoup en déclarant: 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 Ḥkw: seul l'intérieur des portes est décoré, et il représente exclusivement, comme à l'extérieur, des scènes entre le roi et la reine. L'affirmation du Dr. Bosse-Griffiths repose exclusivement sur le pendentif-dont il n'est pas certain qu'il ait appartenu au contenu de la chapelle!
${ }_{13}$ ASAE 3, 111 -12; Rec. Trav. 27 (1905), 70.
${ }^{14}$ Bull. Inst. Ég. 4, Sér. i (1900), 79.
${ }^{13}$ Breasted, A.R. III, I4, note c.
à l'adresse de ce dieu: elle y a été placée, dans l'antiquité pharaonique déjà, tout à fait arbitrairement. Elle a passablement souffert depuis sa découverte: les quatre lignes où Legrain avait encore pu distinguer quelques signes ont totalement disparu. ${ }^{16}$ La scène représentée est assez singulière: le roi Horemheb, en casque bleu, offre un gros bouquet de fleurs à la triade thébaine-Amon-Ré-Sonter; Mout, dame du ciel et régente des dieux; Khonsou-à-Thèbes Neferhotep-à laquelle il est présenté. La scène serait banale, s'il n'était pas présenté par deux divinités qui ne sont même pas parèdres, et que l'on n'a pas coutume de rencontrer en pareille circonstance: Ouret-Hekaou, et Hapy, légendés respectivement (cf. pl. XIVA):
Wrt-Hkzw nbt rh nbt pt [hnt] ntrw nbw (Ouret-Hekaou, dame du palais et régente de tous les dieux) et $H^{\prime} \subset p y$ in $n \cdot n \cdot(i) n \cdot k$ ht nbt nfrt w‘bt dd pt kmı•n $t_{3}$ : Hapy: je t'apporte toute bonne, belle et pure chose que donne le ciel et que produit la terre.

Dans l'édit du couronnement, Horemheb est conduit à Amon par son dieu local, Horus d'Alabastronpolis; cette présentation à Amon par un autre dieu est très certainement en rapport étroit avec la cérémonie d'intronisation, voire avec, éventuellement, la commémoration de cette intronisation. On trouve d'ailleurs plusieurs exemples d'une telle présentation où d'autres éléments péremptoires attestent le thème du couronne-ment-en particulier la présence de Thot écrivant le nom du roi sur la feuille de palmier ou de perséa. C'est le cas, par exemple, dans la tombe thébaine No. 73 d'un Amenhotep(?), où Hatshepsout est agenouillée entre Ouret-Hekaou, qui étend sa main en signe de protection au-dessus de la reine, et Khnoum, tandis que Thot écrit sur la feuille de palmier. ${ }^{17}$ A Karnak, sur l'aile droite du VIII ${ }^{e}$ Pylône, ${ }^{18}$ Thoutmès II ${ }^{19}$ est présenté à Amon assis dans sa chapelle, et qui a posé sa main sur l'épaule du roi, par Ouret-Hekaou, qui, comme dans la scène précédente, tend sa propre main en signe de protection. Derrière elle, Thot inscrit sur la feuille de palmier:
$s s ̌ n n \cdot k n b$ Hmnyw rnpwt $\cdot k$ mitt Tm nsyt $\cdot k$ nsyt $H \quad$ mi R‘ $\underset{\text { d }}{ } t$ : Le maître de l'Ogdoade a écrit pour toi tes années comme (celles) d'Atoum, ta royauté (comme celle) d'Horus et de Ré, éternellement.
Les paroles adressées par Ouret-Hekaou à Amon ont partiellement disparu; il en subsiste cependant: $s n d \underline{d} \underline{d} s \cdot k m$ Pr-Wr shry $\cdot k m$-hust $s s \cdot(k)$, etc.: tu es installé toi-même dans le Per-Our, et tu (y) fais apparaître ton fils, etc.

Thot, dans la suite de son discours, déclare: hnm $n \cdot k$ Wrt-Hksw-Wrrty m tp $\cdot k$ : Ouret-Hekaou, (sous sa forme du) double-uraeus se joint à toi, sur ta tête.

Ce texte me parait très important. Il rejoint exactement les lignes déjà citées de l'édit d'Horemheb, où il était question du Per-Our d'Ouret-Hekaou, présentée comme la fille d'Amon; de plus, Ouret-Hekaou, divinité réelle (et non épithète) s'assimile ellemême au double uraeus qui, comme dans le texte de Turin s'installa sur son front.

Sur le même pylône, aile gauche cette fois, ${ }^{20}$ une autre scène illustre cette autre partie de l'inscription de Turin: (Amon) agita ses bras en signe de bienvenue (km3s ‘wy m nyny);

[^54]en effet, Ouret-Hekaou retournée vers Thoutmès II qu'elle tient par la main gauche, lui fait respirer de la main droite le signe de vie, en le conduisant à Hathor qui fait précisément le geste nyny. Ouret-Hekaou, dite 'Dame du Ciel', déclare dans un texte amputé vers le haut: . . (mon) bras vers toi, vers le Grand-Temple (l. lwt - r 3 t ) pour que tu voies ton noble père, le Seigneur des dieux, Amon-Ré. Devant Hathor-texte peut-être ajouté par Séti I ${ }^{\text {er }}-r d i t h n s w t-b s^{21} n s w t r ~ h t-n t r ~ n t f ~ I m n-R\ulcorner$ : faire l'intronisation royale du roi, vers le Palais de son père Amon-Ré.

La conclusion est évidente: Ouret-Hekaou, déesse spécifique du couronnement, à tête de lionne, est celle qui est mentionnée sur la chapelle dorée de Toutankhamon.

La présence de Hapy peut paraître plus singulière dans une scène liée à l'intronisation. Il faut cependant rappeler que Hapy figure dans les scènes classiques décorant les côtés du trône où il lie les fleurs symboliques du Sud et du Nord, figurant ainsi le sm3 $t ; w y$-la réunion du Double-Pays, mission première du Pharaon. Par ailleurs, nous avons vu l'intérêt porté par Horemheb-au travers notamment de son nom d'Horus d'or-à l'image du roi nourricier de son pays. Ce 'programme', défini par sa titulature -Planificateur; grand en merveilles (constructions) à Karnak; satisfait de la vérité en faisant venir le pays à l'existence-insiste sur son rôle administratif et économique. Horemheb s'était d'ailleurs fait représenter avec tous les attributs de Hapy précisément pour symboliser son activité bienfaitrice. ${ }^{22}$ Si Hapy n'est pas communément associé à Ouret-Hekaou, il l'est par contre à Hekaou 'Le Magicien', ${ }^{23}$ et l'on peut penser qu'on a là un exemple de plus du goût de l'Égyptien pour le jeu de l'analogie.

On nous permettra, à propos de cette stèle, de clore par deux remarques. Tout d'abord, il convient de souligner le caractère très amarnien de ce document, dans sa facture comme dans son esprit, et ceci malgré la présence de la triade thébaine. L'offre rituelle du bouquet est un thème fréquent à Amarna; mais de plus, le geste d'offrande est absolument identique à celui qu'on retrouve dans la cité d'Akhenaton: les deux mains, opposées paume contre paume, entourent le bouquet; cette attitude amarnienne, ${ }^{24}$ ne se trouve ni avant, ${ }^{25}$ ni après. ${ }^{26}$ En outre, il faut rappeler que Hapy, avec Maat, est un des seuls dieux (même désincarnés) à avoir trouvé grace à Amarna; on ne citera qu'un exemple, majeur il est vrai: le Grand Hymne à Aton de la tombe d'Aï (col. 9 et ss):

> Tu (=Aton) as créé Hapy dans sa caverne
> Et tu l'as fait venir selon ton désir
> Pour faire vivre les gens d'Egypte,
> De la même façon que tu les as créés pour toi, leur Maître
> (. . .)
> ${ }^{23}$ Louxor, Chambre des Naissances, $\mathrm{I}^{\text {er }}$ registre, $2^{e}$ scène; cf. Campbell, The miraculous birth of King
> ${ }^{24}$ Cf. Tombe de Panehesy par exemple (Davies, Rock Tombs, II, pl. 8, 12 et 23 ; id., ibid. v, pl. 21 (stèle de Pakha)). Nombreux exemples dans les blocs d'Hermopolis; cf. Roeder, Amarna-Reliefs aus Hermopolis, pl. 3 (245-VII); pl. 95 (566-VIII); pl. 178 (PC-65); pl. 217 (PC-7i); etc.
${ }^{21}$ Même expression qu'à la ligne 14 de l'Édit de Turin.
${ }^{22}$ Statue du British Museum 441-Sharpe, Eg. Inscr. II 43, 4. Amon-hotep III, 44 et 46.
${ }_{25}$ Tombe 52 de Nakht, plusieurs exemples.
${ }^{26}$ P. ex. Tombe de Khonsou, no. 135.


LA GRANDE-EN-MAGIE


## Une stèle du temple de Ptah à Karnak

Le Hapy du ciel, tu l'as donné aux peuples étrangers Et aux animaux qui cheminent dans la montagne; Mais le Hapy qui vient des entrailles de la terre, Tu l'as donné à l'Egypte.

Nous avons vu enfin (cf. note 16) que dans les restes de texte lu encore par Legrain, il était question de Aton qui existe en son devenir: la mention est moins banale que l'expression qui continuera à être employée après la fin du schisme atonien, dans son insignifiance première de tout ce qu'entoure Aton.

Enfin-dernière remarque-la stèle est indubitablement d'Horemheb; elle ne laisse apparaître aucune trace de correction du nom, aucun ravalement général de la surface comportant les signes et cartouches. Or, on ne manquera pas de constater l'extraordinaire similitude de traits du roi avec certains reliefs attribués à Toutankhamonnotamment sa représentation sur les petits côtés des parois de la colonnade processionnelle d'Amon à Louxor. Cet élément devrait engager à la plus extrême prudence les auteurs qui, sur la base de traits du visage, ont délibérément attribué à Toutankhamon des monuments manifestement originaux d'Horemheb. ${ }^{27}$
Reste à examiner la deuxième proposition du Dr. Bosse-Griffiths, à savoir que les représentations de la chapelle dorée, loin de figurer des scènes 'familiales' d'inspiration amarnienne, sont liées étroitement aux rites de l'intronisation. L'embarras des auteurs ${ }^{28}$ à cet égard atteste qu'il y a problème.

Comme nous l'avons rappelé, le roi est dit aimé d'Ouret-Hekaou à dix reprises; l'idée que le monument est essentiellement en relations avec le couronnement paraitt donc logique. Peut-on aller aussi loin que Dr. Bosse-Griffiths qui au terme de son analyse affirme: It seems likely that all the 'intimate' scenes of King and Queen are representations of happenings during the coronation (p. 108)? S'il est raisonnable de lier au couronnement la scène inférieure du panneau arrière (la reine tend au roi deux feuilles de palmier nouées, avec les signes 'années', $h b$, et 'roo.000'); si l'on peut, en la rapprochant de la scène du couronnement dans la chapelle d'Hathor à Deir-el-Bahri où Ouret-Hekaou tend son collier menat au-dessus de la reine agenouillée, ${ }^{29}$ admettre qu'Ankhesenamon joue le même rôle (donc s'identifie à Ouret-Hekaou), dans la scène supérieure gauche du panneau droit; si on admet enfin, que la scène d'onction puisse appartenir au rituel de l'intronisation (panneau arrière, scène supérieure)-en revanche on reste plus embarrassé pour rattacher les quatorze autres scènes à quelque rituel connu ou inconnu de l'intronisation; que penser de la scène de la chasse au boomerang, et plus encore, du tir à l'arc contre des oiseaux dans un buisson de papyrus (panneau gauche)? Assurément l'ignorance où nous sommes de beaucoup de rituels autorise l'hypothèse de certains mimes symboliques, lors de l'intronisation-analogues, par exemple, à certaines parties de la 'Danse du sacrifice' où le roi procède à la 'course à l'oiseau'; ${ }^{30}$ sans doute,

[^55]le sistre et les fleurs-qu'on retrouve entre les mains de la reine à plusieurs reprises sur la chapelle dorée-figurent aussi entre les mains d'Ouret-Hekaou ${ }^{3 I}$ dans la tombe de Ramsès VII.

Mais d'autres scènes, qui ont conduit plusieurs auteurs à voir dans l'ensemble des représentations de la chapelle dorée des tableaux de la vie intime domestique royale, sont difficiles à rattacher, au premier chef, à ce que nous savons des intronisations-connues par des édits comme ceux de Thoutmès III ou d'Horemheb, ou par des représentations, à Deir el Bahri ou ailleurs: les bouquets offerts par la reine; l'eau qu'elle verse sur des fleurs dans un vase tenu par le roi; l'eau que le roi verse dans la main de la reine, assise, un coude familièrement appuyé sur le genou de son époux; voire la reine familièrement suspendue au bras du roi-toutes ces scènes semblent peu compatibles avec un rituel du couronnement. Tout au plus quelques-unes d'entre elles rappellent le culte rendu à la statue du dieu; en l'occurrence, la reine fonctionnerait comme grand-prêtre, oignant le roi, lui passant au cou un collier de fleurs, agitant son sistre devant lui. Dans cette optique, les trois ou quatre scènes rattachables sans trop de difficulté à la cérémonie du couronnement pourraient relever d'un rituel commémoratif, combiné avec d'autres scènes du culte royal. La possibilité d'un tel rituel-qui semble se référer à un cérémonial très ancien ${ }^{32}$-pourrait trouver confirmation dans le rite de l'Ouverture de la bouche, qui se fait précisément à l'aide de l'instrument Our-Hekaou, ${ }^{33}$ tandis que les litanies d'encensement de l'uraeus ${ }^{34}$ font apparaître Ouret-Hekaou (ou Ouret-Hekaout) en liaison avec Sekhmet, et Menhyt-deux autres déesses léontocéphales.
En ce qui concerne Ouret-Hekaou, nous avons eu l'occasion, dans ce qui précède, de relever à quel point la confusion était entretenue. La distinction à faire, que nous croyons avoir démontrée, entre Ouret-Hekaou et Ouret-Hekaout est valable de Thoutmès II à Séti ${ }^{\text {er }}$. Dès Ramsès II, bien qu'il s'agisse de la déesse léontocéphale, et dans scènes très nettement liées au couronnement, elle est appelée Ouret-Hekaout; c'est le cas notamment à Abou-Simbel ${ }^{35}$ et dans le Temple de Khonsou à Karnak. ${ }^{36}$ OuretHekaou est dans presque tous les cas, représentée en déesse à tête de lionne, ce qui entretient (ou permet) la confusion avec d'autres déesses léontines, avec lesquelles elle est parfois syncrétisée: Pakhet, nous l'avons vu, au Spéos Artemidos; Sekhmet-Bastet dans la tombe de Ramsès VII, ${ }^{37}$ où elle est représentée en Sekhmet-Bastet-OuretHekaou sur le montant gauche du passage, et en Ouret-Hekaou sur le montant de droite -anthropomorphe cette fois (c'est le seul exemple à ma connaissance où la déesse n'a pas une tête de lionne). Après la XVIII ${ }^{e}$ dynastie, elle est parfois syncrétisée avec Mout, ${ }^{38}$ ou avec Isis, ${ }^{39}$ dans ces cas, le caractère léontin d'Ouret-Hekaou l'emporte sur le caractère anthropomorphe de Mout et d'Isis.

[^56]Dans sa qualité première de préposée, en quelque sorte, au couronnement, elle figure dans de très nombreuses scènes d'intronisation: Thoutmès II;40 Hatshepsout;41 Thoutmès IV;42 Amenophis III;43 Toutankhamon, Horemheb; Séti Ier;44 Ramsès II;45 Ramsès III; ${ }^{46}$ Ramsès IV; ${ }^{47}$ et Ramsès VII. ${ }^{48}$ Elle marque presque toujours sa protection en étendant sa main au dessus du roi (debout ou agenouillée devant une autre divinité, généralement Amon, parfois Ré-Harakhti), et tend parfois un collier. ${ }^{49}$ Elle est souvent accompagnée de Thot qui inscrit le nom du roi sur la feuille de palmier, ce dernier recevant parfois des mains de Thot ou de Ré-Harakhti des 'heb-sed'. Elle est caractérisée à trois reprises de Dame du Palais ( $n b t \subset h{ }^{50}$ et assez souvent de Dame du Ciel ( $n b$ pt), voire de Régente du Double-Pays (hnt tizw) ou de Régente des dieux (hnt ntrw). ${ }^{51}$

Son rôle de déesse du couronnement l'associe nécessairement à des dieux qui, par nature, ou selon les conditions locales, ont des rapports étroits avec le trône pharaonique; Amon (et Amonit) sont fréquents, ainsi que Mout, Hathor, Ré-Harakhti; mais on la trouve également avec Atoum, Khnoum, Soped, Anubis et Ptah-sans parler bien entendu de Thot déjà cité, ou de ses sosies Sekhmet et Bastet. L'ensemble des scènes où elle est représentée et légendée permet d'affirmer qu'Ouret-Hekaou a une identité propre; si elle s'assimile à l'uraeus royal, ${ }^{52}$ c'est par une sorte de projection qui n'enlève rien à son caractère fondamental de déesse léontocéphale, qui préside au couronnement plus qu'à la couronne.

Dans ce sens et pour conclure, c'est bien d'elle qu'il s'agit dans la chapelle dorée de Toutankhamon; par une certaine symbolique, dans les scènes où elle aurait pu apparaître comme telle (panneau arrière), elle est personnifiée par Ankhesenamon. On peut même penser qu'il y a dès lors un double sens lorsque le roi se dit sur ce monument, à dix reprises, 'aimé d'Ouret-Hekaou'.

[^57]
# RUBBINGS OF EGYPTIAN RELIEFS MADE IN 1826 BY SIR J. GARDNER WILKINSON 

By ROSALIND MOSS

Travellers in the early nineteenth century were most prolific copyists of scenes and inscriptions on Egyptian monuments, and yet (with a few notable exceptions such as Champollion and Rosellini) their published works are meagre and often unillustrated. Robert Hay and James Burton, whose volumes of notes and drawings are in the British Museum Manuscript Department, are represented only by the latter's 'Excerpta Hieroglyphica', and Nestor L'Hôte, whose notebooks are in the Bibliothèque Nationale in Paris, by a series of 'Lettres écrites d'Egypte en 1838 et 1839 ', and his 'Notice historique sur les Obélisques, etc.'.

Sir J. Gardner Wilkinson, who was in Egypt between 182I and 1831 and between 1841 and 1856, and is best known for his six volumes entitled The Manners and Customs of the Ancient Egyptians, published a few other books, but the bulk of his material is in the fifty-six volumes of his papers, mostly unpublished, on permanent loan to the Griffith Institute at Oxford, which contain valuable copies of scenes and inscriptions.

Recently a series of his rubbings of reliefs in tombs and temples, made in Egypt in 1826 (hereafter referred to as 'Wilkinson squeezes'), which have been in the Department of Egyptian Antiquities in the British Museum for a number of years, have been lent to the Griffith Institute so that Mrs. Burney and I could examine and classify them. There are some 5,500 squeezes altogether, mostly in excellent condition and some of special importance, containing as they do scenes and details which have been injured or destroyed during the last 150 years. They also show the exact scale of the reliefs, and are of course absolutely accurate, which is not always the case in the published copies. Fortunately Wilkinson has marked the more important ones with the name of the site concerned, or fastened the squeezes together in a numbered series; but sometimes it is less easy to identify a tomb 'near my house', or 'Tomb of the Beautiful Hunt', by which he describes them.

The most interesting scenes are those from the Theban Necropolis, and as so many monuments, especially private tombs, have been destroyed since his time, and are still incompletely published, the following résumé may be useful.

Theban Private Tombs recorded: nos. 23, Thay (97 squeezes); 33, Pedamenōpet (8 squeezes); 36 , Ibi ( 244 squeezes); 49, Neferḥōtep ( 26 squeezes); 50 , Neferhōōtep (io squeezes); 53, Amenemhēt (247 squeezes); 100, Rekhmirēc (ı squeeze); 125, Duauneḥeh ( 17 squeezes); 127, Senemicoh (44r squeezes); 183, Nebsumenu ( 74 squeezes); 342, Dḥutmosi (35 squeezes); 347, Hori (2 squeezes). Kings' tombs: nos. I, 2, 8, 9, 15,

17 (240 squeezes). Queens' Tombs: no. 52, Tyti (49 squeezes), and the sarcophagus-lid of Merytamūn from tomb 68 ( 14 squeezes). Deir el-Medina Necropolis: the sarcophagus of Queen 'Ankhnesneferebrē' ( 17 squeezes), and the stela of Ramesses III from the Sanctuary of Ptah and Mertesger ( 15 squeezes). Karnak Temples: reliefs from the Granite Sanctuary ( 151 squeezes), details from the Hypostyle, the obelisks of Hatshepsut, and scenes west of them ( 279 squeezes), the representation of the pylon in the Temple of Khons ( 57 squeezes), and a scene above the cornice in the Temple of Apet (50 squeezes). Luxor Temple: four scenes in the second Antechamber ( 75 squeezes), inadequately published by Gayet. West Bank Temples: Temple of Sethos I (igo squeezes); Medînet Habu (81 squeezes); Deir el-Baḥri Great Temple, scenes of Ptolemy III from the Sanctuary ( 26 squeezes), and some details from Deir el-Medîna Temple ( 20 squeezes).

A large number of the series come from Philae (chiefly the Porch of Nectanebos I, the First Pylon, the Birth House, and the inner part and roof of the Temple of Isis), and from Lower Nubian temples, especially Kalâbsha, Dendûr, Dakka, and 'Amada, forming a useful supplement to the not very satisfactory illustrations of the 'Temples immergés' volumes, and providing many details now destroyed. From other sites in Egypt the most important are those of six tombs at el-‘Amarna, nos. i, Huya ( 7 squeezes), 4, Meryrē I (ıo squeezes), 6, Paneḥesi (scene from lintel), 7, Parennüfer (8 squeezes), 8, Tutu (2 squeezes), 25, Ay (49 squeezes), and unidentified scenes ( 16 squeezes). Those from the tomb of Ay include many interesting details which are not always clear in the Davies publications. There are also scenes from four mastabas in the Gîza necropolis, details from three tombs at Asyût and two at el-Kâb, with a few reliefs from West Silsila, while temple-scenes include 407 squeezes from Edfu and Kôm Ombo. Among completely unpublished reliefs are a block depicting a bark being carried by several priests presumably (from their titles) connected with the tomb of Sennedjem (no. i) at Thebes, and a set of fifteen squeezes described as 'small sculptures from a wall in Elephantine', showing adorations by named New-Kingdom officials before the local divinities, which seem to have disappeared unrecorded. These scenes will be published shortly by Dr. Málek.

We have succeeded in identifying most of Wilkinson's squeezes, and they are now arranged topographically in seventy-two boxes, with detailed lists of their contents, ready for return to the British Museum to be available for consultation by scholars. In fact they have already been found useful by authors of forthcoming publications for filling gaps in damaged scenes. A few reliefs which we have been unable to identify, and a number of isolated details and individual hieroglyphs, have been grouped together in the final boxes.

# GANAANITE ${ }^{\text {r }}$ RITUAL VESSELS IN EGYPTIAN GULTIC PRACTICES 

By SH. YEIVIN

A
In August 1973 this author read a paper at the Archaeological Section of the VIth World Congress of Jewish Studies in Jerusalem, in which he discussed the problem of 'What Are Ritual Accessories and Vessels?'. ${ }^{2}$ In the course of preparing that paper for publication, enlarging and revising it, he had occasion to re-examine a certain Egyptian relief, pl. XV, I , which he had mentioned in illustrating and explaining one class of vessels usually dubbed 'ritual', namely the so-called 'pipe-bowls'3 (see fig. i).


Fig. I. A steatite 'pipe-bowl' from Tell Beyt-Mirsim

> B

Now, the function of these 'pipe-bowls' is illustrated in a relief of Sethos I's Mortuary Temple at Abydos. ${ }^{4}$ The king is portrayed there as officiating before the statue of Osiris (seated), behind which stands the statue of Horus; the king is depicted as if advancing towards the statues of the deities; in his left hand he raises an incense-pipe to the level of his mouth, while in his right hand he grasps a comparatively small 'stand' crowned by a small bowl or cup, from which protrude several small vessels arranged

[^58]in two tiers; from the three in the upper tier he pours a liquid libation, apparently into three similar (?), but somewhat larger, pots placed each on a tall 'stand', the three stands being placed in a line on the floor in front of the statues of the deities.

## C

The author had assumed that the king is represented as blowing into the long handle of the incense-apparatus. And so he may be, since the latter is raised to the level of his lips. The reproduced apparatus seems, however, to consist of five main parts, from left (i.e. the front) to right (i.e. rear): (a) the actual cup or small bowl (probably of pottery), from which rise three 'flames', inclined forward towards the statues of the deities, as if reacting to the draught of air created by the king's blowing into the stem of the apparatus; (b) the steatite (?) 'bowl of a spoon' (see above, fig. r), the short 'stem' (= handle) of which is inserted into (c), the third part of the apparatus, the long hollow handle (of metal?), ${ }^{5}$ the end of which is gripped in the king's right hand, just below (d) the fourth part of the apparatus, a comparatively small pot(? $)^{6}$ with flaring sides; unfortunately, the king's hand here covers, and thus hides from our sight, the lower part of this vessel (part (d) of the apparatus), so that we cannot see how it is attached to the long hollow stem (part (c) of the apparatus); at the same time it also hides the manner of attachment of (e) the last part of the apparatus, only the horizontally protruding head of an ornamental lion being visible. At first the author thought that this may be the head of another stone bowl, which had been added on here as the last part of the whole apparatus; such bowls had been found in Syria (unfortunately not in excavations) allegedly coming from various sites. ${ }^{7}$ However, comparison with other scenes, in which the incense-apparatus figures, proved the fallacy of this first surmise. It looks as if the lion's head is the top of a round hollow head-piece covering the rear end of the hollow metal tube (part (c) of the apparatus). ${ }^{8}$ Now this shows us, at least approximately, how the whole apparatus worked. One may further add that the relief discussed above pl. XV, 1 , giving a distinct view of parts (a) and (b) of the apparatus, makes it quite evident why no traces of burning or smudging have ever been found on the steatite 'pipe-bowls' (fig. i) uncovered so far: for the incense was actually placed and burned in pottery (?) cups fitted into the steatite bowls. The former had

[^59]not been indeed found as yet, at least not in association with the steatite 'pipe-bowls' as far as the present author has been able to ascertain. Also, as far as this author knows, steatite 'pipe-bowls' have not as yet been found anywhere in Egypt, but they are well represented among finds in Canaan and northern Syria, throughout the Israelite periods, ${ }^{9}$ i.e. the XIIIth-VIIth centuries b.c.

## D

To turn now to the libation vessel. The representation, per se, seems extremely strange, until one realizes that the Egyptian convention of representational art in relief should be applied here as well, namely that parts within, or side by side of, each other are depicted as if one on top of each other. ${ }^{10}$ Then it becomes quite obvious that what the artist intended to portray is quite a common Hither-Asianic ritual, and only ritual, ${ }^{\text {II }}$ vessel (see fig. 2). It consists of a comparatively small but relatively deep bowl, containing inside seven small thumblers, the whole made of pottery. Such ceramic products were found in situ on two sites in Israel: at Nehariyyah, ${ }^{12}$ and Megiddo, ${ }^{13}$ in both cases uncovered within 'holy' precincts, actually on ruined 'High Places', or in courtyards surrounding them. ${ }^{14} \mathrm{~A}$ similar bowl with seven inset 'thumblers', the whole set on a stand, was unearthed at Ugarit (see fig. 3). ${ }^{15}$ A large number of separate 'thumblers' (without the bowls holding them) was found throughout the area of a temple belonging to the MB IIc period at Byblos. ${ }^{16}$ All these finds range within a comparatively short stretch of time between the XVIth (end of the MB II c period) and the XIVth (end of the LB II period) centuries b.c.

Our Egyptian relief of the reign of Sethos I falls just in the period, when the chronological limits of the two vessels (the 'pipe-bowls', on the one hand, and the libation bowls-cum-thumblers, on the other) meet.

[^60]

1. A relief from the mortuary temple of Sethos I showing the incense-apparatus and the libation bowl in the hands of the officiating king
After H. Fechheimer, Die Plastik der Agypter (Berlin, 1922)

2. The 'Fosse Temple' at Lachish (IIIrd phase) with high stand on left of altar Courtesy Archaeological Institute, University of London


Fig. 2. Two libation bowls containing seven thumblers each, from the High-Place at Nehariyyah


Fig. 3. A bowl-cum-thumblers from Ugarit

## E

Lastly, the tall and narrow stands, widening out towards their base. The only real example this author knows had actually been uncovered in situ in the latest phase (III) of the temple erected at Lachish by the Egyptians, ${ }^{17}$ but definitely Canaanite ${ }^{18}$ in type (see pl. XV, 2).

One must admit that it would have required a high degree of skill to pour libations from three thumblers of one vessel simultaneously into three different stands, or rather the vessels placed on them, strung out in one line (?). Then, again, at least on the strength of the actual example, the stands not only were not connected to any drainage arrangements, but were provided with an opening just above floor level (see above, pl. XV, 2, fig. 6); what then were the libations meant to achieve?

## F

Finally, in the light of all that has been stated above, one may definitely assume that the links between Canaan and Egypt were strong at the beginning of the Nineteenth Dynasty, and they were far from being confined to the political and economic fields, but also found expression in the spheres of cults and ritual practices.

[^61]
# GREEK AND LATIN PAPYRI FROM QAŞR IBRÎM 

By M. E. WEINSTEIN and E. G. TURNER

The papyri published here (all that seemed worth printing are given) were found in March 1974 at Qaṣr Ibrìm by the Society's expedition to the site under the directorship of Professor J. M. Plumley. The actual find was made by Professor W. H. C. Frend, who has given details of the location of finding in Proceedings of the XIV Int. Congress of Papyrologists (1975), pp. 103 ff ; see also Professor Plumley's report in fEA 60 (1974), 236. In Proceedings, l.c., Professor Frend has given a preliminary survey of the papyri, in which he pays tribute to the work of Mrs. Elisabeth Trapman-Labouchere.

The editors of the present papyri have worked closely together. We have laboured under the disadvantage of not having seen the originals, which are of course still in Egypt. It is likely that verification on the originals would lead to further gains, new readings and possibly the elimination of some conjectures. Our work has been done on photographs taken by Professor Plumley, which have at times been built up into an artificial mosaic. We should like to pay tribute to E. Hitchcock of University College London for help in reducing all the pieces to the same scale (namely, facsimile size), ${ }^{1}$ and to Dr. W. E. H. Cockle for help in mounting them.

It is clear that the papyri add little to the text of Homer or knowledge of the Roman army and the Roman administration. Their important historical contribution is that their date of writing confirms the occupation of Qaṣr Ibrìm (Primis) by a Roman military force towards the end of the first century before Christ. It is hard to resist the view that the force is that led by the Roman Petronius in 23 b.c.

No text actually bears a written date. The dates are in fact assigned by us on the basis of palaeographical comparison. For this reason we are grateful to the Society for making special arrangements to give us four plates (pls. XVI-XIX) on which readers will be able to check our allocations. We are of opinion that no text, whether literary or documentary, is of a date earlier than the beginning of the first century before Christ (the Homers could have been copied up to fifty years before some soldier carried them in his knapsack to Ibrìm), and that no document extends very far, if at all, into the first century after Christ. Palaeography is not, however, a sufficiently exact science to allow us to say that the documents must belong to the year $23 / 2$ b.c. Some of them may be some years (even decades) later. A refusal to lay down a terminus ad quem is all the more necessary considering the present rarity of securely dated comparative material in Latin. Nevertheless these new, even if exiguous, scraps of Latin writing of relatively early date will themselves be welcome to palaeographers for comparative purposes.

[^62]Greek Literary

1 Homer, Iliad, 8. 273-6 (pl. XVI)
3 II + I III
$4 \cdot 3^{*} \times 5 \cdot \mathrm{I} \mathrm{cm}$
I b.c.
Two joining scraps of the bottom of a column with a margin of 2.5 cm , written in a medium-sized, well-spaced, informal round hand, mainly bilinear: of the fourteen letters represented only one of the two rhos is longer than the other letters and all are of the same height. (There are no examples of phi and psi.) The high crossbar of alpha; the near right angle at the left corner of delta; the crossstroke of epsilon made at the right side of the letter, but not touching the left; the deep centre of $m u$, made in four strokes; the large roundel of $r h o$; and the straight sides of omega are to be noted. Tau has both a curved and a straight vertical. Small finials decorate the ends of strokes. The hand shares style and many letter forms with the first hand of P. Ryl. Iv, 586 of 99 or 60 в.c.; P. Oxy. II, 236 a and b, 64 b.c., should also be compared although they are written much more rapidly. Twelve 23 line columns would give a column end at line 276 , but there are other possibilities, e.g. ten columns of 25 lines plus one of 26 . The text shows no variation from the vulgate.

$$
\begin{aligned}
& \rightarrow \quad \epsilon \nu \theta a \pi \tau \nu a \pi \rho] \omega \tau[0]\rangle \tau[\rho \omega \omega \nu \epsilon \lambda \epsilon \tau \epsilon v \kappa \rho o s ~ a \mu \nu \mu \omega \nu
\end{aligned}
$$

> 275 Saıтора $\tau] \leqslant \chi \rho о \mu \iota \nu \tau \epsilon \kappa[a \iota$ a $\alpha \tau \iota \theta \epsilon \circ \nu \lambda \nu \kappa о ф о \nu \tau \eta \nu$ $\kappa а \iota \pi о \lambda \nu] a \iota \mu о \nu \iota \eta \nu$ a $[\mu о \pi a о \nu a$ каı $\mu \epsilon \lambda a \nu \iota \pi \pi о \nu$

## 2 Homer, Odyssey, 2. 72-100, 107-8, ı10-11, 120, 122-5 (pl. XVI)

 Io I + II + IV-XIII + 3 I height $23 \cdot 3^{*} \mathrm{~cm} \quad$ I в.c.Remains of three contiguous twenty-five line columns of a roll. The largish formal round hand, strictly bilinear except phi and psi, is of the same type as $P$. Mert. II, 52 and 3. The ends of most straight strokes are decorated with round finials, arcs or serifs, some of great length. Those pointing to the left are especially prominent. The cross bars of theta and epsilon do not usually touch any other part of the letter, but this hand, unlike 3 , is not consistent in this or the use of finials. $M u$ is broad and usually made in four movements.
As the contents do not overlap with 3 and the style is so similar, it is possible to suppose that they both came from the same 'set' of the Odyssey and that this roll is the work of a less experienced scribe than the writer of 3 or of the same scribe when he was younger. There are six published papyri of Odyssey 2 (cf. Pack ${ }^{2}$, there is also one quotation) of which either this or P. Mert. II, $5^{2}$ is the oldest.

The seeming lectional signs in lines 74, 97, and 98 are best diagnosed as shadows or debris. The format of the roll was not luxurious; there is only 1 cm between the end of the long line 97 and the beginning of line 122 (the maximum is 5 cm between lines 99 and 124). The preserved upper margin is 1.3 cm , the lower 2.1 cm . The text shows few variants from that of Allen's $O C T$, all but one certainly erroneous: extra iota adscripts in lines 76 and 78 , itacisms (iota-epsilon for iota) in lines 91 (?) and 96 , dissimilation in line 79, an incorrectly written ancient variant in line 77. There is a previously unrecorded minor addition in line 74. In line 91 the papyrus sides with T and Bentley against the vulgate. $\pi \rho o \sigma \sigma \epsilon i \pi \epsilon$ line 84 is a simple inadvertence.

* indicates a minimum measurement, since available photographs do not cover the entire surface of the original.


## Col. I

$\rightarrow \quad 72 \delta v \sigma \mu \epsilon \nu \epsilon \omega \nu[\kappa \alpha \kappa \epsilon \rho \epsilon \xi \epsilon \nu \epsilon v \kappa \nu \eta \mu \iota \delta a s$ a $\alpha a \iota o v] s$
$\tau \omega \nu \mu$ алот[ıvข $\mu \epsilon \nu о \iota$ кака $\rho \epsilon \zeta \epsilon \tau \epsilon \delta v \sigma \mu \epsilon \nu \epsilon о \nu \tau \epsilon S$
тovtovs $\delta$ oт[pvvov $\tau \epsilon \epsilon \epsilon \mu \circ \iota \delta \epsilon \kappa \epsilon \kappa \epsilon \rho \delta \iota o \nu \epsilon \iota \eta$
$v \mu \epsilon a s \in \sigma \theta \epsilon \mu[\epsilon \nu a \iota ~ \kappa \epsilon \iota \mu \eta \lambda \iota a \quad \tau \epsilon \pi \rho о \beta a \sigma \iota \nu \tau \epsilon$

Col. II


 $\nu v \nu \delta \epsilon \mu о \iota ~ a \pi \rho \eta \kappa \tau o v s$ o] $\overline{\phi u v a s} \epsilon \nu \beta a \lambda \lambda \epsilon \tau \epsilon \theta v \mu \omega \omega[$
80 $\omega s$ фато $\chi \omega о \mu \epsilon \nu o s \pi o] \tau \iota \delta \epsilon \sigma \kappa \eta \pi \tau \rho o \nu \beta a \lambda \epsilon \gamma \alpha \iota[\eta \iota$
 $\epsilon \nu \theta$ a $\lambda \lambda o \iota \mu \epsilon \nu \pi \alpha \nu \tau \epsilon \varsigma \quad a] \kappa \eta \nu \epsilon \sigma \alpha \nu$ ov $\delta \epsilon \tau \iota \varsigma \epsilon \tau \lambda \eta$



 $\sigma o \iota \delta$ ov $\tau \iota \mu \nu \eta \sigma \tau \eta \rho \epsilon s$ axaı $\omega] \nu$ aıтıo $\epsilon \iota \sigma \iota \nu$ $88 \quad a \lambda \lambda a \alpha \iota \lambda \eta \mu \eta \tau \eta \rho \eta \tau \sigma \iota] \pi \epsilon \rho \iota \kappa \epsilon \rho \delta \epsilon a$ oo $\delta \epsilon \nu$

 $\pi \alpha \nu \tau \alpha s \mu \epsilon] \nu \in \lambda \pi \epsilon \iota \kappa \alpha \iota v \pi \iota \sigma \chi \epsilon \tau \alpha \iota \alpha \nu \delta \rho \in!![\epsilon \kappa \alpha \sigma \tau \omega \iota$
 $\eta \delta \epsilon \delta o \lambda o \nu \tau] o \nu \delta a d \lambda o \nu \epsilon \nu \iota\langle\rho \in \sigma \iota \iota[\epsilon \rho \mu \eta \rho \iota \xi \epsilon$ $\sigma \tau \eta \sigma a \mu \epsilon \nu] \eta \mu \epsilon \gamma a \nu \iota \sigma \tau o \nu \epsilon \nu!\mu \in \gamma a \rho o \iota \sigma \iota \nu v \phi a \iota v \epsilon \nu$ [
 96 коvроь $\epsilon \mu о \iota \mu] \nu \eta \sigma \tau \eta \rho \epsilon s \in \pi \epsilon \iota \theta a[\nu \epsilon] \delta \epsilon \iota o s$ o o
 $\epsilon \kappa \tau \epsilon \lambda \epsilon \sigma \omega \mu \eta] \mu \circ \iota \mu \epsilon \tau \alpha \mu \omega \nu[[\alpha \nu \eta \mu \alpha \tau]$ o $\quad \lambda \eta \tau \alpha \iota$ $\lambda \alpha \epsilon \rho \tau \eta \iota \eta \rho \omega \iota \tau \alpha] \phi \eta \iota \circ \nu \epsilon \iota$ o $\sigma \epsilon \kappa[\epsilon \nu \mu] \iota \nu$

Col. III
$\alpha[\lambda \lambda$ oт $\tau \epsilon \tau \rho a \tau o \nu \eta \lambda \theta \epsilon \nu \epsilon \tau о s \kappa \alpha \iota \epsilon \pi \eta \lambda \nu \theta o \nu \omega \rho a \iota$
1०8 $\kappa[a \iota \tau о \tau \epsilon \delta \eta \tau \iota s \epsilon \epsilon \iota \pi \epsilon \gamma v \nu a \iota \kappa \omega \nu \eta$ $\sigma a \phi a \eta \iota \delta \eta$ [
 $\sigma[o \iota \delta \omega \delta \epsilon \mu \nu \eta \sigma \tau \eta \rho \epsilon s$ vтокрıvovта⿱ $\iota \nu \epsilon \iota \delta \eta \iota s$
$120 \tau[v \rho \omega \tau a \lambda \kappa \mu \eta \nu \eta \tau \epsilon \epsilon v \sigma \tau \epsilon \phi a \nu 0 s \tau \epsilon \mu v \kappa \eta \nu \eta$
[

${ }^{1}$ These letters have fallen out of the plate.

| 1. $\delta o \theta \epsilon i \eta$ | 79 l. $\epsilon \mu \beta-$ | 84 l. $\pi \rho o \sigma \epsilon ́ \epsilon i \pi \epsilon$ | $911 . \alpha \nu \delta \rho i$ | $94 \nu$ [smudged, possibly |
| :--- | :---: | :---: | :---: | :---: |
| deleted | $961 . \delta i o s$ | $97 \phi$ corrected from $\epsilon$ |  |  |

$77 \pi \rho o \tau \iota \pi \tau v \sigma o ́ \mu \epsilon \theta a$ : two grossly unmetrical mistakes in one word. The variant $\pi \rho o \tau \iota$ - is noted by the scholiasts with no criticism, thus showing ancient ignorance of Homeric technique: $\pi \rho \circ \tau \iota-$ would be used to make the preceding syllable long, $\pi \sigma \tau \iota$ - to keep it short, as here. $-o \mu \in \theta a$ is probably a visual error for $-o \iota \mu \theta \theta$ rather than an aural error for $-\omega \mu \epsilon \theta a$. Note that the preceding optative is (nearly) correctly produced.

87 The papyrus clearly reads aıtıo not (pace Frend) aıoıo
91 $\mu \epsilon ̀ v \epsilon ้ \lambda \pi \epsilon \iota$ : pap. a T Bentley, $\mu \epsilon \in \nu \rho{ }_{\rho}^{\prime \prime}$ vulg.
$98 \mu \epsilon \tau \alpha \mu \omega \dot{\lambda} \iota \alpha$ a c ef $\mathbf{g} \mathbf{d}$ ss.

> 3 Homer, Odyssey, 5. $122-33,135-4 \mathrm{I}, \mathrm{I} 65-7 \mathrm{I}(\mathrm{pl} . \mathrm{XVII)}$ $8 \mathrm{I}+\mathrm{II}+\mathrm{IV}-\mathrm{VII}$ height of col. $24 \cdot 2 \mathrm{~cm}$$\quad$ I в.c.

Remains of two columns written in an extremely elegant and fairly large, formal round hand, obviously of the same style and period as P. Mert. II, 52, dated before May-June 5 b.c. by a document on the verso. Its editors, B. R. Rees, H. I. Bell, and J. W. B. Barns, believed the hand of the obscure document on the recto to be the same as that of the verso. If so, it is unlikely that so calligraphic a roll would not have enjoyed a considerable period of use before becoming scrap paper. Thus a date firmly in the first century b.c. must be assigned to both papyri, and 3 is the oldest copy of Book V (there are two earlier quotations, cf. Pack ${ }^{2}$ ). The letters of both papyri are approximately the same size, although the top margins vary, $c .5 \mathrm{~cm}$ here against 4 cm in the Merton piece and there are $c .20$ lines to a column here to $c .25$ in the other. P. Fuad inv. $266=G M A W 56,5 / 6$ actual size, and $P$. Berol. Graec. ina, both assigned to the first century b.c. are also very close to the hands of both 2 and 3. There is some shading: vertical strokes are generally thinner than curves, obliques, and horizontals. The cross bars of theta and epsilon do not touch any other part of the letter. The zeta is in the $I$ form and both horizontals have finials. $P h i$ is the only letter larger than the others, but the roundel is the same size as the other letters. All letters, except epsilon, theta, and omicron, are consistently seriffed, both with straight lines and arcs (cf. phi), the decorative bases of tau, upsilon, and phi being particularly prominent.

There are no lectional signs. With the exception of one strange and erroneous variant in line 123, the text is standard. There are no traces of line 134 , but the top of 8 V does not appear to join 8 VI . The papyrus has been collated against Allen's OCT.
Col. I

$$
\begin{aligned}
& \rightarrow 122 \quad \tau \circ \phi \rho \alpha \text { oı } \eta \gamma \alpha \alpha \sigma \theta \epsilon] \theta \epsilon \circ \iota \rho \epsilon \iota \alpha \zeta \omega о \nu \tau \epsilon S \\
& \eta o s \epsilon \nu \text { o } \rho \tau v \gamma \iota \eta] \iota \chi \rho v \sigma o \rho \rho o o s ~ a \rho \tau \epsilon \mu[\iota s a \gamma \nu \eta \\
& \text { oıs a } \gamma \alpha \nu o \iota s ~ \beta \epsilon \lambda \epsilon \epsilon \sigma \sigma \iota] \nu \in \pi o \iota \chi[o] \mu \epsilon \nu \eta \quad \kappa \alpha[\tau \epsilon \pi \epsilon \phi \nu \in \nu \\
& \omega s \delta \text { отот } \iota \sigma \iota \iota \nu \iota \epsilon v \pi] \lambda \text { окацоs } \delta[\eta \mu \eta \tau \eta \rho \\
& 126 \omega \iota \theta v \mu \omega \iota \epsilon \iota \xi \alpha \sigma \alpha \mu \iota \gamma \eta] \phi \iota \lambda о \tau[\eta \tau \iota \kappa \alpha \iota \epsilon v \nu \eta \iota \\
& \nu \epsilon \iota \omega \iota \epsilon \nu \iota \tau \rho \iota \pi \sigma\rangle \omega \iota \text { ov } \delta] \epsilon \delta[\eta] \nu \eta[\epsilon \nu \text { a } \pi v \sigma \tau o s
\end{aligned}
$$

```
    \zeta\epsilonvs os \mu\iotav ка\tau\epsilon\pi\epsilonф\nu\nu\epsilon \betaa]\lambda\omega\nu [a\rho\gamma\eta\tau\iota к\epsilon\rho\alphav\nu\omega\iota
        \omegas \delta av vv\nu \muо\iota а\gammaа\sigma0\epsilon 0\epsilon]o\iota \beta\rho[o\tauo\nu av\delta\rhoa \pia\rho\epsilon\iotava\iota
    130 \tauо\nu \mu\epsilon\nu \epsilon\gamma\omega\nu \epsilon\sigma\alpha\omega\sigma\alpha \pi\epsilon]\rho\iota \tau\rhoо[\pi\iotaos \beta\epsilon\beta\alpha\omega\tau\alpha
        o\iotav\nu \epsilon\pi\epsilon\iota o\iota \nu\eta\alpha Өo\eta\nu a]\rho\gamma\eta\tau\iota [\kappa\epsilon\rho\alphav\nu\omega\iota
        \zeta\epsilonvs \epsilon\lambda\sigmaas \epsilonк\epsilonа\sigma\sigma\epsilon \mu\epsilon]\sigma\omega\gamma \epsilon\nu[\iota o\iota\nuo\pi\iota \pio\nu\tau\omega\iota
        \epsilon\nu0 a\lambda\lambdaо\iota \mu\epsilon\nu \pi\alpha\nu\tau\epsilonS a]\pi\epsilon\phi0\iota0[\epsilon\nu \epsilon\sigma0\lambdaо\iota \epsilon\tau\alpha\iota\rhoо\iota
        \tauo\nu \mu\epsilon\nu \epsilon\gamma\omega \phi\iota\lambda\epsilono\nu \tau\epsilon к\alpha\iota] \epsilon\tau\rho[\epsilon\phiо\nu \eta\delta\epsilon \epsilonфа\sigmaко\nu
        Ө\eta\sigma\epsilon\iota\nu аӨ\alpha\nu\alpha\tauо\nu ка\iota а\gamma]\eta\rhoаор [\eta\mu\alpha\tau\alpha \pi\alpha\nu\tau\alpha
        a\lambda\lambda\epsilon\pi\epsilon\iota ov \pi\omegas \epsilon\sigma\tau\iota \delta\iotao]s voo[\nu a\iota\gamma\iotao\chio\iotao
        138 ov\tau\epsilon \pi\alpha\rho\epsilon\xi\epsilon\lambda0\epsilon\iota\nu a\lambda\lambdao\nu] 0\epsilon\varrho[\nu ov0 a\lambda\iota\omega\sigma\alpha\iota
        \epsilon\rho\rho\epsilon\tau\omega \epsilon\iota \mu\iota\nu к\epsilon\iota\nuоS \epsilon\pi] ]\tau\rho\nuv[\nu\epsilon\iota к\alpha\iota \alpha\nu\omega\gamma\epsilon\iota
        \pio\nu\tauo\nu \epsilon\pi a\tau\rhov\gamma\epsilon\tauo\nu \pi\epsilon\mu]\psi\omega \delta[\epsilon\mu\iota\nu ov \pi\eta\iota \epsilon\gamma\omega \gamma\epsilon
        ov \gamma\alpha\rho \muo\iota \pi\alpha\rho\alpha \nu\eta\epsilons \epsilon]\pi\eta\rho\epsilon\tau\muо[\iota к\alpha\iota \epsilon\tau\alpha\iota\rhoо\iota
```


## Col. II missing

Col. III
$\alpha] v \tau \alpha \rho \epsilon \gamma[\omega \sigma \iota \tau о \nu \kappa \alpha \iota v \delta \omega \rho \kappa \alpha \iota$ о८vov $\epsilon \rho v \theta \rho о \nu$
$166 \epsilon \nu \theta \eta \sigma \omega\left[\mu \epsilon \nu о \epsilon \iota \kappa \epsilon\right.$ а кєข тоь $\lambda_{\iota} \mu о \nu \in \rho v к о \iota$ $\epsilon] \iota \mu \alpha \tau \alpha \tau \alpha[\mu \phi \iota \epsilon \sigma \omega \pi \epsilon \mu \psi \omega \delta \epsilon \tau о \iota$ ovpov o $\pi \iota \sigma \theta \epsilon \nu$ $\omega] s$ кє $\mu \alpha[\lambda \alpha \sigma \kappa \eta \theta \eta s$ $\sigma \eta \nu \pi \alpha \tau \rho \iota \delta \alpha$ үа८av $\iota к \eta \alpha \iota$ $\alpha] \iota \kappa \epsilon \theta \epsilon \circ \iota[\gamma \epsilon \theta \epsilon \lambda \omega \sigma \iota$ то८ ovpavov $\epsilon v \rho v \nu \in \chi \circ v \sigma \iota \nu$
170 o] $\mu \epsilon v \phi \in \rho[\tau \epsilon \rho \circ \iota \epsilon \iota \sigma \iota \nu 0 \eta \sigma \alpha \iota \tau \epsilon \kappa \rho \eta \nu \alpha \iota \tau \epsilon$ $\omega] s$ фато $\rho\left[\iota \gamma \eta \sigma \epsilon \nu \delta \in \pi o \lambda v \tau \lambda a s \delta^{\prime} \circ\right.$ os o $\delta v \sigma \sigma \epsilon v s$
122-5. Some critics athetised (along with 121) ' $\Omega \rho i \omega \nu$ ' . . . ómó $\boldsymbol{\tau}^{\prime}$ 'because the story is strange and Artemis never kills men'.
 appropriate to Artemis. L.S.J. s.v. quote E. Ba. r 54 (lyr.) referring to the river Tmolus, Hedyl. ap. Ath. 8. 344 f to Zeus descending in a shower of gold, Supp. Epigr. 8. 549, 17 (Egypt, hymn to Isis) $N \epsilon i ̀ \lambda o \nu ~ \chi \rho v \sigma o \rho\{\rho\} o ́ a \nu$ and Ath. 5. 203c ó $\chi \rho v \sigma o \rho o ́ a s ~ к а \lambda о u ́ \mu \epsilon \nu o s ~ N \epsilon i ̀ \lambda o s . ~ E v e n ~ f u r t h e r ~ a f i e l d, ~ \chi \rho v \sigma o ́-~$ ( $\rho$ ) $\rho$ vios is used of Perseus (as son of Danaë in S. Ant. 950 (lyr.)) and also in A. Pr. 805 and Supp. Epigr. 4. 467, 2 of vó $\mu \alpha \tau \alpha$. The word appears in the present form in John Damascene hom. II. I (M. 96.764 A ), of $\lambda$ ó $o \mathrm{os}$. But there is no evidence in the Fathers of an epithet 'streaming with gold' connected in any way with Artemis (cf. Lampe Pat. Gk. Lex. s.vv. रpvoo( $\rho$ ) oóas, र $\rho v \sigma o ́ \rho \rho v \tau o s, ~ a n d ~$ most recently V. F. Vanderlip, The Four Greek Hymns of Isidorus, Am. Stud. Papyr. 12, pp. 43f.). Possibly this error is the result of an Egyptian scribe's familiarity with the epithets of the Nile.
 C. F. H. Bruchmann, Epitheta deorum, suppl. to W. H. Roscher's Lex griech. u. röm. Myth., Leipzig, 1893, s.v. Artemis. We thank Dr. W. E. H. Cockle for the reference). It is attested for Apollo in the Iliad, but for Artemis only in an oracle (Hdt. 8. 77. r) and nowhere in Homer.
$132 \mu \epsilon \cdot \sigma \omega \gamma$ : Probably not the particle. An exemplar with a very heavily seriffed iota could have been the cause of this error.


## Greek documentary fragments

4 List of Provisions (pl. XVII)
I I + II

$$
\text { I } 3.8 \times 2.6 \mathrm{~cm}
$$

I в.c.
II $6 \cdot \mathrm{I} \times 9.5 \mathrm{~cm}$
Probably to be assigned to the first century b.c. (cf. $P$. $O x y$. II, 236 b, 64 в.c. and $P$. Oxy. xiv, 1639, 73 or 44 B.c.). However, some letter forms can be found much earlier (e.g. kappa and pi in P. Lond. 1, 42, p. $29=$ Montevecchi, La papirologia, pl. 18, 172 b.c.). Both fragments are arranged in two columns, but they do not fit together in any obvious way. I cannot be the beginning or end of the list as this would allow only three letters to supplement the first line and one for the second. It does not show the kollesis to be found $c .3 \mathrm{~cm}$ from the left edge of II and must be placed, therefore, on one side of it or the other. The list may have been indented and I could preserve part of the beginning of the document. The kollesis falls in the 3.6 cm left margin of II, the list of provisions. There are scanty remains on II of a second column which may have given price, type of measure or amount. Possibly this is an account like $P$. Tebt. I, $\mathbf{1 2 2}$ ( 96 or 63 b.c.), but the only items common to the two are wine and lentils. The grain and pulse entries are similar to the list of 'bribes' in P. Tebt. I, 9. There are two entries in the accusative (lines 5 and io), but the significance of this, if any, is not clear. Quantities of things are usually found in the genitive.

51. oítov $\quad 6 \rho$ corrected from $\gamma \iota$ ? $\quad$ то 1. $\kappa \rho о \mu \mu v ́ \omega \nu$.
II. ‘. . . wine, . . . wine, . . . grain, . . . satyrisk-, . . . peas, . . . bruised beans, . . . lentils, . . . onions, . . . garlic. . . .'
2. apparently something to do with linen. ]. $\omega$ could be o with two vertical traces in front. For the first trace, if $\omega$ is the correct reading, $\iota$ is most likely, $\tau$ is possible only if peculiarly ligatured, thus making a form of $\chi \iota \tau \dot{\omega} \nu$ unlikely.

3-4. Two entries for two different kinds of wine? .[ could be the end of the top leg of $\kappa$, but it does extend rather far; possibly the left arm of $v$; if the surface is destroyed, the top of $\epsilon$ is possible, but rather close. If in fact $\kappa$ is to be read in line 3 with $\chi$ in line $4, \kappa \epsilon[\rho \alpha ́ \mu \iota o \nu$ or $\kappa \epsilon[\rho \alpha ́ \mu \iota a$ and $\chi[o ́ a s$ are likely supplements.
6. $\sigma \alpha \tau v \rho \iota \sigma \kappa[$ : The reading is certain, but puzzling. L.S.J. gives it as a diminutive of the name ${ }^{\text {átupos and a form of the name for the plant Fritillaria graeca. The word has not occurred in the }}$ papyri (cf. WB). Neither a personal nor plant name nor a small satyr (cf. Lewis and Short) fits what context there is. P. Tebt. I, 9.12 may suggest a solution. There $\pi a \sigma \pi \epsilon \rho \rho \eta \eta$ is mentioned as making up six of the fifty artabae of pulse. Possibly $\pi \alpha \sigma \pi \epsilon \rho \mu \eta$ and $\sigma \alpha \tau v \rho \iota \sigma \kappa$ - are the same, mixed seeds; cf. Latin satura, a mixture.


Reduced 4/5

1. Homer, Iliad, 8.273-276
2. Homer, Odyssey, 2.72-100; 107-108; 110-111; 120; 122-125


5
Reduced 4/5
3. Homer, Odyssey, 5.122-133; 135-141; 165-171
4. List of Provisions
5. Business Letter (?)


Reduced 4/5
6 Private Letter. 7 Private Letter. 8 Letter. 30 Heading of a Latin Letter. 32 Latin documentary scrap



34 c
34 f
Reduced 4/5
33 Latin date. 34 Latin roster (?). 40 Latin scrap
PAPYRI FROM QAṢR IBRİM

## 5 Business Letter (?) (pl. XVII)

13 I-V

$$
\begin{aligned}
& \text { I } 2.9 \times 6.7 \mathrm{~cm} \text { I в.с. } \\
& \text { II } 4.3 \times 3.9 \mathrm{~cm} \\
& \text { III } 3.2 \times 2.7 \mathrm{~cm} \\
& \text { IV } 2.7 \times 2.3 \mathrm{~cm} \\
& \text { V } 4.1 \times 12.0^{*} \mathrm{~cm}
\end{aligned}
$$

Five fragments, apparently of a letter ( $\gamma \rho \alpha{ }^{\prime} \psi o \nu \mu o \iota$, line 21) mentioning sums of money (line 11) and, therefore, on business topics. Most interesting is the appearance of a Roman numeral (either 252 or an unusual form of 10,000 ) in line 12, which, along with the form of alpha, the mention of monthly provisions, and the possible Latin loan word in line 19, suggests a Roman military origin for the document. The writing is a thin and stiffly elegant cursive, basically bilinear with the exception of $r h o, p h i$, and $p s i$, all of which also have long, more or less horizontal, serifs extending to the left of the descender, cf. P. Tebt. I, 120, 97 or 64 B.c. There is an upper margin of 2.6 cm and a lower one of at least 3.2 cm . Fragments I and II are easily placed at the top, and V at the bottom. IV may have the end of a line, but where III belongs is uncertain. In the left 'margin' of I there are ends of two lines of writing, darker and larger than the rest, possibly part of a previous column or a marginal note. The $n u$ seems to be made the same way here and in the rest of the text, but the kappas are different.

4


8

$$
\text { ]. } \pi \tau o \lambda \pi \beta^{\prime} \Delta_{\chi}[
$$

$$
] \text { cclọ̣ } \ldots \text {. . } v \theta[
$$

1. $\epsilon$.[: $\eta, \pi$ or $\nu$ ? кє́ $\chi \rho \eta \tau \alpha \iota:$ perhaps money has been borrowed and repaid in line 8 ?
2. $\pi \epsilon .: \iota$ or $\rho$.
3. $\chi$ may also be the talent sign as in line ir.
 is at least two talents, 4,500 drachmae.
4. cclọ: $=$ 10,000, cf. R. Cagnat, Cours d'épigraph. lat. ${ }^{4}$ (1914), $3^{1}$ and the example in $I L S$ II, 6377; or cclii $=252$.
5. $\dot{\alpha} \pi \epsilon \sigma \tau \alpha \lambda[\kappa-$ or $\dot{\alpha} \pi \epsilon \sigma \tau \alpha \lambda[\mu$ évov vel sim.
6. $\epsilon^{\pi} \pi \mu \eta \nu \dot{\prime} \omega \nu$ : Possibly some form of military provisions for an outlying garrison, as at Qaṣr Ibrîm?

7. ка $\mu \pi \epsilon \sigma \tau \rho a$ : There appears to be a fold before the final alpha, which might hide the iota necessary if this is to be a form of campestris. The other possibility, $\kappa \alpha \mu \pi \iota \sigma \tau \rho a$ 'loincloths', would be misspelled, but cf. Mayser, $\mathrm{I}, \mathrm{I}^{2}, 65-6$ on $\epsilon$ for $\iota$.
8. $\gamma \rho \dot{\alpha} \psi o v \mu o t$ : This sounds like a command at the end of a letter.

## 6 Private Letter (pl. XVIII)

6 II-IV

$$
14 \cdot 6^{*} \times 10 \cdot 5 \mathrm{~cm}
$$

I b.c./A.D. I
The bottom of a private letter written rapidly and fluently in a somewhat large, fully cursive hand. Alpha, kappa, mu, rho, upsilon, and omega are made in one movement. Only theta and $n u$ are made in three movements (beta, gamma, delta, zeta, $x i$, and $p s i$ are not represented). $N u$ and $r h o$ can have finials on the vertical strokes, and the high horizontal link strokes on $n u$ should be noted. The hand is close to P. Berol. Graec. 13 (13 b.c.) in letter forms, although the size and fluency of the writing give an appearance of elegance not found there. $P$. Oxy. Iv, $106 \mathrm{I}=$ Seider 1 , 22 ( 77 b.c.) should also be compared, although a narrower hand; cf. also the eta, theta, nu, sigma and tau of P. Mert. I, 6 (77 в.c.).

$$
\begin{aligned}
& \tau[o] \dot{v}[s \\
& \chi \rho \eta \dot{\eta} \alpha \nu \stackrel{\prime}{\epsilon} \chi \eta!!s[ \\
& \chi^{a \lambda \kappa} \omega \bar{\omega} \phi \rho \iota .[
\end{aligned}
$$

]oov каi $\pi \alpha ́ \nu \tau \alpha s$

$$
\gamma \rho \alpha ́ \psi o \nu] \mu o \iota \pi \epsilon \rho i \grave{\omega} \nu \stackrel{\alpha}{\alpha} \nu
$$

$$
\text { ]. } \kappa \alpha i \mu \grave{\eta} \dot{\alpha} \mu \epsilon \lambda \eta^{\prime} \sigma \eta s \pi \epsilon \rho i \tau \hat{\omega} \nu
$$

$$
] \epsilon \in \rho \omega \bar{\omega} \theta a!
$$

## 3. 1. $\chi \rho \epsilon i a \nu$

‘. . . Greet (?) . . . and all. . . . (Write) me about whatever you need. And about the money, do not neglect to ask [its return from] Lysippus. Farewell.'

I ff. The fragments were placed as follows: the end of line 2 (6 II) goes closely in sense with the beginning of line 3 ( 6 III); 6 III and 6 IV are obviously from the end of the letter and the fibres match. What is not clear, is how much space there is between 6 III and 6 IV.
I. ] $\sigma o v$ : either the end of a name, or possibly may even be part of ä $\sigma \pi \alpha \sigma o \nu$, although the transitive active form is usually found only at a much later date.

4. $\phi \rho \iota$. [is enigmatic, a name? The indexes of $I L S$, Lesquier, and Daris, as well as $N B$ and Foraboschi Onomast. provide no clues.
4. $\dot{a} \pi a \iota \tau \hat{\eta} \sigma \alpha \iota$ is used in the papyri to indicate the return of money, e.g. a dowry or deposit. There is a hook of ink over $o$ in $\iota \pi \pi o v$ but the $v$ is not deleted, possibly abbreviated, but then $v$ written out in full.

## 7 Private Letter (pl. XVIII)

No number
$6.9 \times 4.1 \mathrm{~cm}$
I b.c.
The lower left corner of a letter, presumably (cf. line 4) private. If the supplement of line 3 is correct, half the original width survives. The left margin is $\mathrm{I} \cdot 3 \mathrm{~cm}$, the lower $\mathrm{I} \cdot \mathrm{I} \mathrm{cm}$. The hand is probably late Ptolemaic (but note the wide phi) and should be compared to P. Mert. I, 6 ( 77 b.c.) and P. Tebt. I, 37 (73 в.c.) although more spiky than either of them. See also P. Vindob. Worp. 2 (2I b.c.). The upward slope of the writing is very noticeable. If lines 2 and 3 are about giving someone a grace-period for doing or paying something, business matters may have formed the main part of the letter.

$$
\begin{aligned}
& \rightarrow \quad \epsilon \lambda[\quad \text { c. } 25 \\
& i \nu a \delta \omega[\quad c .20 \quad \pi \epsilon-]
\end{aligned}
$$

$$
\begin{aligned}
& 4 \text { фídovs } \dot{\eta} \mu \hat{\omega} \nu \pi \underset{\alpha}{\prime} \varphi[\tau \alpha s \quad \text { c. } 14 \\
& \text { ov̉ } \gamma \text { à } \rho \mu \epsilon \mu \in ́ v \eta \kappa \epsilon \varphi[\quad \text { c. } 14 \\
& \kappa \alpha i ̀ \tau \hat{\eta} \overline{\kappa \delta} \dot{\alpha} \pi \eta \eta \tau \eta[\sigma \epsilon \quad c .9
\end{aligned}
$$

'. . in order to give . . . a grace-period. Farewell. Greet all our friends [and especially Name] for he has not remained . . . and on the 24th he asked the return of . . .'
 a name followed. The other occurrence is in P. Beatty Panop. 2, 34. In the Tebtunis document it is a grace period for making a survey; in the one from Panopolis, for a payment. $\sigma v \mu \pi \epsilon \rho \iota] \mid \phi \circ \rho a ̀ \nu$ is also possible.
6. $\dot{\alpha} \pi \eta \dot{\eta} \tau \eta[\sigma \epsilon: c f .6 .4$.

## 8 Letter (pl. XVIII)

The top left corner of a letter with margins at the left of $\mathrm{I} \cdot 3 \mathrm{~cm}$ and top, $\mathrm{I} \cdot 5 \mathrm{~cm}$, written over an earlier, washed out text (see ll. 4-5 n.) in a quick cursive, with kappa in both one and two, widely separated, movements and a flat-topped $n u$, cf. Seider $1,20=P$. Ryl. ir, 73 in which the verticals are more pronounced, and New Pal. Soc. II, i $=P$. Oxy. iv, 106ı, 22 b.c. Unless the name of the addressee was very long, probably half the width survives.

| $\rightarrow$ | Kod入̧ $\epsilon \hat{v} \theta \iota$［ |
| :---: | :---: |
|  | $\chi$ дıí $¢ \iota \nu . \epsilon[$ |
|  |  |
|  | ．єкขоьб．［ |
| 5 |  |
|  |  |

1－2， 4 ＇Kolleuthis to X，greetings．．．．If you have need．．．．＇
ı．Cf．Ko入入ô̂Өos，on which see Dieter Mueller in $\mathfrak{f} E A 59$（1973）， 178.


4．．$\epsilon \kappa v o \sigma .[: \tau$ is not visible at the beginning except，possibly，a bit of the right arm of the crossbar； at the end a low curved trace under a bent fibre from line 3 ．
4－5．Traces of the washed out text are visible at the beginnings of these lines；in $4 a$ can be read．
5．Possibly there are too many loops for avtov，but cf．rovíov in P．Ryl．II，73．2．．．．$\%$ ধTou might also be read．

## II V

## 9 Letter

The beginning of a letter written in a hand with some Latin characteristics：note，in particular， the epigraphic alpha and the rho with the right foot in ligature with epsilon，and the large initial chi and epsilon．The left slant of the writing and the forms of epsilon，iota，$n u, p i, r h o$ ，and $p h i$ are paral－
 and 1050， $15-5$ b．c．，all written more rapidly．

$$
\rightarrow \quad \begin{array}{cc}
\quad] \epsilon \mu \epsilon \phi \rho[.] .[ \\
& ] \text { ]ai } \rho \epsilon \iota \nu \\
\epsilon \pi \epsilon[
\end{array}
$$

I．$\mu: \nu$ also possible．Probably this is part of the name of the sender．If $\nu$ is correct，then a name such as $\Psi] \epsilon v \in \notin \phi \rho[\epsilon] \mu[\iota \varsigma$（or $-\mu[\epsilon \omega s$ ）might be read．
2．$\dot{\epsilon} \pi \in[\hat{i}$ or $\ddot{\epsilon} \pi \epsilon \mu \psi a$ ．

## 10 Part of a letter（？）

## 9 I

$$
3.2 \times 2.4 \mathrm{~cm}
$$

I b．c．／A．D．
This scrap，written on both sides in a hand with first century b．c．features，e．g．round finials on $t a u$ ，should be compared with P．Oxy．xII， $\mathrm{I} 453=$ Roberts，G．L．H． 8 b （ $30 / 29$ в．c．）．The side written across the fibres has the beginnings of three lines，possibly at the top of the document．The name Rufus appears in the nominative，accusative or genitive．The side written with the fibres has the ends of two lines．Apparently it was photographed first and some of the papyrus was destroyed before the other side was recorded．$\rightarrow$ is upside down relative to $\downarrow$ ．
$\downarrow$ 2．．［：high vertical trace，very likely $\tau$ ．
3．$\iota \omega[$ ：a hook on the left of $\omega$ ，possibly ink lost between supposed $\iota$ and $\omega$ ．

## 11 Letter (?)

II I + II
I $5.4 \times 10.2 \mathrm{~cm}$
II/I в.c.
II $1.7 \times \mathrm{r} .8 \mathrm{~cm}$
Written in a thick Ptolemaic hand, similar in style to $P$. Lond. i, 19 p. 16, 16ı b.c.; P. Berl. Inv. $16277=S B$ vi, 9065 , г в.c.; and $P$. $A m h$. II, 5 I, 88 в.с.; where the high link stroke in the $n u$ should be noted. There is a small margin at the top of $\mathrm{I} \cdot 2 \mathrm{~cm}$ and line I may be a heading. Line 2 (see note) suggests that this was a letter.

2. $\gamma \epsilon \epsilon^{\prime} \nu \omega[\sigma \kappa \epsilon$ or $\gamma \epsilon \iota \nu \omega \overline{[ }[\sigma \kappa \epsilon \tau \epsilon$ or $\gamma \epsilon \iota \nu \dot{\omega}[\sigma \kappa \epsilon \iota \nu \sigma \epsilon \theta \epsilon \in \lambda \omega$ ?
5. $]_{\epsilon \varphi}: \theta$ also possible; $\epsilon \pi, \epsilon \tau, \epsilon \iota$; but $\notin \tau o v s$ not possible.
7. The first cataract at Philae/Aswân?
8. $\kappa \alpha \tau \alpha \rho]$ ák $\kappa \tau \eta v$ ? $\theta[$ or $\epsilon[$.
9. $\xi$ : very uncertain.
10. $\sigma v v] \tau \alpha \dot{\alpha} \xi \eta s$ ?

## 12 Scrap Mentioning a Beneficiarius

7 III

$$
3.0 \times 8.7^{*} \mathrm{~cm}
$$

I b.c.
A very clumsily written fragment. The hand is parallel to $P$. Amh. II, 5 I, 88 b.c. The text is far too short and rubbed to tell very much, but line II contains what may be the earliest reference in the papyri to a beneficiarius, thus indicating a Roman milieu. The document may be some sort of roster or other list of names, as lines $4-9$ end in what could be the nominative singular.



1. .. [: Three rubbed uprights with a horizontal above, a Roman numeral?
$2,4,5\left(\right.$ ?). $\left.\begin{array}{c}\epsilon \\ \tau \\ \tau\end{array}\right)$ or $\dot{\eta}] \mu \epsilon ́ \tau \epsilon \rho o s$.
2. .[:Very rubbed traces.

6, 8, 9, ro. )-: a sign after names, especially in line 9? M. Avi-Yonah, Abbrev. in Gk. Inscr. (Jerusalem, 1940) states ) 'patrem homonymum indicat' in $I G \operatorname{xiI}(2), 85$ from Mytilene with no date. Possibly second half of a pair, but not theta nigrum $=$ deceased.
7. ]a $\pi \epsilon \epsilon \epsilon \epsilon \tau \tau$ [: Possibly for $\dot{\alpha} \pi \epsilon \lambda \epsilon \dot{v} \theta \epsilon \rho o s$.
8. ] $\tau!\circ$ : instead of $\tau!, \pi$ or $\tau \rho$ cannot be excluded. Movvá $\tau \iota o s$ vel sim.? $\pi a \tau \rho o ́ s ?$
12. $\delta$ : possibly $a$.

## 13-22 Small Greek documentary scraps

Many of these pieces may be second hands of documents. Individual palaeographic parallels for such small scraps are not much value. The following examples may, however, give some idea of the possible range for dating these bits: P. Tebt. III, i. 8ir, 165 в.с.; P. Amh. ir, $35=$ Seider 1, 14, 132 в.c.; P. Heidelberg 48, ı26 в.c.; P. Lond. ini, 883, p. 22, col. ii, = Seider 1, 19, 89/8 в.с.; P. Grenf. if, 38, 8ı в.c.; G.P.R. 1, $224=$ Boswinkel and Sijpesteijn, Greek Papyri, in, A.d. 6; P. Med. $3=$ Montevecchi, pl. 37, before A.D. 14; P. Med. $6=$ Montevecchi, pl. 39, A.D. 26. 15-22 are not printed.
13. Five pieces, of which only the first is printed: line 2 suggests that these may have been



1. $a v[$ : less possibly $\lambda \nu, \alpha \tau, \nu .2$. ].. : very faint traces, a vertical(?) followed by a low trace.
2. 7 IV. $2.9 \times 8.3^{*} \mathrm{~cm}$. Traces of seven, eight, or nine lines from the centre of a document the whole length of which may be preserved. Top margin 1.0 cm . The low cross bar of alpha, shallow top of upsilon, and the two stroke kappa should be noted.
 $\left.{ }^{8}\right]$ vacat $\left[{ }^{9}\right] .\left[{ }^{10}\right]$ vacat [ $\left.{ }^{11}\right]$. [.
3. $\kappa: \pi$ also possible. $3 . \kappa \omega$ : ко also possible.

## 23-29 Possibly literary scraps

Many of these scraps, which look like literary hands, could also be second or third hands of documents. They are too small to date, but the following examples may give a range for dating these pieces: $P$. Ryl. iv, $586=P$. Oxy. $\mathrm{Iv}, 802=$ Roberts, G.L.H. 8 a , 99 в.C.; P. Lond. 11, 354, p. 163 = G.L.H. 9a, 74 в.C.; P. Lond. 1ı, 256a, p. 98, A.D. 15 ; P. Mert. 1, 10. 28-31, A.d. 21. They are not printed here.

## 30-40 Latin documents

## 30 Heading of a Latin Letter (pl. XVIII)

$5 \mathrm{III}+12 \mathrm{I} \quad 14.2^{*} \times 3.2 \mathrm{~cm} \quad$ I B.C./A.D. I
Written in a large, elegant formal hand with emphasis on the vertical as in the initial $v$ of Varius, where the right arm is only slightly slanted. Initial $s$ and $v$ are taller than other examples of those letters and of most other letters. Dating this type of hand is extremely difficult because there are only a small number of papyri in this style. The letter shapes are similar to P.S.I. xı, $183=$ Seider $6 \mathrm{a}=$ Mallon, Pal. rom. v, 2 of A.D. 47 , but there is no contrast of thick and thin strokes as there. Many letters are also like P. Berol. $13956=$ Seider 1 (assigned to the middle of the first century B.c.). In neither of these is there a parallel for the fully rounded $s$. There are hints of it in B.G.U. $\mathrm{iv}, \mathrm{IO} 83=$ Mallon et al. L'écrit. lat. 21, I a.d. The surviving margins are: left, 0.8 cm ; right, $\mathrm{I} \cdot 3$ cm ; top, $\mathrm{I} \cdot 2 \mathrm{~cm}$; bottom, $\mathrm{I} \cdot 2 \mathrm{~cm}$. Fragment 31 c may be from the body of this letter.

$$
\rightarrow \quad] \text { VARIVS } \cdot \text { VALERIO } \cdot \text { SVO } \cdot[\mathrm{S}] A L \cdot \text { PL }
$$

'Varius to his friend Valerius very many greetings.'

## 31 Fragments of a Letter (?)

(a) 5 I
(b) 5 II
(c) 5 V
$3.4 \times 4.3 \mathrm{~cm}$
I в.c./A.D. I
$4.5 \times 6.3 \mathrm{~cm}$
$2.5 \times 4.3 \mathrm{~cm}$

These three scraps may belong together, but there are some problems: the writing of (c) appears to be taller and thinner than that of (a), if (c) 2 is to be supplemented Va]lerio, it may belong to 30; but if it does and belongs to (a) and (b) as well, then the capitals in (b) are puzzling. It is difficult to compare letters as so few are decipherable, but $i, n, r$, and $s$ are very close and along with the spacing between lines and similarity of the surfaces, argue that all three pieces come from the same document. The writing is small with emphasis on the vertical: $a, n$, and $r$ go far below the base line; $i, o$, and $s$ are tall. The following features are found in one or both $P$. Oxy. iv, $737=$ Mallon, Pal. rom. in. 2, c. A.d. i ; and P. Berol. $13956=$ Seider $1=$ Mallon, Pal. rom. I, i, I b.c.: the cross bar of $e$ is made with a dot, the base of $l$ is short and joins the upright at a $90^{\circ}$ angle, $r$ has a very long left leg and a very short right one, $s$ is cursive with a flat top. The interpuncta also indicate a date before the end of the first century A.D., cf. B.I.C.S. 17 (1970), 139. For the capitals in $\mathbf{b}$ cf. Mallon, L'écrit. lat. 17, A.D. 43-120.

| $\rightarrow \mathbf{a}$ | ]. |
| ---: | :--- |
|  | ].uss. |
| $\rightarrow \mathbf{b}$ | ] vac. GLAVY[ |
| 4 | ]r..s.se.ia.[ |
|  | ]sis•!. |
|  | ]ni• |
| $\rightarrow \mathbf{c}$ | ].. |
| 8 | ]lerio |
|  | ].ssei•eran[t |

1. ]. : Possibly an interpunct.
2. ]. $u$ : Possibly $l i$.
3. $\mathrm{L}:$ A very sharp angle; V : high trace of left arm; if the style of these capitals were mixed, B or D possible.
4. ]r.. : After $r$ there is a smudge with room for I or 2 letters; se: $e$ very narrow followed by a slightly curved small vertical, $t, i$, or $c$; then a space; then a thick horizontal meeting a short thick vertical; $\boldsymbol{i}$ possibly $l ; \boldsymbol{a}$ followed by a low vertical, then a hole and possibly some very faint traces.
$5 . i$ broken at the top; scurved oblique possibly to be taken with the interpunct as $a ; l$ a short vertical with serifs top and bottom; then very faint traces, possibly offsets.

32 Scrap (pl. XVIII)
12 VI
$4.0 \times 4.8 \mathrm{~cm}$
I. B.C./A.D. I

The bottom left corner of a Latin document with a lower margin of 1.5 cm and $\mathrm{I} \cdot 2 \mathrm{~cm}$ at the right. The letters are of the same style as Stud. Pal. xiv, $3=$ Seider, 4, last quarter of the first century b.c., although not so calligraphic. Nolito in line 4 may point to a legal context.

I. . .t: First an upright; then a nearly complete letter in the shape of a figure-8, but with the bottom open and the left leg a nearly straight oblique, the right leg begins as an oblique and then becomes perpendicular to the base line; possibly $b$ or a monogram. $t$ could also be $e$ or $i$.
2. ]. : A small high horizontal trace. $u$ and $o$ are linked.
3. The right leg of $n$ bends back rather strangely.
4. $] t: i$ also possible.

## 33 Date (pl. XIX)

4 I
$7.9 \times 15.0^{*} \mathrm{~cm}$
I b.c./A.D. I
Written in an upright hand with broad $a, m$, and $u$. There are two archaic features: $i i x$ for $v i i i$, and the spelling of idus with ei (cf. TLL s.v. idus; eidus is usual up to Augustus, then found only four times thereafter). The preserved letters correspond to van Hoesen, Roman cursive writing, Tbl. ic, 17 b.c.-A.d. 23. The date 6 September does not seem to have any particular significance. The blank space at the bottom indicates that this was the end of a document with a space of at least 2.6 cm left between the date and the body of the document and at least II .5 cm blank below. There is a left margin of 1.7 cm .

$$
\rightarrow \quad] \text { iix eidus } \cdot \text { septemb }[
$$

For iix cf. P. Oxy. Iv, 737.5, 3 ( (c. A.d. I). On subtractive numbers in inscriptions see J. S. and A. E. Gordon, Contrib. to the pal. of Lat. inscript., 176 and $215-16$. The figures they give indicate that in the second half of the first century A.D. iix has nearly disappeared.

34 Roster(?) (pl. XIX)
(a) 12 IX
(b) 3 III
(c) 12 VII
(d) 12 II + IV
(e) 12 X
(f) 12 V
$8.4 \times 3.9 \mathrm{~cm}$
$2.1 \times 1.7 \mathrm{~cm}$
$7.5 \times 2.1 \mathrm{~cm}$
$9.5 \times 3.4 \mathrm{~cm}$
$\mathrm{I} \cdot \mathrm{I} \times 3.4 \mathrm{~cm}$
$3.5 \times 1.2 \mathrm{~cm}$

I b.c./A.d. I

All the letters in these pieces (except $z$ which does not appear there, and has a top stroke twice as long as the bottom stroke) can be paralleled in $P$. Oxy. xliv, 3208 , originally published by V. Brown in B.I.C.S. 17 (1970), $136-43+\mathrm{pl}$. iv, dated probably to the reign of Augustus. These six pieces are grouped together because of the handwriting, but (a) and (b) are definitely written with the fibres, (c), (e), and (f) across them and no determination on (d) can be made from the photograph. This could be a set of soldiers' accounts if cen(turia) is correctly read in line 3, cf. also the number in line 10 and coṣ in line ir (a consular date?). Known military accounts do not preserve a heading ratio, nor are the names in surviving accounts listed one after the other as here in lines 5-7. See the collection of accounts and pay records in R. O. Fink, Roman military records. (a) has a left margin of 4.1 cm and at the bottom of 2.4 cm ; (c) left, $\mathrm{r} \cdot 9 \mathrm{~cm}$; (d) left, 3.2 cm ; (f) left, 1.2 cm .


1. laeli $: l$ could be $i$ if the low horizontal is a shadow; $a \in$ could be $p ; e$ could be $i$ or a damaged $l$; $l$ could be $i ; i$ could be $p$ or $f$.
2. .[: a high trace, possibly not ink.
3. cen(turia) Avit $(i)$ ? centuria is usually abbreviated $\varphi$ in Latin, but Fink, op. cit. 586 s.v. does give cen as an abbreviation of centuria, of which we can find no example in his collection.
4. A high trace of an oblique.
5. $p r: p$ is rubbed, $r$ could be $s$ (another Greek name?).
6. $n$.. [: The traces do not suit Zenon; of $n$ only two uprights remain; then an apex, $a$ ? then a tall letter, s? Zenas? cf. Z $\eta v a ̂ s$ in $N B$.
7. ]...[: Top of a cross bar or curve; then an oblique, a curve, another oblique, dom?, then a high oblique.
8. ]. : Small low trace.
9. Note the subtractive numeral which suggests an early date, cf. 33 n . .[: one or two uprights and possibly an oblique, $m$ or $n$ ?
ir. $s[$ : A small vertical trace joining a high horizontal.
10. $n . u$ : A small trace of vertical pointing to the right, if not $i$ then $s$ ? $m: a$ or $n$ also possible.

## 35-40 Latin scraps

35. a 14 IV. $2.8 \times 8 . \mathrm{I} \mathrm{cm}$, b 14 I. $3.8 \times 5.6 \mathrm{~cm}$. Very plain capitals, comparable to $P$. Berol. $13956=$ Seider, $\mathrm{I}, \mathrm{mid}$. I. b.c., but too plain to date accurately.

36. ]. : vertical trace, either or both $b$ s could be $d$, the first could also be $l i$; $u$ could be $l i$. 2. $e$ could be $i ; m$ is very broad. 3. These seem to be random ink. 4. Small heavy traces followed by a vertical; after $\underset{a}{ }$ a light circle? 5 . At the beginning of the line washed out or offset traces. 6. Small high traces at the beginning of the line.
37. (a) 5 VIII. $1.8 \times 3.2 \mathrm{~cm}$. (b) 5 XII. $2.8 \times 2.5 \mathrm{~cm}$. (c) 5 IX. $2.1 \times 2.1 \mathrm{~cm}$. (d) 5 XIII. $2.4 \times 2.3 \mathrm{~cm}$. All are written, at least partially, in an unusually tiny upright hand with a few cursive characteristics. They appear in some way to go together, although the second line of (d) has large capital letters not unlike those in 31. There is nothing in what letter forms there are to prevent them from being dated to either the first century b.c. or A.D.
(a) $\left.\rightarrow^{1}\right]$ am. $\left[\quad{ }^{2}\right]$ iuli. $\left[(\mathbf{b}) \rightarrow^{3}\right.$ eid $]$ us iuli $\left[(\mathbf{c}) \rightarrow^{4}\right]$. cuis $\left[(\mathbf{d}) \rightarrow^{5}\right]$. liui $\left[{ }^{6}\right]$ ACE . [
38. $i$.[: a low dot following $i$ and possibly connected to it. 3. Possibly a heading, the lower margin is 2.0 cm .4 . ]. : A small oblique. 5. ].: Low, small trace. 6. ]A: A high oblique slanting down to the right, if it is part of a letter $A$ seems best. .[: The trace is narrow, could be $i, t$ with a small cross bar or a cursive $f$ or $s$.
39. 12 XI. $1 \cdot 3 \times 1 \cdot 9 \mathrm{~cm}$. A very elegant seriffed hand.

$$
\rightarrow] \text { rpi[ }
$$

]rupi[ also possible.
38. 5 IV. $\mathrm{I} \cdot 3 \times \mathrm{I} \cdot \mathrm{I}^{*} \mathrm{~cm} . \rightarrow$ ]SOLV $[$
39. i2 III. $6 \cdot 1 \times 7.6 \mathrm{~cm}$. Blank except for the remains of 4 letters, $\rightarrow$ ]. ati[, i.e. ]dati[ or ]bati[
40. 3 IV. $4.5 \times 2.9 \mathrm{~cm}$. One line of wave decoration formed by s-curves leaning to the right. The second line looks like decoration, but is fluently written Latin (pl. XIX).

$$
\left.\rightarrow{ }^{2}\right] \text { qua } \ldots .[
$$

At the end, displaced fibres make reading impossible.

## AN ANGIENT EGYPTIAN MUMMIFIED FISH

By F. FILCE LEEK ${ }^{\text {I }}$

There recently came into my possession a light yellow linen-wrapped object said to contain a mummified fish, and this was accompanied with the sparse information that it was Ptolemaic and had probably originated in Gebelên (pl. XX, r).

The radiograph which was subsequently taken proved that there was indeed a fish within the linen wrappings (pl. XX, 2). ${ }^{2}$ The skeleton was in an excellent state of preservation and thus the fish could be identified with certainty as Eutropius niloticus, a fairly common Nile schilbeid catfish (pl. XXI, i). Of particular interest is the fact that the entire vertebral column is preserved, thus providing a certain means of distinguishing this species ( 48 vertebrae) from the related Nilotic species of the genus Schilbe ( $5 \mathrm{I}-5$ vertebrae). A close search of the relevant bibliographical literature has failed to find any reference to other examples of the Eutropius, and as far as can be determined the only species of fish that has been described is the Nile perch Lates niloticus, which has been found in vast numbers buried in the desert and in the tombs at Esna. ${ }^{3}$

Although the practice of mummification of fish reached its climax during the Ptolemaic period, it prevailed centuries before, as is evidenced by a wall painting in the tomb of Khabekhent at Deir el-Medineh. Khabekhent, son of Senedjem, lived during the reign of Ramesses II, and the wall painting to which reference is made depicts Anubis administering the last rites to a large mummified fish. ${ }^{4}$

An external examination of the object suggested that a fracture existed in the posterior third of the fish and this is confirmed by the radiograph, which reveals a lack of continuity in that part of the vertebral column. At each end of the linen wrapping was a single stitch, impregnated with glue or resin, which, from its shiny appearance, could well have been of recent origin. This, combined with the knowledge that there are no other records of linen-wrapped Eutropius niloticus, gave rise to the thought that whilst the outer wrapping was undoubtedly authentic, it might well have been used to cover a recently preserved specimen.

[^63]
## F. FILCE LEEK

So in spite of the destruction which would inevitably ensue, it was imperative to unwrap the fish. The stitch at each end was carefully dissected out. The chemical composition of the adhesive was not determined, partly because of the minute amount of material available and even more importantly, because no useful dating information would have been forthcoming. Although the outer wrapping was quite firm, it was sufficiently pliable to be carefully peeled off, and as soon as it was possible to see beneath it, there was no possible doubt that the specimen was indeed an ancient one. There now appeared a binding of a slightly decayed vegetable fibre covered with an extremely fine powdery brown dust (pl. XXI, 2). On investigation this fibre proved consistent with the culm of papyrus Cyperus papyrus L. ${ }^{5}$ and this provided an extremely rigid cradle for its contents. Had it been less firm the whole would have collapsed centuries ago. The papyrus stalk must have been quite pliable when it was bound around the specimen, since two knots had been tied in it at that time, making a total length of approximately 150 cm , from the three pieces of papyrus. Its flexibility would gradually be replaced by firmness as it dried out. Between some of the convolutions, spaces existed, and it was apparent that yet another linen wrapping covered the specimen. The papyrus binding proved extremely tough and unyielding, and it had to be removed in a number of pieces before the innermost bandages could be exposed. The first impression of this layer was that its fibres were of a coarser texture than those of the outer wrapping, since they were wavy and appeared less regular (pl. XXII, r), but further scrutiny showed that the threads of both wrappings were identical. Their changed appearance was due to the moisture absorbed during the wrapping process and to the variable shrinkage of some of the fibres during later evaporation. ${ }^{6}$

This innermost wrapping proved to be much tougher than the outer one, probably due to the inorganic salts it had absorbed from the fish, and extreme care had to be exercised during dissection in order to prevent injury to the enclosed specimen. The partial removal of this third and final wrapping revealed that the skin and muscles of the posterior third had disintegrated, leaving only the caudal and anal fins or their skeletons, and some disarticulated vertebrae still in situ (pl. XXII, 2). When the wrapping was fully cut away, the head and anterior part of the fish was found to be intact, revealing the typical form of the Eutropius niloticus (pl. XXII, 3). ${ }^{7}$

Loret and Gaillard reported on a large number of linen-wrapped Nile perch found at Esna and were able to demonstrate that it was usual during the process of preservation, for a longitudinal incision to be made on one side of the fish, so that the brine in which they were to be immersed could penetrate to the interior part of the abdomen.

[^64]
I. The entire linen-wrapped mummified fish

2. X-ray of Eutropius niloticus surrounded by linen wrappings:
(a) ventral view with head to left
(b) oblique ventral view, both showing disarticulated vertebral column


I. Innermost wrapping following dissection of papyrus cradle, showing its disorganised fibres

2. Partial removal of the inner linen wrapping, revealing the fragmented vertebral column

3. (a) The remains of the innermost wrapping after removal of its contents
(b) The preserved Eutropius niloticus, the head and anterior part of the body with its skin still in situ, as well as the disjoin posterior half of the vertebral column and the tail fin

In this instance, it was not possible to recognize such an incision. By a critical examination of many specimens, they were convinced that the dead fish were subjected to a prolonged maceration in a strong alkaline solution (brine/natron) and afterwards surrounded by a layer of mud containing saline substances before they were wrapped in linen. No trace of mud was visible on the Eutropius specimen, nor was any detected during the X-ray diffraction examination made on a sample of the skin. ${ }^{8}$ Loret and Gaillard also found that in some cases, as in the one here described, the middle binding was made of papyrus stalk, but there were variations-sometimes linen strips were made into cords and at other times strands of palm leaf were employed.

Because of the similarity of the three wrappings of the Eutropius with those used in the preservation of the Lates at Esna, it can reasonably be assumed that this specimen was contemporary with those mummified in that city. It is also interesting to note that another vertebrate has been added to the long list of creatures that for religious reasons were mummified during ancient Egyptian time.

[^65]
# THE CIRCUMSTANTIAL PRESENT AS AN ANTEGEDENT-LESS (i.e. SUBSTANTIVAL) RELATIVE IN COPTIC 

By ARIEL SHISHA-HALEVY

I. Coptic disposes of two procedures to express the substantival relative clause ('he who . . .', 'that which . . ' etc.), namely, either by substituting a substantivator morpheme (of the $\pi-/ \tau-/ \mathbf{n -}$ paradigm) ${ }^{1}$ for the antecedent, yet in close juncture with the relativeconverted ${ }^{2}$ form: пет-, пептач-, пещдч-, etc.; or by having an indefinite pronoun or pronominal(oүa, pweeє, qoerнє: 'one', 'any', 'some') as antecedent to a circumstantially converted form, as the relative : circumstantial opposition is neutralized, in favour of the latter, when adnominal to a non-п-determined substantival kernel. ${ }^{3}$

A third, rarer and obviously idiomatic procedure is that using the bare circumstantial present form as an antecedent-less relative, mostly equivalent to an or-determined, $\boldsymbol{\pi}$-substantivated relative form (оүпетоүади, оүпетнаноје, etc.); or, alternatively, a o $\gamma^{\lambda}$-antecedent before the adnominal circumstantial. The Sahidic and Bohairic examples offered below (all of them either definitely or very probably translated from the Greek) represent most of the possible syntactical functions of a substantival relative.
(a) as direct object, though without governing the prenominal morphoponemic alternant (status constructus) of the infinitive: ${ }^{4}$

[^66]
 токкі̀入а.







 (one) who makes his son or his daughter pass through fire, or (one) who inquires of the diviners . . . nor (one) who ventriloquizes, nor (one) who looks for omens, nor (one) who is a necromancer'. Greek: all participles (in the nominative).


 have not found (one) which is good which (will) please you'. Crum completes '(corn)'. A postclassic, non-literary, untranslated (i.e. native Coptic) instance.
(b) as postposed actor (or grammatical subject), unintroduced by $\overline{\mathrm{n}} \boldsymbol{\mathrm { r }}$-:

 (one) who is a slave and (one) who is a wood-cutter'.



 (one) who is impure and (one) who is leprous, (one) who grasps a crutch and (one) who falls by the sword and (one) who is in want of bread'. There seems no justification for Drescher's sic-ing of ecpraqe, see Corpus Script. Christ. Orient. 314/Copt. 36, p. 86 n. 1; the circumstantial after $\omega \boldsymbol{x} \bar{\pi}$ does, however, seem suspiciously like a predicative complementation of this verb.
(8) (?) John I: 27 (Thompson's collation, Chester Beatty MSS. A, B) çaqє дє єpate . . . пал


(c) Co-ordinated (by aүw) to, or disjoined (by $\mathbf{H}$, a $\lambda \lambda \lambda$ ) from a noun signifying $a$ quality, this being either the predicate of a Nominal Sentence ( $\epsilon \mathrm{c}-\mathrm{this}$ expressing an additional predication $)^{5}$ or in any other syntactical status:
(9) Num. 14: 12 (Boh., ed. Lagarde) ormut ineerroc orog emaurey 'A great and multi-


[^67]
## ARIEL SHISHA-HALEVY






 (Boh. orcacle $\mathbf{H T}$ ) 'a fornicator or (one) who is impure'.
 not a thing of the flesh, but (one) who is pure'; a Second Present (conditioned by a $\lambda \lambda \boldsymbol{\lambda}$ ) ${ }^{6}$ interpretation is not excluded.

 (one) who is living'.
 righteous in all things and (one) who is holy'.
 'It is an abomination . . . and (a thing) which is vain and base'. Note the contextual association with the $\bar{\Pi}$ - (nota relationis) introduced attribute. ${ }^{7}$

 $\theta \epsilon \sigma \sigma \epsilon \beta \eta \eta_{s} \epsilon \sigma \tau \iota \kappa \alpha a i \mu \hat{a} \lambda \lambda o \nu$ iov $\delta a t \zeta_{\epsilon \iota}$ 'She is God-loving and (one) who tends towards the Jews'. A Second Present interpretation is possible.

(d) After the gloss-introducing єтє паг пе, ${ }^{8}$ glossing Greek terms; as gloss in GreekCoptic (-Arabic), as lemma in Coptic-Arabic scalae:
 $\boldsymbol{\epsilon} \mathcal{B} \boldsymbol{\lambda}$ : $\pi \alpha \nu \tau \epsilon \lambda{ }^{\prime}$ 's, i.e. '(one) who is perfect'.

 Present interpretation ('It is in him that every Fatherhood is') is possible.
(22) Rylands MS. II3 (Catalogue, p. 62) zwoceeєнос. єq才 $\overline{\ell \quad} \Pi \omega \overline{\pi g}$ '(one) who gives life'.
(23-4) Brit. Mus. Oriental I242(I) (Catalogue, No. 491) єстınapoc(?). éqбеебoee 'mighty'
 strangely atrothc. сејоүад.
(25-41) Paris Copte 43, 44 (The Paris Scalae, Vat. copt. 7I; ed. Kircher in Lingua Aegyptiaca Restituta, 1643):9 seventeen Bohairic examples in Chapter 25 (pp. 23I-4), with occasional variants and parallels quoted by Crum in the Dictionary under the relevant headings. Note especially


[^68]

(e) A co-ordinated substantival unit.

2. This phenomenon recalls the use, in classic and post-classic sources, of eесстте, пєєе-, пєе- as the glose (logical subject) component in a 'Cleft Sentence' ('It is . . . who/that . .' ). ${ }^{10}$ This is probably the case of the epistolary opening-formula X neeqceas $\overline{\mathrm{n}}-\mathrm{Y}^{\prime}$, a collateral variant of (the also more literary) X netcqar and X -ееседar, ${ }^{1 \mathrm{I}}$ as well as other epistolary and legal formulas. The circumstantial glose-form has a highly interesting distribution also in the literary idiom, and can be traced back to pre-Coptic Egyptian. ${ }^{12}$
3. Not to be overlooked in this context is the adverbial use of the self-same circumstantial present, ${ }^{13}$ which may be related to its substantival function, although the exact connection is to me as yet obscure (the Greek participle may be a clue). Cases like our ex. (2) make a translation-transference from the so-called adverbial accusative very plausible, as do also (a) the fact that this function-form is limited to the 3 rd person masc. sing. and (b) the lack of any formal means of syntactical inclusion in the two first groups exemplified above.
4. The adnominal circumstantial (see n. 3) which is the only verb-form adnominal to a non-determined substantival kernel, is in my opinion not directly connected with the function here discussed; it is rather a case of localized neutralization of the relative: circumstantial opposition, and cannot account for the substantival function, unless we assume an ellipsis of an indefinite antecedent (oๆa, (or) pweee or sim.): for this there is neither any ground nor any parallel, and it would be but a restatement, not a solution, of the problem. ${ }^{14}$ Nevertheless, the very existence of the above category (c), together with its statistical preponderance, seem to imply some connection with the adnominal circumstantial.
5. Functionally, this construction seems to stand on a still lower level of definition than that of пет-, which is, after all, in many syntactical regards treated not as a zerodetermined noun. In our сес由тее we really have a case of zero determination: in the syntagmatics of Coptic relative constructions, this means a zero antecedent.

[^69]
# THE SO-CALLED 'PLATINUM’ INCLUSIONS IN EGYPTIAN GOLDWORK 

By JACK M. OGDEN

Introductory note. Platinum and related metals are quite commonly associated with gold in alluvial deposits throughout the world. The gold recovery and working techniques used in antiquity were such that traces of these platinum metals could be retained in the final gold product, either as minute visible specks or forming a homogeneous solid solution with the gold, and their presence can be of value in considerations regarding ancient gold sources and production methods. The writer is at present engaged in a study, including analysis, of a wide range of ancient goldwork that contains platinum metal traces, including items of Sumerian, Egyptian, Greek, and Roman origin, and the full results of this research will be published in due course. ${ }^{1}$ The following is a brief review of the findings that relate to Egyptian goldwork.

Since the end of the last century such authorities as Maspero, Petrie, Williams, and Lucas have called attention to the small bluish-grey metallic inclusions that are visible in some ancient Egyptian goldwork but their identification of these specks have been far from uniform. ${ }^{2}$ Maspero simply called the inclusions 'platinum', whereas Williams more cautiously refers to the visible specks in a couple of dozen of the gold items in the collection of the New York Historical Society as being of the 'platinum metals', this being a term for the chemically related platinum, palladium, osmium, iridium, ruthenium, and rhodium. Petrie is more specific and tells us that the 'scarab of Mu-en-ab [Twelfth Dynasty] contains the first specimen of osmiridium from Africa'. Osmiridium is one term for a natural alloy of osmium and iridium. Petrie similarly describes other inclusions in ancient Egyptian gold.

This identification is doubted by Lucas who, on the basis of simple non-destructive tests, says that 'it is far more likely that they [the specks] are largely platinum'. It is uncertain how Petrie arrived at his identification, but from a metallurgical point of view he would seem to be nearer the truth than Lucas. The solubilities of the various platinum metals in gold (containing variable silver and copper contents) are far from fully understood, but platinum itself is readily soluble in gold whereas the naturally occuring osmium-iridium alloys are known to be insoluble; indeed writing within ten years of the California gold rush the American mineralogist Dana ${ }^{3}$ said that 'iridosmine [another term for a natural osmium-iridium alloy] is common with the gold of

[^70]California, and injures its quality for jewellery. It is proposed to separate it by keeping the gold melted for a short time to allow the grains of iridosmine to settle.'

Apart from Lucas's tests the only previous analysis of the grey metallic inclusions in Egyptian gold known to the writer was carried out by Notton at the research laboratories of Johnson Matthey \& Co. at Wembley. A section and microprobe analysis was made of a New-Kingdom gold button, primarily to supply data for an article dealing with ancient soldering techniques, ${ }^{4}$ but the full research report (unpublished) mentions small inclusions in the gold which proved to be a mixture of osmium, iridium, rhodium, and ruthenium. Platinum seems to have been absent. ${ }^{5}$

Over the last couple of years a number of further electron microprobe analyses have been carried out at various laboratories ${ }^{6}$ on the present writer's behalf and it would now seem that the inclusions in Egyptian goldwork, as well as those in much other ancient jewellery, are basically composed of natural alloys of osmium and iridium, not infrequently with ruthenium and some rhodium, occasionally a small trace of platinum, but seldom if ever any palladium. These inclusions would therefore appear to be very much the same as the osmium-iridium alloy grains found in many alluvial gold deposits including those of California, the Witwatersrand in South Africa, the river Laba in N. Caucasus, the Urals, Tasmania, and parts of South America including Colombia, and different from the basically iridium platinum alloy inclusions that Young has identified in some goldwork, including Lydian gold coins, and which have been taken to indicate the presence of a natural iridian platinum occurrence with gold in the famed Pactolus deposits of Western Turkey. ${ }^{7}$

It is unfortunate that with our present state of knowledge we cannot be specific about the sources of the Egyptian 'platiniferous' gold, though since a very high proportion of ancient Egyptian goldwork (in the writer's experience about 75 per cent) contains visible platinum metal specks, from those visible to the naked eye down to those only discernible after lengthy microscopic examination we can believe that the general source lay within Egypt or to her south, where there was a very great wealth of gold, rather than in Asia Minor or other Mediterranean countries. The very presence of the platinum metals with gold limits us to alluvial rather than vein gold deposits as the platinum metals do not associate with gold in veins but, on account of their high density and their not combining with other substances during erosion, they congregate with gold amongst river sands and gravels. It is just this same high density and inertness that prevents the removal of the platinum metals from gold during normal washing and separating procedures.

[^71]Platinum metals have not been reported as occurring with gold in Egypt but Mertie's ${ }^{8}$ mention of a minor Egyptian platinum occurrence and (unless one and the same) the recording of platinum on the Isle of St. John in the Red Sea ${ }^{9}$ suggest that some trace of platinum metals within the huge auriferous region of Egypt would not be unexpected. According to the Geological and Mineral Resources Department of the Ministry of Mines at Khartoum ${ }^{10}$ platinum metals have not yet been discovered at all in the Sudan and certainly neither Mertie nor Whiteman ${ }^{11}$ makes any reference to a Sudanese occurrence of the platinum metals, but a century and a half ago Cailliaud, ${ }^{12}$ recording his travels in the Sudan, describes 'L'or platinifère jaune-grisâtre' in the region of Mt. Taby or the Qamamyl (possibly in both areas as he is a little ambiguous). Certainly the presence of platinum metals in either of these regions could be suspected on purely mineralogical grounds by the known presence of chromite and magnetite, frequent associates of the platinum metals. Cailliaud's statement is further supported by the fact that if we cross the border into Ethiopia we find no doubt about the gold of the river Birbir containing grains of the platinum metals and these have been extensively studied and analysed. ${ }^{13}$ Platinum metals, though less fully studied, also occur in the Didessa Valley which flows into the Blue Nile.

Just how far the Egyptians reached in their search for gold is uncertain, but the apparent lack of hieroglyphic inscriptions and general mining detritus south of about the 18th parallel might indicate that more southerly gold mining was limited to panning by the local natives. Though primitive by Egyptian standards, the Sudanese negroid tribes can hardly have been unaware of the gold within their territories and it can only have been a matter of time before some of this gold reached Egypt. It is interesting that the wall-paintings that appear in Egypt from about the mid-Eighteenth Dynasty show distinctly negroid types carrying gold as dust and cast rings-exactly the two forms in which the native panners of Walega and the Bertat have traded gold even in recent times.

The sheer quantity of the platiniferous gold used by the Egyptians must largely represent direct Egyptian exploitation of gold deposits rather than the somewhat unreliable trade or tribute from the African interior, whilst on present evidence there seems to be no record of platinum metal inclusions in Egyptian gold work pre-dating the Middle Kingdom, the period at which the exploitation of the gold fields to the south of the First Cataract is believed to have begun. Taken in conjunction, these two facts could point to the extensive gold deposits of the Wadi Allaqi and the Nile south of Wadi Halfa as being the main source of the platiniferous gold to the Egyptians at least until well into the first millennium b.c., but any definite conclusions must await

[^72]

Fig. I. Sketch-map of the gold-bearing regions of the Sudan and Ethiopia. All the gold-mining areas shown north of the 18 th parallel show evidence of ancient working.
a detailed mineralogical study of the areas concerned. Possible correlating evidence could be seen in the suggestion of various writers that the placer gold deposits of the Eastern Desert ('gold of Coptos') would probably have been all but exhausted by about the beginning of the second millennium b.c. and in what is possibly to be taken as a garbled tradition of platinum metals being found with gold in the Nile area between Philae and Meroë in classical literature. ${ }^{14}$

The Egyptians also obtained gold from the elusive land of Punt, a fact which backs up a belief in the early native exploitation of gold in Africa to the south of the 18th parallel, but whether or not the Punt gold, though certain to have been alluvial, contained traces of the platinum metals is at present unknown. From the point of view of the ready availability of placer gold deposits alone an identification of the Eritrean coast with Punt is not impossible and it might be of interest to say that although the platinum metals have not been reported in Eritrean gold, antimony has and this might well point to an origin for the gold used in the construction of the Second-Dynasty sceptre of Khasekhemui with its small antimony content which has puzzled many and led to suggestions of Second-Dynasty Egyptian trade with countries as far away as Transylvania. ${ }^{15}$

The osmium-iridium alloy inclusions found in Egyptian and other ancient goldwork as well as the grains of a similar alloy found in many parts of the world are of small size, about 0.08 mm probably being about average though many are many times smaller, and specimens of up to about 3 mm are recorded. In shape these inclusions are frequently either tabular or of angular forms that retain, to varying extent, a semblance of hexagonal shape (pl. XXIII, b). It would seem unlikely that the platinum metal grains were noticed during gold recovery although a sharp-eyed craftsman might well have been aware of their presence in the final gold product. However, in many of the world's deposits, including those of Birbir, we find some osmium-iridium alloy grains that are relatively thickly coated in what is predominantly platinum to form larger nuggets that can be, and have been, easily separated from the associated gold. Such composite platinum metal nuggets seem the most likely raw material for the inlay strip described by M. Berthelot:16 ' $D$ 'après l'étude approfondie que j'en faite, sa résistance aux réactifs surpasse non seulement celle de l'or, mais celle du platine pur. Elle accuse l'existance d'un alliage complexe, renfermant plusieurs des métaux de la mine de platine, sans préjudice d'un peu d'or.' The composite platinum nuggets, like those from Birbir, could have been hammered into a mass or flattened into a strip in much the same way as silver-rich electrum or even iron, with which they were quite possibly confused. The osmium-iridium grains are practically unworkable, even today. Other examples of the use of what is basically platinum, like Berthelot's strip, have not been confirmed from Egypt, though Petrie ${ }^{17}$ mentions a comparable inlay and also describes a ring of a 'hard white metal', a description that could hardly apply to silver,

[^73]electrum, tin, or lead. The reference to platinum grains being found in Egyptian tombs ${ }^{18}$ is probably to be attributed to a misunderstanding regarding the platinum metal inclusions in gold, and the presence of platinum in gold, forming a homogeneous alloy with the gold, as in some Iron Age European goldwork, has not been proved in any analysis of Egyptian gold.

The osmium-iridium alloy grains in ancient gold are extremely hard; they will scratch rock crystal, and so, even if not seen by the goldsmith, their presence could have affected his work particularly in the beating of very thin foil. Certain effects resulting from the presence of osmium-iridium specks are of interest in a study of ancient goldsmithing techniques and in considerations of authenticity; these will be dealt with elsewhere, but examples include the fact that wires produced by means of some drawing process can result in a definite alignment of inclusions and that, in the writer's experience, some cast items have the majority of the inclusions in that part of the item that would have been in the lower part of the mould. As we have seen above, the osmium-iridium grains will sink in molten gold. The hardness of the inclusions will also cause them to stand proud of the surrounding gold after polishing or wear unless very hard abrasive is used (pl. XXIII, e-f). The use of refining for gold in Egypt in dynastic times requires much further research, but refining could have some effect on any platinum metal present with the gold. Amalgam-refining was probably not introduced into Egypt before the end of dynastic times but cupellation and cementation processes could well have been used on at least some occasions; the former method, only removing base metals, would have little effect on any members of the platinum family present and both ancient and modern evidence would tend to suggest that the cementation process, using salt, would have little if any effect on the over-all presence of platinum metals, although it can be noted that salt at normal cupellation temperatures could affect some osmium-iridium alloys. The strangely black coloration of the platinum metal specks in the heavy gold signet ring dating to about 600 b.c. and formerly in the collection of the Duke of Northumberland, ${ }^{19}$ might well be evidence for the often suggested use of some salt process to impart an outward semblance of high purity to a finished gold item. Instances from various sources are given in pl. XXIII, a-g.

All these effects, of working techniques and refining, are of relevance in the determination of the authenticity of so-called ancient gold items, for although Williams calls the platinum metal inclusions 'reassuring', this is far less true today and osmiumiridium alloys (and other platinum metal alloys?) have been found in various gold items condemned on stylistic grounds as fake, perhaps in particular in those emanating from Turkey. Much more work is obviously needed on the platinum metal inclusions in gold work, modern included, and hopefully with the help of metallurgists, mineralogists, and the ever-improving analytical techniques available a fuller understanding

[^74]will be reached. We can also urge that future excavators and cataloguers follow the lead of Williams and others and note the occurrence of platinum metal inclusions in items they publish, for it is seldom that important trace elements occurring with gold can be detected by visual, non-destructive means alone.

## Appendix

Of the platinum metal inclusions shown in plate XXIII those in (c), (d), and (e) were subjected to microprobe analysis with the following results.
(c) (Egyptian ring shank)-Iridium, osmium, and platinum present in roughly a ratio of $2: 1: \frac{1}{2}$.
(d) (Leech earring, ist mill. в.c., Asia Minor)-Osmium and iridium in approximately equal proportions, possible traces of platinum, but no rhodium or ruthenium detected.
(e) (Roman gold earring)-Osmium and iridium in about equal amounts plus traces of rhodium and ruthenium.
For comparison it can be said that the osmium-iridium alloy particle contained within a predominantly platinum nugget from the river Birbir in Ethiopia was composed of osmium and iridium roughly in proportions of $3: 2$ plus traces of ruthenium. (Otteman and Augustithis, op. cit. 271).

The composition of the gold of the items that contain platinum metal particles varies enormously; the items that Williams records as containing such particles varied in composition from 40 per cent88.75 per cent gold and the gold of the ribbed earring in plate XXIII (a) had a composition of $72 \cdot \mathrm{I}$ per cent gold; 23.5 per cent silver; 4 per cent copper; and 0.4 per cent iron.

a. Gold ribbed ear-rings, I8th Dynasty, actual size

c. Platinum metal inclusion on twisted wires of Egyptian ring shank. Late 2nd mill. B.c. $\times 100$
d. Measle-like platinum metal inclusions on a 'leech' ear-ring from Asia Minor. Early ist mill. b.c.

$b$. Detail of $a$. showing single platinum metal inclusion (pale colour), approx. $\times 30$


$e$. Hard platinum metal inclusion stands proud of single gold granule decorating a Roman gold ear-ring

$f$. Platinum metal inclusion revealed by attrition of surrounding gold due to its position on inside of suspension loop of a Byzantine gold pendant
g. Gold ring from Kafr 'Ammâr, Egypt, with platinum metal inclusions (arrow shows one). Dia
bezel, 2.3 cm

## Egyptian antiquities acquired in 1974 by museums in the United Kingdom

## Edited by JANINE BOURRIAU

The proposal to prepare as a regular feature of this Journal an annual bulletin of acquisitions by museums has been prompted by the accounts of acquisitions of Greek antiquities which appear regularly in Archaeological Reports, published by the Society for the Promotion of Hellenic Studies and the British School at Athens. In our case, the purpose is three-fold: firstly, to provide museum curators with the means of bringing their acquisitions to the attention of other Egyptologists, since not all museums publish an annual list of accessions, and some only acquire Egyptian antiquities at irregular intervals. Secondly, where accessions are published, to draw together the information scattered in separate annual reports and journals; and thirdly, to notify the existence of minor objects, which may never justify full publication, but are of interest to scholars.

This first bulletin, which is in the nature of an experiment, lists the accessions in 1974 of the Ashmolean Museum, the Birmingham City Museum, the British Museum, the Fitzwilliam Museum, and the Royal Scottish Museum. Of necessity, some selection of acquisitions has been made by the editor, and the classes of material which have been omitted are amulets, pendants, armour scales, and organic remains, such as bread. In the case of the British Museum, the selection was made by Mr. W. Vivian Davies, Assistant Keeper in the Department of Egyptian Antiquities. If the bulletin continues, the number of museums who participate can be expected to vary according to the opportunities which have arisen for making acquisitions in the past year. Eventually it is hoped that museums with no Egyptologist on their staff will be encouraged to send a notice and a photograph of an accession to the editor. For practical reasons, it has been agreed to present the bulletin in the form of a list giving the basic information which can be provided for each object without undertaking further research. Names and titles are given in English, but an effort has been made to illustrate as many objects as possible, especially those with inscriptions, in photographs. The items are listed in chronological order and measurements are given in centimetres. Anyone interested in providing contributions for the third bulletin which will cover acquisitions made between January and December 1976, is asked to contact the editor at the Fitzwilliam Museum, Cambridge, before June 1977.

In the preparation of this first edition, my thanks are due to the following scholars who have supplied lists of accessions and/or contributed to the discussion of the format which the bulletin might have: Mr. John Baines, Mrs. Joan Crowfoot Payne, Dr. Rosalie David, Mr. W. Vivian Davies, Dr. Dorothy Downes, Mr. T. G. H. James, Dr. Jaromír Málek, Dr. Roger Moorey, Mr. R. V. Nicholls, Mr. John Ruffle, Miss Jennifer Scarce, Professor H. S. Smith, and the Editor of $\mathfrak{f} E A$.

## Predynastic Period

r. The 'Pitt Rivers Knife', flint knife with ivory handle carved with figures of animals and birds, British Museum $685^{12}$ (pl. XXIV, 1). Length $26 \cdot 3 \mathrm{~cm}$. Said to have come from Sheikh Hamada, near Sohag, in Upper Egypt. Late Predynastic Period. See (selective bibliography only) Petrie, Naqada and Ballas (1896), 51 and pl. 77 (upper); De Morgan, Recherches il (1897), 267, fig. 865; Bénédite, $\mathcal{f} E A 5$ (1918), 227, fig. 1; $I L D$ Dec. 17, 1955, 106ı.
2. Slate palette, Birmingham 56'74. Diameter 14.0 cm . Provenance unknown.

## Early Dynastic Period

3. Six pots, Ashmolean 1974. 172-7 (pl. XXIV, 2). Forms, Prehistoric Egypt Corpus, W62, W62-3 (both with purple lattice decoration), W55, W50, $\mathrm{L}_{47} \mathrm{~A}, \mathrm{~L}_{47}$ A. Heights respectively, 257 , $27 \cdot 1,29 \cdot 0,22 \cdot 4,35 \cdot 4 \mathrm{~cm}$. El-Kâb, from excavations of Sayce and Somers Clarke, 1901-4. Protodynastic.

## Old Kingdom

4. Two blue faience plano-convex tiles, Roy. Scot. Mus. 1974.90-I. $3.5 \times 5.7 \mathrm{~cm}$. Saqqâra, Step Pyramid of King Djoser. Third Dynasty.
5. Nine fragments of copper ore, slag, and charcoal, Roy. Scot. Mus. 1974. 115-23. From upper manufactory at Buhen, surface finds in 1963, EES excavations.
6. Limestone statue fragment, Roy. Scot. Mus. 1974.38. Part of left-hand of a man, painted light red. Length 6 cm . Saqqâra. EES excavations (G7-20).

## Middle Kingdom

7. Greywacke royal head, possibly from a small sphinx, Fitzwilliam E.2.1974 (pl. XXIV, 3). Height 8.4 cm . Provenance unknown. Early Twelfth Dynasty, possibly reign of Sesostris I. See Annual Report of the Syndicate and Friends of the Fitzwilliam (1974), 7, pl. I.
8. Quartzite sphinx of Sesostris III, headless with remains of cartouche of Hyksos King Apophis on right shoulder, British Museum 1849. Height $52 \times 105 \mathrm{~cm}$. Provenance unknown. Twelfth Dynasty. See Münzen und Medaillen, A. G. Basel, Auktion 46 (April 1972) Werke Ägyptischer Kunst, 23 (34), pls. 9 and ıo; Christie's Sale Catalogue, July 11, 1974, 80 (442), pl. 24.
9. Pot, Ashmolean 1974.178. Form, Harageh, Middle Kingdom Pottery Corpus 49G. Height 10.7 cm . El-Kâb, from excavations of Sayce and Somers Clarke, 1901-4.

## New Kingdom

10. Steatite scarab commemorating the marriage of Amenophis III to Gilukhepa, daughter of the King of Mitanni, British Museum 68507 (See pl. XIII, 2 above). Length 7.5 cm . Provenance unknown. Eighteenth Dynasty. See Brugsch, $Z \ddot{A} S$ ı 8 (1880), 8ı-7; and the remarks by Mrs. C. Blankenberg above, pp. 78 f.
II. Quantity of silver fragments, British Museum 68503 . They comprise one roughly shaped ingot, approx. 20 rings, armlets and parts of same, a number of small pieces from cups and a few shapeless lumps. Length of ingot 21.0 cm . Amarna. Eighteenth Dynasty. See Frankfort and Pendlebury, City of Akhenaten, II, 60-1, pl. 43.
11. Pot, Ashmolean 1974. 333. Form, Riqqeh and Memphis, vi, 18-19 Dynasty Corpus, 78K, containing sticky black substance with wad of textile embedded. Height 9.5 cm . Egypt, exact provenance unknown. Eighteenth Dynasty.
12. Steatite scaraboid, glaze lost, Ashmolean 1974. 169 (pl. XXIV, 4). On back, crouching figure of man with side-lock. $1.4 \times 0.9 \times 2.0 \mathrm{~cm}$ (height). Egypt, exact provenance unknown. Nineteenth-Twentieth Dynasties.
13. Wooden shawabti-figure, Ashmolean 1974. 170 (pl. XXV, r). Covered with white wash, details in black, red, blue, green and yellow; inscribed for Amenmose, Chief Steward of Amūn, with incomplete shawabti formula. Height 20.6 cm ; Egypt, exact provenance unknown. Ramesside. See below, Jaromír Málek, 'Two recent minor accessions of the Ashmolean Museum', pp. 148 ff .
14. Limestone ostracon with brush drawing in red and black of a prisoner, arms bound above his head, British Museum $6851 \mathrm{I} .13 .0 \times 1 \mathrm{I} 5 \mathrm{~cm}$. Provenance unknown. Nineteenth-Twentieth Dynasties.
15. Alabaster toilet spoon, Roy. Scot. Mus. 1974.69 with hemispherical bowl, and handle in the form of a thick, flat stalk surmounted by a lotus flower. Unfinished, Length 12.5 cm . Provenance unknown. Probably New Kingdom.
16. Wooden statuette of Ptah, Roy. Scot. Mus. 1974.36 standing mummiform wearing a long beard and holding a $w_{3} s$-sceptre. Height 20 cm . Saqqâra EES excavations (H5-510). New Kingdom(?).
17. Blue glazed faience seal amulet with black details, and frog back, Ashmolean, 1974.366 (pl. XXIV, 5) $1 \cdot 6 \times \mathrm{I} \cdot 0 \times \mathrm{I} \cdot 2 \mathrm{~cm}$ (height), Provenance unknown. New Kingdom.

## Third Intermediate Period

19. Bronze statuette of kneeling king, probably Taharqa, Fitzwilliam E.3.1974 (pl. XXV, 2). Traces of gold inlay on head, kilt, and arm bands. The original double uraeus has been hammered flat, and a single uraeus incised in its place. Height 6.6 cm . Egypt, exact provenance unknown. Twenty-Fifth Dynasty. See Sotheby's Sale Catalogue, April 29, 1974, 51 (233), pl. 28; Annual Report . . . Fitzwilliam (1974), 7, pl. 1.
20. Wooden stela, Ashmolean 1974.17I (pl. XXVI, i). Covered with white wash, details in red, blue, green, yellow, and black. Inscribed for the lady Diēsiḥebsed, Private Songstress of Amūn, daughter of Irte[rau], Scribe, Chamberlain of the Divine Adoratrice and Udjarenes. ${ }^{1}$ Height 36.5 cm . Egypt, exact provenance unknown. Twenty-fifth-Twenty-sixth Dynasties.

## Late Period

21. Red jasper inlay, Roy. Scot. Mus. 1974.19I (pl. XXVI, 2). A man's face in profile, looking left, the eye with cosmetic line and eyebrows excavated for secondary inlays. From a shrine or a piece of furniture; probably represents the Pharaoh Apries. Height 2.4 cm . Provenance unknown. Probably reign of Apries or Amasis.
22. Blue-green glazed faience, ushebti-figure, Ashmolean 1974.368 (pl. XXV, 3). Incised inscription for Administrator of the Treasury Ptahhotep, born of Harenpe-tesnakht. Height 17.8 cm . Bought, Christie's, presumably from 'Campbell's Tomb', Gîza. Temp. Darius I. See below, Jaromír Málek, 'Two recent minor accessions of the Ashmolean Museum', pp. 148 ff .
23. Bronze statuette of Osiris, with atef-crown, Ashmolean 1974.334. Height with tang, 15.0 cm . Egypt, exact provenance unknown.
24. Bronze cat head, British Museum 68516 (pl. XXVII, 2). Height 18.0 cm . Provenance unknown.
25. Bronze situla, Roy. Scot. Mus. 1974.26, piriform, plain, with collar, circular lugs at opposite poles on the rim, peg at base. Height 14 cm . Saqqâra EES excavations ( $\mathrm{H}_{5}-\mathrm{I} 41$ ).
26. Bronze statue fragment, Roy. Scot. Mus. 1974.25, consisting of a rectangular plinth on which are the feet and part of the left leg of a striding male figure. Height $8.5 \times$ length $10.4 \times$ width 4.0 cm . Saqqâra EES excavations ( $\mathrm{H}_{5}-\mathrm{r} 66$ ).
27. Wooden statuette of Isis and Horus, covered with gesso and remains of gilding, Roy. Scot. Mus. 1974.3 I. Height $6 \cdot 8 \mathrm{~cm}$. Saqqâra EES excavations (H6-97).
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28. Wooden statuette of Isis and Horus, Roy. Scot. Mus. 1974.32. Height 9.3 cm . Saqqâra EES excavations (3513-2).
29. Wooden reliquary with traces of gilding, Roy. Scot. Mus. 1974.33, 33A (pl. XXVII, r). Osiris seated on a block throne against a hollow obelisk-shaped container holding a phallus-shaped bundle (A). Height $1 \mathrm{I} \cdot 2 \mathrm{~cm}$. Saqqâra EES excavations (H6-72).
30. Wooden reliquary in the form of Osiris, Roy. Scot. Mus. 1974.34. Length 10.2 cm . Saqqâra EES excavations ( $\mathrm{H}_{5}-158$ ).
31. Wooden statue of a man wearing a pleated kilt kneeling to present a statue of Osiris, Roy. Scot. Mus. 1974.37 (pl. XXVI, 4). Badly damaged. Height 20.6 cm , Saqqâra EES excavations (H5-526).
32. Pottery lid of a slipper coffin, Birmingham 5I'74. Man's face modelled in relief and painted. Height 60 cm . Provenance unknown.
33. Blue faience bowl, Roy. Scot. Mus. 1974.28. Restored. Diameter $14.8 \mathrm{~cm} \times$ height 5.6 cm . Saqqâra EES excavations ( $\mathrm{H}_{5}-684$ ).
34. Fragment of blue-green and dark blue faience plaque, Roy. Scot. Mus. 1974.29. 8.3 $\times 6.4 \mathrm{~cm}$. Saqqâra EES excavations (H6-ri8).
35. Pale blue glass inlay, Roy. Scot. Mus. 1974.124. Cast in the form of a left hand, shown with fingers extended. Length 2.9 cm . Provenance unknown. Probably Late Period.
36. Grey-green schist heart scarab. Roy. Scot. Mus. 1974.39 (pl. XXVI, 3). The underside in the form of the heart sign, and inscribed with chapter $30 B$ of the Book of the Dead. Length 4.2 cm . Tell el-Farâcîn EES excavations. Late Period (?).
37. Limestone trial piece with representation of a ram-headed deity, British Museum 68508, $16.0 \times 12.5 \mathrm{~cm}$. Provenance unknown. Ptolemaic Period.
38. Ostracon, inscribed in Greek, Birmingham 57'54; max. diameter in cm. Provenance unknown. Ptolemaic Period.
39. Papyrus document, Ashmolean 1974.562 (pl. XXVII, 3). A Penthemeros-certificate for Herieus, for work on the dike of the Thicket of the Arabs at Socnopaei Nesus. Height 7 cm . Egypt, Socnopaei Nesus. A.d. 146. See below, Revel Coles, 'An unpublished Penthemeros-certificate in the Ashmolean', pp. i5 If.
40. Linen shroud with full length representation painted in tempera, of a young woman holding a cup and garland. British Museum 68509 (pl. XXVII, 4) 14.5 (height) $\times 60 \cdot 0 \mathrm{~cm}$. Provenance unknown, 4 th century A.D.

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## Two recent minor accessions of the Ashmolean Museum

'The two small objects with which I am here concerned were acquired by the Ashmolean Museum in Oxford in 1974. I am grateful to Mrs. Joan Crowfoot Payne and Dr. P. R. S. Moorey of the Department of Antiquities for affording me all facilities when I was preparing this note and to Miss Kathleen Lorimer for reading through the text of it.

The shawabti-figure of Amenmose. No. 1974.170. See pl. XXV, I and fig. i.
This was brought back from Egypt by the Revd. Fort of Lower Heyford in the early nineteenth century, and was presented by Miss Dorothy Dew. It is of wood covered with white wash, and is 20.6 cm high, 5.6 cm wide at the elbows, and its maximum thickness is 3.6 cm . It belongs to the

## TWO RECENT MINOR ACCESSIONS

mummiform type of shawabtis，with arms modelled in relief crossed right over left on the chest， holding two rather fragile－looking hoes added in paint．The wig of the so－called＇ad revers＇type is， however，that of a living person．A wesekh－collar of seven rows of beads is painted over the chest． A large broad bag on two straps is painted across the shoulders of the figure with a yoke with pots below it．The lowest part of the shawabti starting just above the feet is devoid of any text and carries four painted broad vertical bands．A wide criss－crossed strip extends from the waist down－


Fig．I
wards at the back．The piece thus belongs to a distinct group of shawabti－figures of which other representatives have been known for some time（e．g．Oxford，Ashmolean Museum 1874．243， 1933. 614，1962．854，Brussels，Museés Royaux，E．5341，and several in London，University College Museum）．

The preservation of the shawabti is very good．Most of the bright colours remain；brownish yellow：the whole body with the exception of the feet and the back above the waist，as well as the background of the bag and the strip below；red brown：the face and hands，the framing－lines separating the text，the bands in the area of the feet，and the outlines and the inner pattern indicating the fabric of the bag and the strip below；black：apart from the outlines of eyes，eyebrows and hands which are plastically modelled，the wig，the hoes，the bracelets，and the series of dots flanking the strip at the back；blue and green：bands of thickly laid paint indicating the collar．The figure is accompanied by a piece of cloth in which it is said to have been originally wrapped．

The text contains the first four phrases of the 3 rd version of the usual shawabti－formula，also known from Chapters 6 and 151 of the Book of the Dead and Spell 472 of the Coffin Texts，arranged in five lines of neat cursive writing in black ink．The signs are about 1.2 cm high with the framing－ lines $\mathrm{I} \cdot 5-\mathrm{I} \cdot 9 \mathrm{~cm}$ apart．

No other monument of this Amenmose is known to me．The earliest attested holder of his title imy－r pr we n＇Imn，＇Chief Steward of Amūn＇，is Senmut in the reign of Hatshepsut．From then on

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the title sporadically occurs throughout the whole New Kingdom (Helck, Materialien, 8ir). It is, however, not clear whether there was a difference between this and the more common imy-r pr $n$ 'Imn, 'Steward of Amūn'. Amenmose did not necessarily have to be attached to the Great Temple of Amen-Rē at Karnak, but might have been connected with another smaller sanctuary of Amūn elsewhere (Kees, Priestertum, 77). The provenance of the shawabti thus remains uncertain.

Speleers (Les Figurines funéraires égyptiennes, pl. 24) and Petrie (Shabtis, pl. 29 [75-6, 78]) suggested Dynasty 18 and late Dynasty 18 respectively as the dates of the comparable shawabtis.


Fig. 2
This, however, seems to me arguable, particularly on typological grounds, on account of the large bag across the shoulders of these figures. I should prefer a Ramesside date for the shawabti of Amenmose.

The ushebti-figure of Ptaḥhotep. No. 1974.368. See pl. XXV, 3 and fig. 2.
This was bought at Christie's (see Christie Sale Cat. July io-11, 1974, No. 387) where another ushebti was also offered for sale (ibid. No. 386; a photograph now in Small Sculpture from Ancient Egypt, Charles Ede Ltd. [1975], No. 47). It is made of faience of brownish colour at the front and of bright blue-green colour elsewhere. The figure is 17.6 cm high, 4.6 cm wide at the elbows, its maximum thickness is 3.0 cm , and its base measures 2.9 cm (front) by 3.8 cm (depth). It belongs to the mummiform type with all the characteristic features of Late Period ushebtis, the striated wig falling in two lappets on the chest, the false beard, the arms crossed on the chest, the rectangular base and the back pillar on which the wig seemingly rests, the pick and hoe, and the small rectangular bag over the left shoulder with its cord held in the right hand. The back pillar of this ushebti is not perfectly straight.

Apart from a few surface fissures the preservation is very good.
The incised text consists of nine lines of the 6th (Saite) version of the usual formula and, although rather indistinct in places, can be read without problems. The signs are about 0.7 cm high with the framing-lines about 0.9 cm apart.

The owner of the ushebti, Ptahhotep, has the title iry pr-hd, 'Administrator of the Treasury', but the name of his mother Harenpe-tesnakht leaves no doubt about his identity with the wellknown 'Overseer of the Treasury' (Bothmer et al., Egyptian Sculpture of the Late Period, 77). He
is dated in the reign of Darius I by the stela (Louvre IM.1244; N. 677) dedicated to one of the three Apis-bulls which died during the reign of this King, probably that of year 34. The Ashmolean Museum has another important monument of Ptahhotep, the basalt lid of his sarcophagus (No. 1947.295). It is likely that this ushebti also comes from tomb LG 84 at Gîza (the so-called 'Campbell's Tomb') where Ptaḥhotep was buried in one of the subsidiary burial chambers (PM iii${ }^{2} .290$ ).

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## An unpublished penthemeros-certificate in the Ashmolean ${ }^{1}$

A penthemeros-certificate of standard form, straightforward except for an unexplained puzzle in the reading at line 5 . This class of texts has been studied by P. J. Sijpesteijn, Penthemeros-Certificates in Graeco-Roman Egypt (= Papyrologica Lugduno-Batava, vol. xiI: Leiden, 1964); also Aegyptus 52 (1972), 141-5 I.

The small rectangle of papyrus is complete except for some worm-holes. The hand, along the fibres, is a rapid cursive employing frequent abbreviations. The back is blank. A kollesis runs down the centre of the piece. See pl. XXVII, 3.
P. Ashm. inv. 1974.562.

Socnopaei Nesus
$9.5 \times 7 \mathrm{~cm}$.
July 26, A.D. 146

Títov Ai入iov Aठ[pıavo]̂ A Av $\tau \omega \nu i v o v$
$\Sigma_{\epsilon} \beta a \sigma \tau o \hat{v} E v \dot{u} \sigma \epsilon \beta o \hat{v} s . \epsilon \iota \rho \gamma(a \sigma \tau \alpha \iota) \dot{v} \pi \dot{\epsilon} \rho \chi \omega(\mu \alpha \tau \iota \kappa \hat{\nu} \nu)$

$5{ }_{\epsilon}^{\epsilon} \omega(s) M \epsilon \sigma o \rho \eta \eta^{\beta} \epsilon \nu \epsilon \chi \rho \eta \ldots \chi \bar{\omega}(\mu a \tau \iota)$
$\Delta \rho v(\mu \circ \hat{v}) \not{ }^{\prime} \rho \alpha \dot{\beta} \beta \omega(\nu) \Sigma o \kappa \nu o(\pi \alpha i o v) N{ }^{\prime}(\sigma o v)$

$\mu \eta(\tau \rho o ̀ s) T \epsilon \sigma \epsilon \nu o(v ́ \phi \epsilon \omega s)$.
'The ninth year of Imperator Caesar Titus Aelius Hadrianus Antoninus Augustus Pius. Herieus, son of Harpagathes and Tesenouphis, and grandson of Herieus, has worked on account of the dikework of the same 9th year from 28th Epeiph to 2nd Mesore . . . on the dike of the Thicket of the Arabs at Socnopaei Nesus.'

4-5. The dates represent July 22-6, A.D. 146 .
5. The middle of this line is puzzling although the writing is mostly intact. The same collocation $\epsilon \nu \in \chi \rho \eta$ (but not the uncertain traces following) recurs in P. Grenf. II 53a 5, the original of which has been examined by myself in the Bodleian Library: the text there may now be transcribed $\epsilon \nu \epsilon \chi[\rho] \eta$. ${ }^{2}$ Unfortunately this second example does not bring us much nearer a solution, apart from indicating that $\epsilon \nu \in \chi \rho \eta$ should be interpreted on its own. Initial $\epsilon \nu$ may be $\epsilon \nu$; a preposition is desirable at any rate, and should not be sought in the traces following $\epsilon \nu \in \chi \rho \eta$ since (as said) these do not recur in P. Grenf. II 53a. Form of eta may well indicate an abbreviation, in both texts (cf. $N \eta^{\prime}(\sigma o v)$ in each text), although the form of eta in $M \epsilon \sigma o \rho \eta^{\prime}$ (both texts) is not very different.

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1. The 'Pitt Rivers Knife', flint and ivory, British Museum, $\mathbf{I}$

2. Early Dynastic pottery from El-Kâb, Ashmolean Museum, 3

3. Royal head from a sphinx, greywacke, Fitzwilliam Museum, 7


## Plate XXV



1. Wooden shawabti of Amenmose, Ashmolean Museum, 14

2. Bronze statuette of Taharqa(?), Fitzwilliam Museum, 19
3. Blue-green glazed faience ushebti of Ptaḥḥotep, Ashmolean Museum, 22


r. Wooden stela of Diēsihebsed, Ashmolean Museum, $\mathbf{2}$

4. Grey-green schist heart scarab, Royal Scottish Museum, 36

5. Red jasper inlay, Royal Scottish Museum, 2I


6. Wooden reliquary in the form of Osiris, Royal Scottish Museum, 29

7. Papyrus document, Ashmolean Museum, 39


## OSIRIS AND THE MOON IN ICONOGRAPHY

By J. GWYN GRIFFITHS

There are two statements in Plutarch's De Iside et Osiride which connect Osiris with the moon. In the first ( $4 \mathrm{I}, 367 \mathrm{c}$ ) he says that those who combine physical ideas with conceptions drawn from astronomy consider Typhon to be the solar world and Osiris the lunar world. ${ }^{1}$ In 43, 368 c he refers to the festival called 'The Entry of Osiris into the Moon', but in the subsequent discussion, although he says that 'thus they locate the power of Osiris in the moon', he makes it clear that he envisages the expression as implying that Osiris as the sun has physical union with Isis as the moon. ${ }^{2}$ In my Commentary (p. 453 b. 3) I alluded briefly to the iconographical evidence. Reference should have been made to the unequivocal, albeit small, group of bronze figures which bear the name $W$ sir-ITh, thus combining Osiris with a moon-god.

Two such figures in the Cairo Museum were published by Daressy, Statues de divinités (CCG, 1906), $115-16$, nos. $38427-8$ and pl. 24. No. 38427 is from the Serapeum, Saqqâra and is dated by Daressy to the Persian period; a part of the head-dress is a lunar disc with a lunar crescent beneath (not horns, as Daressy and others used then to explain this feature); a wedjat-eye, symbolizing the moon, is figured in the middle of the disc, and an ibis-head is shown above, surmounted by an elaborate crown which is supported by ram-horns. The figure is seated and mummiform, and the inscription on the base seeks the giving of life by the god to one Pediese.荡通 is the writing of the god's name, and the reading may be $W \operatorname{sir}-T r h$ rather than Wsir-ITch-Dhwoty, the sign for Thoth being merely a determinative. Yet the name Irch may denote simply 'the moon' rather than the god of that name, so that the meaning would then be 'Osiris-lunar Thoth'. ${ }^{3}$ Daressy's no. 384284 is assigned by him to the Twenty-sixth Dynasty and is similar in several ways. Here the god's name appears on the base as 1 'life' but also 'health, joy, and a goodly long old age' for a certain Pedibastet. Comparable is the bronze figure at the Chicago Oriental Institute (no. 18046) reproduced by Hornemann in his Types of Ancient Egyptian Statuary (1951), no. 726 and described

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by T. G. Allen in his Handbook of the Egyptian Collection (1923), 103 (with the number 94.259 ). The wedjat-eye is again shown on the lunar disc and above this is an elaborate atef-crown with an ibis-head projecting from its centre. On the front of the base is an inscription $W \operatorname{sir}-\Psi-\underset{c}{ } d i$ Pimu.

The bronze figure in the Kestner Museum, Hanover, no. 2521, also bears the title $W$ sir- I ch, and Roeder ${ }^{5}$ argued that even here the second element denotes simply the moon, and not a divine name. Berlin no. $2452^{6}$ has the same inscription, and Roeder ${ }^{7}$ shows that it very probably stood originally on the base of Berlin no. 2458. A sixth indubitable instance occurs in the Ashmolean Museum, Oxford, no. 1971. 947. ${ }^{8}$ Dr. P. R. S. Moorey has published this in connection with an exhibition devoted mainly to Persian bronzes, ${ }^{9}$ and it may be useful to present it here with a new photograph, ${ }^{10}$ as well as one of the inscription on the front of the base. See pl. XXVIII, r-2. The figure has been assigned to the Late Era, but its provenance is unknown. Its measurements are: height (without the tang below), 18.5 cm ; greatest width (at elbows), 6.1 cm ; base, $3.5 \mathrm{~cm} \times 3.2 \mathrm{~cm}$; depth of tang, 1.7 cm . The workmanship is good and so is the condition of the metal, save that in parts it is discoloured with reddish spots. Dr. Moorey suggests that this may be due to the use of a restorative on a part of the crescent. The seated god is mummiform and holds the flail and crook-three Osirian features. The right hand holding the flail is placed above the left hand which bears the crook; this is the position ascribed by Roeder ${ }^{11}$ to Lower Egypt. To the LowerEgyptian tradition also belongs the way in which the crook is shown extending below the left hand to about half way down the seated thighs, and at an angle to its original direction. ${ }^{12}$ The lunar disc and crescent as well as the uraeus and beard conform with the composition of the other figures; here the detail shows some elaboration, as in the gold leaf which covers the whites of the eyes. On the front of the base the inscription

 sri sst. One might feel that $\Vdash_{1}$, in view of the diagonal strokes, should be read Dhwty rather than $\mathrm{It} h \mathrm{~h}^{13}$ and this would agree with the presence of the ibis as determinative in the two instances published by Daressy. It would be unwise to build much on one solitary reading, but it is significant that none of the figures bears a full writing as 'Irh, although such a writing occurs in a stela of the New Kingdom: see Maria Cramer, $Z A ̈ S ~ 72$ (1936), 95; cf. Lanzone, Diz. Mit. pl. 37.

[^78]Among related bronze figures in the British Museum ${ }^{14}$ there is a clear instance of the same type in no. $60738 .{ }^{15}$ It was acquired from the estate of R. P. Knight. No date or provenance is given. The height of the figure is 24 cm (including the base); its greatest width (at the elbows) is 6.5 cm . Above the head is a lunar disc on a crescent; the uraeus and pointed beard are present; so are the flail and crook, in the same LowerEgyptian mode as that shown on the Ashmolean figure 1971. 947. The figure is mummiform. A doubtful detail concerns the markings on the lunar disc: these are not very clear now, but the publication by Arundale and Bonomi shows a wedjat-eye
 $h t p$ (the writing on the original is from right to left, so that probably the order of the last two consonants has been wrongly denoted). The stroke before $h t p$ is perhaps an unrealized $\ell^{16}$ The inscription on the right of the base begins with $\ell \stackrel{\Longrightarrow}{\leftrightarrows}$, but it is not legible afterwards except in parts.

These seven instances are closely similar in type, ${ }^{17}$ and it is a fair inference that figures which correspond iconographically, even when an inscription is not present or is no longer legible, should be interpreted as Osiris-I'ah or Osiris-Djeḥuty. The essential components are the crook and flail and, in six of the seven, a mummiform aspect; also the lunar disc and crescent. Steindorff ${ }^{18}$ was doubtless justified, therefore, in thus categorizing-he uses the term 'Osiris-Yoh (Moon)'-two bronze figures in the Walters Art Gallery, Baltimore (Inv. nos. 54. 1999 and 54. 482). In each case, it is true, the head-dress is said to be 'broken off', but enough presumably remains to justify its interpretation as moon-disc and crescent. A third bronze figure in the same collection (Inv. no. 54. 2068, Steindorff's pl. 66, 387) was wisely entitled by him 'Moon God, Standing', without further definition. The only Osirian attribute here is the 'rush-atef'; and the ibis-head of Thoth seems to indicate that god rather than any composite deity; cf. Hornemann, Types, 150, 151 and Roeder, Bronzefiguren, 28, § 3 I.

The moon-god Khons is represented in bronze figures with the lunar disc and crescent, and also, normally, with the youthful forelock. ${ }^{19}$ These figures are not mummiform, nor do they carry the crook and flail; but the atef-crown may be worn. ${ }^{20}$ It is with Khons, however, that we enter a sphere where iconographical attributes become rather mixed. A relief ${ }^{21}$ which shows him with the lunar disc and crescent and also

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with the youthful forelock allows him to hold the crook and flail together with the wassceptre; but he is not mummiform, and the youthful forelock is distinctive, among moon-gods, of Khons. ${ }^{22}$ It is to Ptah that the was-sceptre originally belongs, and in discussing the Hildesheim mummiform bronze figure no. 31, which carries this sceptre as well as the crook and flail, while wearing also the lunar head-dress and the forelock, Roeder ${ }^{23}$ remarks that it should properly be called Ptah-Osiris-I'ahe-Khons and that it represents a Khons worshipped in Memphis as a moon-form of Osiris. In spite of the fused elements the quadruple name is unlikely; the statement that follows is more acceptable. Certainly the forelock points to Khons. The Osirian elements are the crook and flail and probably the mummiform aspect, although Ptah is also figured thus. A mummiform Khons occurs too, as in the well-known granite statue from Karnak with the facial features of Tutcankhamūn. ${ }^{24}$

Two further bronze figures in the Ashmolean Museum exemplify the problems that may arise. A figure from Teh el-Barûd, a little east of Naucratis (1888. r66; see pl. XXVIII, 3 ), is seated and mummiform; it carries the lunar crescent and disc and holds the flail and crook. In several respects, therefore, it resembles the granite statue of Khons from Karnak (see n. 24). Differences are clear: there is no youthful forelock and no was-sceptre. This figure was published with very little detail in Ernest A. Gardner, Naukratis, Part II (London, 1888), pl. 15, no. 14. ${ }^{25}$ Its height is 17.5 cm ; the greatest width (at elbows) is 5 cm ; the base, which is hollow, is 2.5 cm by 2.3 cm , and a short protrusion juts from it. The workmanship is good, but the metal is somewhat corroded. In addition to the details mentioned above, there is a uraeus on the forehead, and below the lunar crescent is a chaplet of uraei acting as a rounded base. The beard is pointed and the wig is striated. The right hand holds the flail, the left hand the crook, the hands being held at the same level (Roeder's Middle-Egyptian position, Bronzefiguren, § 224, with the observation that instances are common both in Upper Egypt and the Delta). Both crook and flail extend a little below the hands. There is no inscription, but there can be little doubt, when we compare the inscribed figures of Osiris-I'ah,, ${ }^{26}$ that this belongs to that category, as F. Ll. Griffith noted in Gardner, op. cit. 81.

[^80]

1-2. Ashmolean Museum 1971.947 with enlarged view of base

3. Ashmolean Museum 1888.166


More problematic is the bronze figure registered at the Ashmolean as Queen's College Loan 1089 (pl. XXVIII, 4). Its height from the bottom of the base is 17.3 cm ; its greatest width, at the hands, is 3.8 cm .; the base is 3.5 cm by 3.3 cm , and a tang protruding from it has a hole. It was transferred to the museum in 1949; no provenance was given, and it has been assigned to the Late Era. The workmanship is very good, and so is the condition of the metal, with a dark sheen. The lunar disc and crescent are present, and the uraeus on the forehead; the detail of beard and wig is carefully worked; a short kilt, with penis-sheath, does not reach to the knees. The god is shown seated, with the right hand resting clenched on the right thigh; the left hand is outstretched, and since it has a hollow cleft, it clearly once held a sceptre. Noteworthy are the free, unbound legs-there is no trace of a mummiform aspect. Whereas the figure has been interpreted as 'Osiris-Lunus', ${ }^{27}$ no Osirian attribute is present. Of the moon-gods Thoth, I cah, and Khons, the last-named is the most likely to be involved. Although there is no forelock, a youthful aspect is suggested, and the was-sceptre may well have been present as in Hildesheim no. 3 r. ${ }^{28}$ The bronze figure of a standing moon-god in Munich ${ }^{29}$ is comparable in several ways and its outstretched left hand doubtless held a sceptre once; one difference is that the moon-disc here is surmounted by an atefcrown. Khons is sometimes assigned this one Osirian attribute, ${ }^{30}$ and it is preferable to recognize him rather than I'ahh ${ }^{3 I}$ in the Munich figure.

If these distinctions are valid, a British Museum seated bronze figure (no. 67128) which has been captioned 'Asar-Aah with Utchat on disk of Khonsu' will also be seen to represent Khons. It was presented by Mrs. J. C. Coates in 1969. Its height is 18.2 cm (including the base); its greatest width (at elbows) is 4.2 cm . The head-dress is broken at the top, but the lower part has extended ram's horns; probably an atefcrown was present. Below is a lunar disc with a wedjat-eye inscribed on it. There is a uraeus on the forehead, and the beard is pointed and plaited; the eyes are inlaid; the left hand is outstretched and clenched, with a hollow into which a sceptre doubtless fitted; the right hand, also clenched, touches the knee. A kilt reaches the knees, and the lower limbs are free. Again, apart from the likely atef-crown, there is no Osirian feature. Similar in many respects is British Museum bronze figure 64568, acquired from the Acworth Collection in 1946. Its height, including the base, is 15.9 cm , its greatest width 3.4 cm . An atef-crown is here intact above the lunar disc and crescent, but this is the only Osirian attribute. Against taking this as Khons is the inscription on

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the front of the base which begins Wsir ITh. However, the treatment of the hieroglyphs on the right of the base suggests that we are dealing with a modern imitation of a Khons-figure, the hieroglyphs being copied from a figure of Osiris-Icah which had been grouped with it in a collection of figures of moon-gods. The same seems to apply to British Museum bronze figure 12589 , purchased in 1883 . Its height is 17.8 cm ; its width at the elbows $5 \cdot 3 \mathrm{~cm}$. A distinctive feature is that the right hand is held a little above the left hand to enclose a wedjat-sign. ${ }^{32}$ An inscription on the front of the base again begins $W$ sir $I T h$; on the left of the base an inscription ends with suspect forms. What is suggested is another imitation of a Khons-figure, but with hieroglyphs taken again from one of Osiris-I Iah. ${ }^{33}$ The alternative is to assume that at some point the traditional distinctions disappeared; yet the seven examples of Osiris-I I ah described above are firmly Osirian in three respects-the mummiform shape, the crook, and the flail-none of which is followed in these two figures. ${ }^{34}$

Whether any ideological distinction can be made between Osiris-I'ah and Khons is not easy to establish. Clearly Khons with the forelock is a young moon-god, and may well represent therefore the moon in its early phases, just as the young sun is sometimes denoted by a child-figure. ${ }^{35}$ Boreux ${ }^{36}$ suggested that Osiris-I Cah, in contrast, represented the dead moon. The analogy of Osiris-Apis might support this, although other divine names beginning with Osiris have no such meaning. ${ }^{37}$ Irah and Thoth, on the other hand, might indicate, when they occur independently, the moon in a more general sense. No such neat distinctions, however, are supported by the texts assembled and studied by Derchain. He shows that the concepts of a young and ageing moon are explicitly applied to both Khons and Osiris in themselves. ${ }^{38}$ All we can be sure of is that Khons with the forelock denotes the new moon. Another

[^82]difficult question is whether the inscriptions on figures of Osiris-Icah concern the living or the dead. In one case (Cairo no. 38428, discussed above) 'health, joy, and a goodly long old age' are requested; a living person is clearly implied, and the same application is occasionally found in texts on figures of Osiris himself. ${ }^{39}$

39 V. Wessetsky, 'Questions et réflexions sur une statuette d'Osiris', Bull. du musée hongrois des beaux-arts 44 (1975), ro, points out that several statues of Osiris bear the epithet di $\upharpoonright n h$, and that doubt arises as to whether life in this world or the next is meant. He cites an allusion quoted by Roeder, Bronzefiguren, 139 (from a figure in Vienna, nr. 116), where Osiris Onnophris is asked to give 'life, health, a long span of life, and a very great old age' to the son of a person. Here the son is clearly alive, but the father is dead, and the statement is made in a funerary context.

# AN UNUSUAL NOMINAL PATTERN IN <br> MIDDLE EGYPTIAN 

To H. 7. Polotsky on the occasion of his 7oth birthday

By MORDECHAI GILULA

The Egyptian Coffin Texts abound in interesting and, sometimes, unusual syntactic constructions that may represent a stage in the development of the Egyptian language of which we have hardly any traces outside the religious literature. The present article is concerned with a most peculiar pronominal construction of which only one example from the Pyramid Texts has hitherto been noted. ${ }^{1}$ Once established, it may entail a reconsideration of our concept of the nominal sentences in the early stages of the Egyptian language.*

1. Pyr. $703 \mathrm{~b}(P . T) \mathrm{N}, \mathrm{N},. N p w \underline{t} \underline{t w t} p w N$, ' N is you and you are N.' So also Aba 680. The version of N is
2. $\sim \square \mathrm{NN} \square \square \underline{t w t} p w N p w \underline{t w t}$, and it differs from the other versions in using the independent pronoun $\underline{t w t}$ instead of the dependent pronoun $\underline{t} w$. Sethe (Nominalsatz, §r38, §142; also Sander-Hansen, op. cit. §47r) had noted that in the Pyramid Texts a $p w$ was inserted in many cases after the king's name while it had not existed in the original version with the independent pronoun ink. This phenomenon (which is illuminating and has an important implication that I shall come to later on) makes any occurrence of $p w$ in these texts after a king's name suspect of having a secondary nature, and of being, in some cases, an automatic insertion to which no grammatical value should be attributed. But in our case, the part of the sentence with $\underline{t w t} p w N$-itself quite uncommon-seems to exclude this possibility and to vouch for the originality of $p w$ also in the other part. Thus, if the king's name is a substitute for a ist person singular pronoun of an original text, example No. I should represent an original *ink $p w \underline{t} w \underline{t} w t p w w i$, while ex. 2 represents *twt pw ink ink $p w \underline{t w t .2}{ }^{2}$ Both are to be translated 'I am you and you are I' or 'you are I and I am you', and the question arises whether one version should be preferred, ${ }^{3}$ or is there, rather, a justification for the use of the two of them. I shall try to answer this question further below in this article.
[^83]Ex. I is established as a distinct pattern by two more $C T$ examples that can also point to its pronominal origin:
 2r. 'I am that 'Afnwt(y) who is in (imy) Dpw . . . I am he. I am 'Afnwt(y) who is in the dark'.
 'It is as the eye of Horus that I have risen; it is as I that the eye of Horus has risen. I am she (ink $p w s y$ ) and she is $\mathrm{I}(s t t p w i=s t t p w w i){ }^{4}{ }^{4}$

Taken together with the alleged original in Pyr, they give an almost complete paradigm of a pronominal identity sentence in the ist person singular: 'I am you, you are I'; 'I am he'; 'I am she, she is I'. A possibility of expressing 'I am myself' will be mentioned below-footnote 65 .
These sentences are unique in being ternary pronominal identity sentences. Their scarcity can be explained by the simple fact that the idea they convey-i.e. the identity of two altogether different personalities (entities)-is strange to normal conversation and can hardly be expected in a normal dialogue. All the above examples are from a special religious sphere that can tolerate such views. They also have some peculiar grammatical features: ( $a$ ) the employment of the dependent pronoun as a member in a nominal sentence; (b) the employment of the dependent pronoun with $p w$ and immediately following it; (c) the rare, although not unusual, combination of the independent pronoun with $p w$ in a ternary (pro)nominal sentence. The employment of the dependent pronoun in a nominal sentence is against all known grammatical rules, ${ }^{5}$ yet it functions here as a member in what appears to be an indisputable ternary pronominal pattern. What may be the reason for it? These sentences are identity sentences par excellence and the parallelismus membrorum would demand that the predicate (or the stressed member) of the first phrase be the subject (or the less accentuated member) of the second phrase and vice versa. This may find its formal expression in the shift in the position of the pronouns and also in their change from the 'independent' to the 'dependent' and from the 'dependent' to the 'independent' pronoun. ${ }^{6}$ A priori we could assume that since the dependent pronoun can function as subject but is never found as a predicate of any kind of a sentence, it would also be the subject here. This could be the reason for its employment. Another 'obvious' assumption is that $w i, t w, s w, s y$ which are considered 'dependent' 7 or 'enclitic' ${ }^{8}$ are less stressed than the 'independent' pronoun, and therefore their employment as subject to it would be quite appropriate. It should be noted, however, that we possess no measure of determining the degree of stress or accent of the 'dependent' pronoun, and, besides, the last assumption can be proven to be inaccurate. The 'dependent' pronouns in our sentences can be shown to be of more or less the same independence as the 'independent' pronouns, and consequently of no less stress.

Our sentences represent a ternary nominal pattern that can be described schematically as $N_{1} p w$ $N_{2}$. This pattern is known primarily with two nouns, one preceding $p w$ and the other following it,

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NOUN pw NOUN. It is the principal nominal pattern of Middle Egyptian, ${ }^{9}$ and it is generally believed that 'the logical predicate . . . comes first and is followed by $p w$ as a purely formal logical subject'. The real logical subject is added in apposition to $p w .{ }^{10}$ Thus 'in the sentences with intercalated $p w$ the first word is in the vast majority of cases not the logical subject but the logical predicate'. ${ }^{11}$ If this analysis is correct-and it agrees with our a priori assumption that $w i, t w, s w, s y$ are the sub-ject-its application to our examples would necessitate the conclusion that since $w i, t w, s w, s y$ are in apposition to $p w$ they must be fully independent and fully stressed. This conclusion can be shown to be true in the light of yet another construction of apparently the same pattern that was mentioned by Sethe, ${ }^{12}$ but was overlooked completely by Gardiner, namely 'INDEPENDENT' PRONOUN pw NOUN. This construction has been known to exist with nominal forms of the verb-relative forms and participles-in the position immediately following pw. ${ }^{13}$ The Coffin Texts supply more examples of this kind, but they also provide examples with nouns ${ }^{14}$ and personal names, thus showing this to be a fully-fledged sub-pattern. See for example:
a. with a personal name, $C T$ in, $3 d$, ink $p w S w$, 'I am Shu'.
b. with a noun, $C T$ iv, $6_{3} s$, ink $p w n b k_{3} w w$, 'I am the master of the high places'. See also A. de Buck, Egyptian Reading-book, 108, 14. Several times in Mocalla.
c. with an active participle, $C T$ Iv, $228 b$, ink pwhpr im. $\underline{t n}$ 'I am he who has been transformed to be like you'. Compare the variants. The Cenotaph of Seti I, pl. 64 has pwy, 'that one', instead of $p w$. See also Peasant, Bi 20-1 ; Grab des Ti, pl. 123. Compare CT iv, 8ı $a$, ink $p w$ $r h$ wiwt Nwt with $B D 78,28(\mathrm{Nu})$, ink pwink rh wiwt Nnw. The splitting of one sentence into two occurs several times.
$d$. with a passive participle, $C T$ viI, $485 k$, ink $p w r d y(w) n \cdot f m \underline{d} r \cdot f$, 'I am he who has been supplied with. . . . Also $C T$ iI, $152 f(?)$.
e. with a prospective active participle, Peas. R 71. See Gunn, Studies, 37, 5.
$f$. with a prospective passive participle(?), $C T \mathrm{I}, \mathrm{I}_{73} a$, ink $p w \operatorname{irf}$ (particle) iry ir $\cdot n \cdot f$; a tentative translation, 'I am he who should be repaid (treated well) since he has done well'. Compare G. Lefebvre, Le Tombeau de Petosiris, II, 125, 4-5 (p. 89) ir nfr ir n.f 'he who will do good, (it) shall be done to him'. Also 56,$2 ; 65$, 12. Faulkner in $\mathcal{F E A} 48,42$ has translated differently.
g. with a relative form, Ebers, $\mathrm{I}, \mathrm{IO}$, ink pw mrrw ntr sinh $\cdot f$ wi, ' I am he whom the god wishes to preserve'. $C T$ iv, $92 k$, $i n k p w \underline{d} d \cdot n n \cdot f S^{\prime} w h n c$ (Tfnt), 'I am he to whom Shu and Tefnut have said'. $C T$ vir, $250 m$, ink $p w$ šms $\cdot n \cdot s n$, 'I am he whom they followed (accompanied)'. $C T$ viI, $487 b$.
$h$. with $s \underline{d} m \cdot t y \cdot f y, C T$ I, $17 \underline{1} \underline{d}$, ink $p w w n n \cdot t y \cdot f y m t s p n n \subset n h w, ' I$ am he who will be in this land of the living'. $C T$ vir, $95 p$, ink $p w z p \cdot t y \cdot f y$, 'I am he who shall remain'. So also Neit, 712. See Edel, Altäg. G. §970. Meir, 5, pl. 22, ink pwir.ty.fy $m$ tr, 'I am he who will finish in time'.

For persons other than the ist person sing. see V. Ions, Egyptian Mythology (Feltham, 1968), I3, line 8 of the stela, $n t k p w i t \cdot s n$, 'you are their father'-an Eighteenth Dynasty example. For $\underline{t w t}$ see $C T$ vi, $237 f$ (our examples i-2 above). $S w t-C T$ iII, $402 b ; C T$ iv, $328 c ; C T$ vi, $74 a, 3901,403 n-p$; $C T$ vir, $486 c$; $B D$ 154, $7-8(\mathrm{Nu})$. Ntf-only late examples, $B \mathrm{I}_{15}$ (Ani) 19, $9 ; B D$ 17 (Urk. V 71, 16); Nauri decree 4. Ntsn-CT v, $150 c$.

[^85]Supposedly being of the same pattern as our sentences, these examples may show the 'dependent' pronoun to be interchangeable with a free noun (or substantive) within the framework of the same substitution table and thus indicate its absolute independence. This conclusion is valid here quite apart from the question of whether these pronouns are subjects or predicates in our sentences, or whether the customary analysis of the construction NOUN $p w$ NOUN is correct or wrong. It will also be true whether, in these sentences, $p w$ is a formal subject to which the 'dependent' pronouns are in apposition-an unusual but quite a possible occurrence-or, and even more so, if $p w$ is a real copula connecting the subject and the predicate (see below). This kind of pronoun is independent here syntactically and probably also prosodically, and it would appear to be of the same 'independence' also in all other constructions and usages in which it is found. ${ }^{15}$ This is particularly true about its employment as subject to adjectival predicates ${ }^{16}$-including the adjectival negative $n n^{17}$ -and to certain interrogative words (Gardiner, Egn. Gr. ${ }^{3}$, §1 $\mathbf{3}^{2}$ ). Its independence is witnessed by its being the direct object of the imperative, ${ }^{18}$ as against the employment of the suffix pronoun in that capacity after the infinitive, ${ }^{19}$ and also by the cases where the 'dependent' pronoun as a reinforcement of the imperative (Gardiner, op. cit., §337) is separated from it by an 'enclitic' particle, e.g. $s \underline{d} m$ irf $\underline{t} n$, 'listen, you!'-Urk. IV, 367, I3. It cannot be a prospective $s d m . f$ since in that case the suffix pronoun is inseparable from the verb. There are many examples of this kind (e.g., Gardiner, op. cit. §252,3a) of which $B D 125$ (Budge, 1898, p. 261, 5-6) is illuminating nhm wi irf $\underline{t} n$ hw wi irf $t n$, 'rescue me, you! protect me, you!'

The formal characteristic of the 'dependent' pronoun is that it is not an initial pronoun, i.e. it is not found 'bare' in the initial position but it is always preceded by another word. This fact still does not make it enclitic or dependent on other words for its stress and it does not testify to a weaker accent in comparison to the 'independent' pronoun-which is a 'bare' pronoun-although it is conceivable in view of its monosyllabic nature. ${ }^{20}$ For the lack of another term, I shall tentatively call it here the 'noninitial' pronoun ${ }^{2 I}$ while the 'independent' pronoun will be called the 'initial' pronoun. ${ }^{22}$

I have assumed a priori that the 'non-initial' pronoun was the subject in the ternary pronominal sentence 'INITIAL' PRONOUN pw 'NON-INITIAL' PRONOUN. ${ }^{23}$ This assumption agrees with the accepted analysis of the nominal construction NOUN pw NOUN, but that still does not make either of them true. At least as far as the analysis of the construction NOUN pw NOUN is concerned, this is not universally true, since, in many cases, the sentence member following $p w$ appears to be the 'logical' predicate. ${ }^{24}$ In these cases $p w$ must be described as a real copula connecting subject and predicate. Such a possibility exists also in our ternary pronominal sentences. If the 'non-initial' pronoun can be independent enough to be theoretically in apposition to $p w$, it can also be independent enough to be theoretically a predicate after $p w$ as

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copula. It is true that in all other cases this pronoun functions only as subject and never as predicate, but this should not deter us from at least considering this possibility especially in view of the fact that it was this unique construction that first brought to mind the possibility of the independence of the 'non-initial' pronoun. What is it, then, and is there any way of determining it? This question will be answered only if we shall be able to find the means of solving the problem of subject and predicate in nominal sentences in Middle Egyptian in general.

The distinction between subject and predicate in nominal sentences in the Egyptian language is a rather complicated one. In every nominal sentence, as in any other sentence as well, there is a part that is more important than the other by being the new informative element. This is the predicate, and it is allegedly more stressed in pronunciation than the subject. A true understanding of the meaning of the sentence depends often on the identification of that element. Unfortunately, in hieroglyphs there is no formal way of telling between the two, mainly because there is no way of telling the relative degree of stress of the sentence members. ${ }^{25}$ In many cases the predicate-the new informative element-can be determined only from the context, i.e. an evidence outside the sentence proper, and so scholars resorted to the differentiation between 'grammatical' and 'logical' subject and predicate. ${ }^{26}$ This differentiation, which in many cases is not sustained even by the context, has been strongly attacked by Schenkel ( $Z \ddot{A} S$ 88, 123-4). Dismissing it as unnecessary and irrelevant, he suggested a purely mechanical way of describing the members of such sentences (and others as well) by their relative position in the sentence, i.e. 'Erstnomen' and 'Zweitnomen' (Gunn's 'first term' and 'second term'-Studies, r73; see also ch. 13, p. 61 n. r). Schenkel's method is an outcome of the frustration that almost everyone encounters when attempting to decide between the members of a nominal sentence by relying on the conventional current description of it. A nominal sentence can be constructed from personal pronouns and nouns in the wider sense of the wordincluding all nominal forms of the verb, and interrogative words. Each of these can be either subject or predicate, except for interrogative words which are always the predicate only. ${ }^{27}$ The current view, as it is reflected in Gardiner's Egn. Gr. 3 §125, is that 'the principle underlying the Egyptian sentence with nominal or pronominal predicate is the principle of direct juxtaposition, the subject preceding the predicate. . . . This construction is still very common in Middle Egyptian when the subject is a personal pronoun, and a previous lesson has taught us that in this case the independent pronouns are used ( $\$ 65,1$ ), the copula is not expressed. . . . When the subject is a noun, direct juxtaposition is practically obsolete, though it was still common in the Pyramid Texts.' The principal nominal patterns in Middle Egyptian are accordingly believed to be PRONOUN+ NOUN when a pronoun and a noun are concerned, and NOUN pw NOUN when two nouns form a sentence. ${ }^{28}$ The word order, according to Gardiner ( $\$ 125, \S 126, \mathrm{p} .102$ ), is in the first case mostly that of subject followed by the predicate, while in the second case the predicate usually comes first ( $\S 130$ ). In each case, however, there are many occurrences in which this order is inverted, or is believed to be so ( $\$ 126$, p. 102, §130). This is explained as a departure from the normal word order (§I26, p. 102, §130). It is possible, however, that such an order had never really existed and that the

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relative position of the subject and the predicate was always free and depended solely on the will of the speaker. What could have been rigid was the formal order of $P R O N O U N-N O U N$ and NOUN pw NOUN, and the speaker could have presumably indicated the predicate by more stress in pronunciation. The rigidity of the order PRONOUN-NOUN, for example, could have nothing to do with either one being subject or predicate, and could have been dependent upon other factors, such as the ability of an individual word to occupy the first place in a nominal sentence and the denial of that ability to other words. ${ }^{29}$ Let us examine this case of a pronoun and a noun.

Two sets of pronouns are used in combination with a noun (substantive) to form a sentence. One of them almost always occupies the first place before the noun and this is the 'initial pronoun', ${ }^{30}$ the other always comes after the noun and this is the 'non-initial' pronoun. ${ }^{31}$ If it is so because one is always the subject and the other is always the predicate, then we could assume that there was a paradigm of two complementary rigid pronominal constructions: NOUN+'NON-INITIAL' PRONOUN and 'INITIAL' PRONOUN+NOUN. Since it is generally accepted that in the construction NOUN+'NON-INITIAL' PRONOUN the pronoun is always the subject, ${ }^{32}$ it would then follow that in the construction 'INITIAL' PRONOUN + NOUN the pronoun is always the predicate. This would contradict the accepted view that the original and primary role of the 'initial' pronoun was to function as the subject. But if the two constructions are not complementary, then the different positions of the nouns and the pronouns in the two constructions can be explained in another way. The position of the pronoun may depend on the kind of pronoun used, and this, on its part, may depend on the kind of other word used as its partner in the sentence. ${ }^{33}$ It so happens that some words require the first place in the sentence-like some interrogatives, and adjectives as predicates-and therefore will take the 'non-initial' pronoun as their pronominal partner (the subject in this case); other words are not confined to the first place and will take the 'initial' pronoun as their pronominal partner. ${ }^{34}$ The construction NOUN+'NON-INITIAL' $P R O N O U N$ is, therefore, to be viewed as a special case in which the order of the words is caused by the particular grammatical characteristic of the predicate which is determined here as such by different grammatical observations. ${ }^{35}$ The position of the 'non-initial' pronoun after the predicate is in all probability not connected with its own characteristic grammatical role as subject, and is not necessarily dependent upon it or determined by $\mathrm{it}^{36}$ in exactly the same manner as the position of the 'initial' pronoun is not determined by its grammatical function.

[^88]The construction NOUN+'NON-INITIAL' PRONOUN is generally treated separately from the nominal sentences as a distinct 'adjectival' pattern. Thus the construction 'INITIAL' PRO$N O U N+N O U N$ is left as the main (pro)nominal construction and is discussed as such by the current grammars of Middle Egyptian. The nouns occurring in it are not confined to any particular class, and in accordance with the general view, and unless otherwise proven, they can be both subject and predicate; so can also the 'initial' pronouns employed in this construction although they are mostly judged to be subjects. The rigid word order is not dependent on a 'fact' that the subject originally came first ${ }^{37}$ or that the pronoun as subject has to precede the noun as predicate, but it could be due to a grammatical rule that a noun may not precede a pronoun in their roles as members in a nominal sentence-except for the special case of 'non-initial' pronouns-whatever their function. It is so because if we were to assume that the rigidity in position is syntactic and that the predicate (or the subject) was rigidly confined to either the first place or the second place, we would then arrive again at the inevitable conclusion that the 'initial' pronouns could only be either subjects or predicates. This is not inconceivable, but it will be pushing matters a little too far, and it is therefore understandable why people refuse to see this construction as a syntactically rigid pattern. According to the accepted view this construction is rigid only formally and the predicate is to be determined either by intonation-an impossible task now-or by logical analysis. It is easy to see why Schenkel has tried to avoid any dealings with the syntactic structure of such sentences and why he has found recourse to his mechanical formal description. By adopting this method, he has freed himself from the straitjacket of conventional terminology ${ }^{38}$ and has managed to avoid the necessity of a subjective treatment of the structure and meaning of the sentence. Thus he has also eliminated a possible misinterpretation of the content by not imposing modern 'logic' on an ancient text. But avoiding the problem does not constitute a solution, and I believe that although up to a certain degree Schenkel was right, there still may be a way for a partial, if not a complete, solution to this question.

The confusion described above had been caused because there seemed to be no way to settle the conflict between the need on the part of the reader to locate what would appear to him to be the important stressed part of the sentence, and what, according to the current view, is the only formal, rigid and uniform pronomical construction 'INITIAL' PRONOUN+NOUN (and, for that matter, also the nominal construction NOUN pw NOUN). But the obstacle of formal rigidity may turn out to be a boon once it is placed in its correct context. I have mentioned above that if we were to assume that the rigidity of the construction 'INITIAL' PRONOUN + NOUN was not merely formal but was rather a syntactic one, then we should have to conclude that the 'initial' pronoun was either subject or predicate only. This would be untenable if-as it is currently held-this construction were the only one with 'initial' pronoun and noun. But if it is not, then there is a foundation for that assumption since the other construction-if it is found-may complement this one syntactically. In his discussion, Schenkel applied his method to the description of several constructions but failed to discuss the pattern 'INITIAL' PRONOUN pw NOUN. ${ }^{39}$ It is this pattern that may be our clue.

Why did the ancient Egyptian make use of two different ways of forming a sentence with an initial pronoun and a following noun? Was it just a matter of style? Do the patterns 'INITIAL' PRONOUN+NOUN and 'INITIAL' PRONOUN pw

[^89]${ }^{38}$ He says about the confusion between 'logical' and 'grammatical' subject and predicate: 'Man braucht bei dieser Lage noch keine "tragedy of language" zu sehen (EG §130, S. 104, unten), die Tragödie liegt eher in der Terminologie'-ZÄS 88, 124.
${ }^{39} \mathrm{He}$ did mention the examples from Moralla in Grundformen, p. 32 (top), although, in my opinion, in a wrong context.

NOUN differ only formally, i.e. one has a pronoun in direct juxtaposition to a noun while the other employs $p w$ as a 'purely formal logical subject' or copula; or is the formal differentiation, rather, indicative of a difference in function? The latter seems to me to be more plausible under the postulation that any change in pattern also means a change in function. I believe that one pattern could have been used for expressing, primarily, a pronominal subject, while the other had been reserved exclusively for expressing a pronominal predicate. This can be implied from, and borne out by, internal Middle Egyptian evidence, as well as by analogy to Coptic.

The pattern 'INITIAL' PRONOUN+NOUN is commonly described as a pattern in which the pronoun serves mainly as the subject-an inference deduced from general considerations. ${ }^{40}$ Gardiner's example ( $\$ 65$ ) for this is $n t f s 3 \cdot 5$ 'he is her son', whereas in $\S 128 \mathrm{Obs}$. he has stated 'For "he is Rēr", as we have seen §125, ntf $R \mathrm{r}$ can also be said; but in that case the pronoun is more emphatic and tends to obtain the value of the logical predicate "he is Rēe"'. Although the last statement may be true for the latest stages of Middle Egyptian, these two examples-invented ad hoc by Gardinerrepresent a common misrepresentation and misinterpretation of the facts that is crucial to our point. The principal use of $n t f$ in Middle Egyptian is in the Participial Statement (Gardiner, §373). It is also found in the construction $n t f p w$, 'it is he' $(\operatorname{Sin}$. B $268 ; C T \mathrm{v}, 236 d$ ), and in its extension $n t f ~ p w$ NOUN (only late examples; see above). Another important usage of $n t f$ is in the possessive constructions $n(y)-n t f+N O U N^{41}$ and its late derivative $n t f+N O U N,{ }^{42}$ but it is hardly found in nominal sentences in direct juxtaposition to a noun until the late Eighteenth Dynasty ${ }^{43}$ and it is practically missing from the pattern 'INITIAL' $P R O N O U N+N O U N$ in which it is substituted by $p w$, i.e. NOUN $p w$ is used instead of $n t f$ NOUN. ${ }^{44}$ Pw is the word employed in Middle Egyptian as the 3 rd person pronominal subject (Gardiner, §I28) while $n t f$ is clearly distinguished as the predicate in all its above usages. In the possessive $n(y)-n t f+N O U N$ (and its derivative $n t f-N O U N$ ) the 'initial' pronoun is the predicate in a complementary paradigm to the 'non-initial' pronoun as subject (Rev. d'Eg. 20 (1968), 55 ff .); the Participial Statement-from which pw is excluded-is a Cleft Sentence in which the 'initial' pronoun is always the predicate ${ }^{45}$ and in ntf $p w$ the 'initial'

[^90]pronoun is obviously the predicate too (Gardiner §128). Thus ntf does not merely 'tend to obtain the value of the logical predicate' but it is always the predicate. ${ }^{46}$ The predicative characteristic of $n t f$ is also substantiated in an indirect way by some interrogative constructions. In interrogative sentences, the interrogative word is always the predicate and $n t f$ is never found as its subject. Only $p w$ and $s w$ serve in that capacity. ${ }^{47}$ Particularly instructive is the interrogative $z y$ 'who?' 'what?' that takes the pronoun $n t k$ as its second person pronominal subject-ntk $z y$, 'who are you?'while the 3 rd person pronominal subject will be $p w-z y p w$, 'who is he?' (Gardiner, $\S 499,2$; Edel, Altäg. Gr. §970). Now, in Coptic (Sahidic) there are two sets of pronouns in pronominal sentences.
 unaccentuated form of the former-aलॉ etc.49-and stands for the subject only. जाoef and пе belong to two different paradigms and substitution tables. $\boldsymbol{\pi \epsilon}$ is used instead of an unaccentuated form of $\bar{\pi}$ TOC—namely $\overline{\mathrm{n}} \overline{\mathrm{T}}$ that is practically non-existent ${ }^{50}$-and is always the subject, ${ }^{51}$ while $\bar{\pi}$ Toc is always only a predicate. This seems to correspond to the state of affairs in Middle Egyptian and may point to yet another similarity. In Coptic any pronoun preceding re has to be the predicate, or, in other words, the only way to use a pronoun as predicate in a nominal sentence is to employ it in the pattern PRONOUN $\boldsymbol{\operatorname { c \epsilon }}(N O U N)$ and the fully accentuated pronoun is used accordingly. ${ }^{52}$ In the pronominal pattern $P R O N O U N-N O U N$ the pronoun can only be the subject and the unaccentuated pronoun is used. In view of the nature of $p w$ in Middle Egyptian and its employment, I would venture to suggest that also in good Middle Egyptian any pronoun preceding $p w$ needs to be the predicate while any pronoun in direct juxtaposition to a noun has to be the subject. ${ }^{53}$ Thus the pronominal constructions 'INITIAL' PRONOUN-NOUN (3rd person masculine NOUN-pw) ${ }^{54}$ and 'INITIAL' PRONOUN pw NOUN (3rd person masculine ntf $p w$ NOUN) can form a complementary system for expressing pronominal subject and pronominal predicate respectively. A full paradigm is unnecessary here. The greater frequency of the pattern 'INITIAL' PRONOUN - NOUN can be explained by the simple fact that it is more usual for a person to tell something (the predicate) about himself (the subject), or to tell something about someone else, than to stress that it is he, or someone else, who is something. ${ }^{55}$ As in Coptic there

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could have been a difference in the stress and accent of the 'initial' pronoun in each of these usages, but there is presently no way of proving it. One would be tempted to consider the writing $\ell^{\sim}{ }^{\prime m}$, ink, of the ist person singular 'initial' pronoun as a distinct writing for the subject, or the predicate, in differentiation from 울 which Gunn insisted on transliterating nwk (Studies, p. xii). At first glance it would appear to correspond to the Coptic subject añe while ${ }^{0}$ 盗 would be closer to the Coptic predicate amos, but in sentences like $4 m$ ( $C T$ vi, $354 q$ ) it is clearly the predicate. Also
 In $C T$ vir, $337 b$ both writings appear to be the writing of the subject $i n k n b$ wsrwtyw in parallel to the possessive predicate $n n k$ wsrwtyw.

Obs. I. The construction 'INITIAL' PRONOUN pw NOUN is in all probability an extension of a nucleus 'INITIAL' PRONOUN $p w$ in which the 'initial' pronoun was the predicate throughout the history of the Egyptian language. On the other hand the construction 'INITIAL' PRO$N O U N+N O U N$ can represent a homograph of two different structures in which the 'initial' pronoun may vary in function as subject in one and predicate in the other. This, however, may be true only for the last phase of Middle Egyptian in its transitory stage to Late Egyptian in which the ternary pronominal sentence is already obsolete. It was probably at that stage that $n t f$ started to be used in nominal sentences in direct juxtaposition to a noun, perhaps with no regard to its function (but this is not certain since $n t f$ may possibly have retained its predicative value all the time). In view of the extensive employment of pw ever since Old Egyptian (Edel, Altäg. Gr. §958 ff.) and the scarcity of $n t f$ in nominal sentences in good Middle Egyptian-together with its confinement to an obvious predicative function in both nominal sentences and in other constructions from which $p w$ is excluded-it may seem reasonable to assume that contrary to the customary view (Gardiner, op. cit., §128 and §65) it was not $p w$ that substituted for $n t f$ as a 3 rd person pronominal subject but it was the other way around.

Obs. 2. The suggested rule that any pronoun in direct juxtaposition to a noun is the subject may not apply to the old pronouns $t w t$, swt etc. (Edel, Altäg. Gr. §172) that are still extensively employed in the Coffin Texts. ${ }^{56}$ But it is noteworthy that $p w$ is employed for a third person pronominal subject also in Old Egyptian (Edel, §959 ff.) while swt is not frequently found in direct juxtaposition to a noun. It is more frequent with participles and relative forms. In the construction $\underline{t} w t+N O U N$ the pronoun need not necessarily be the subject while in the construction twt pw NOUN (Edel, §969 and above p. 162) the pronoun is most probably the predicate.

If all this is correct, we can then conclude, with a fair degree of certainty, that also in the construction PRONOUN pw PRONOUN the 'initial' pronoun will be the predicate. It is not, however, that simple and the objection to this conclusion will be apparent when we discuss the construction NOUN pw NOUN. This construction is generally believed to be the principal nominal pattern in Middle Egyptian. There are also a few survivals of a pattern common in the Pyramid Texts-but obsolete in Middle Egyptian-of NOUN-NOUN in direct juxtaposition. ${ }^{57}$ As we have seen above, the common analysis of NOUN pw NOUN is that the noun preceding $p w$ is the predicate in the vast majority of cases. This would appear to agree with our analysis of the pronominal sentences with $p w(P R O N O U N p w N O U N)$. There are, however, many exceptions to this rule and I allow myself to quote, again, more fully the prevalent view as it is expressed by Gardiner, Egyp. Gr. ${ }^{3}$ §ı 30 :

[^92]
## MORDECHAI GILULA

as we have seen (§125), the original method of expressing sentences, where both subject and predicate were nouns, was by direct juxtaposition; but long before the Middle Kingdom that method had become obsolete and had given place to another based on the use of $p w$ described in §ı28. The logical predicate (or part of it, §129) comes first and is followed by $p w$ as a purely formal logical subject; the real logical subject is added in apposition to $p w \ldots$. . The substitution of this construction for the method of direct juxtaposition was evidently due to the desire to indicate the logical predicate more clearly than could be done by that method, in connection with which inversions were frequent ... Thus, whereas in the old method of direct juxtaposition, the first word (the grammatical subject §§i25-6) could be almost as easily logical predicate as logical subject (though the latter was, of course, its proper function), in the sentence with intercalated pw the first word is, in the vast majority of cases, not the logical subject but the logical predicate. The tragedy of language is, however, that it is constantly perverting the constructions which it creates to purposes for which they were not primarily intended; by a second inversion (the first being that of §127,2) the sentence with pw could sometimes have the logical subject in the first place, thus returning to the original word-order (§125).

This construction can, accordingly, be analysed only 'logically' and Schenkel has objected to the quoted view by referring to this description as the 'tragedy of terminology' ( $Z \ddot{A} S 88$, ı24; see n. 38). I believe also that this view, as expressed by Gardiner, is based on a misrepresentation of the facts. It appears to me that-as in Coptic againthe pattern $N O U N$ pw NOUN had always been the principal way of constructing a nominal sentence with two nouns (in Old Egyptian as well), and that the pattern $N O U N-N O U N$ was confined to specific cases even in the Pyramid Texts. Apart from few exceptions that always plagued the Egyptian language ${ }^{58}$ the usages of this pattern seem to be limited mostly to the following cases that had already been observed by Sethe (Nominalsatz, §26. See also §24 and Edel, Altäg. Gr. §947):
(a) when the noun is identical in the two parts of the sentence like phty $N$ phty Sts', 'the power of N is the power of Seth' = 'my power is the power of Seth'-Sethe, Nominalsatz, §24; Edel, Altäg. Gr. §947; Gardiner, Egn. Gr. ${ }^{3}$ §125. The differentiation between subject and predicate is impossible in such cases (Edel, loc. cit). Moreover, it appears to me that it was not even intended. This is a true identity sentence in which the identification goes both ways; both parts of the sentence appear to be of equal importance and no part of the sentence was perhaps more stressed than the other. Sethe (Nominalsatz, §23) assumed that the first member was the stressed one, but, to me, it seems that if there was any stress, it should have been on the second member, or even on the qualifier of the second member-phti $N$ phti $S T \check{S}$. Polotsky in his classes has referred to such sentences as 'balanced sentences'. They are actually no more than 'Wechselsätze' (Polotsky, Orientalia 33 (1964), 281-2 = Collected Papers, 66-7). In the Coffin Texts such sentences are also
 are the food-offerings of Rē ; if (or, whenever) Rē is hungry I am hungry'. The second phrase is a 'Wechselsatz' and some of the versions have $p w$ in the middle.
(b) Sentences with $r n$, 'name', as one member, e.g., $\underline{D} d i r n \cdot f$ 'Djedi is his name', Gardiner, Egn.

[^93]Gr. ${ }^{3}$ §127; Sethe, Nominalsatz, §27; Edel, Altäg. Gr. §947. Wrrti $r n n i t \cdot k$, 'Wrrti is the name of your father'-Pyr. $1434 b$. It should be noted, however, that there are also sentences with $r n$ in all the other possibilities, e.g. (1). rn•s $N-U r k$. Iv, 261, 14-17; 814, 17; Lefebvre, Gr. §605 $r n n m r n n$ $N$; (2) $r n \cdot k p w \subset m — C T \mathrm{v}$, $5 \mathrm{I} e$; (3) ntr $p w r n \cdot i-C T \mathrm{v}, 236$ f. (BıBo ntr $p w r n p n n N p n$ ); (4) $N$ $r n \cdot f p w-C T$ vil, $297 b$.
(c) Family relationship, e.g. mwt $n t N$ sst, 'the mother of N is Isis', Pyr. ${ }_{3} 375 a$; Sethe, Nominalsatz, §§26, 28; Edel, op, cit., §947. There are also such sentences with pw-Edel, op. cit. §966. Compare, e.g. $C T$ v, $37 d$ to $44 f$.
(d) Body members. Sethe, Nominalsatz, $\S_{24}$ (rare).
(e) In personal names. Sethe, Nominalsatz, §26. Edel, op. cit. §947. Personal names have the tendency to be of unusual constructions.

Cases $b-d$ are all particular cases of a certain kind of nouns that are known as 'inalienable', ${ }^{59}$ i.e. they represent things that are not acquired by a person but are granted to him, and cannot, in most cases, be disposed of. Also they have the tendency of being in unusual constructions. ${ }^{60}$ Mostly these exceptional cases together with the 'balanced sentences' are grouped in the pattern $N O U N-N O U N$ in which the formal differentiation between subject and predicate is impossible (Edel, op. cit. §947). At least there is no formal ground for the supposition that in such sentences the subject came first. ${ }^{61}$

The main nominal pattern had, in my opinion, always been NOUN pw NOUN, and an indication that it was so also in the Pyramid Texts is the automatic insertion of $p w$ in these texts (and in some cases in the Coffin Texts) whenever an original 'initial' pronoun was substituted by the king's namesee above p. 160. This insertion was necessary since two nouns could not be placed in direct juxtaposition (except for the particular cases discussed above) and had to be connected by $p^{w w .}{ }^{62}$ There is a vague clue for the analysis of this pattern. Coffin BrBo of the Coffin Texts appears to present the best text from the grammatical point of view. It appears to adhere, in the majority of cases, to strict grammatical rules and to use its original text with careful attention to grammatical usages. It is therefore noteworthy that, in many cases, this coffin does not merely substitute the name of its owner for the original 'initial' pronoun, but it takes good care to insert the necessary $p w$ and to invert the order of the words (compare Sethe, Nominalsatz, §I 38, p. 91 and see his commentary to Pyr. 436a-Kommentar, II, pp. 210-11 ; also Kommentar, I, p. 376 to Pyr. 308a). Example: CT vi, I 55b, ink šw n ntrw (B2Bo), whereas BiBo has hw ntrw pi $(=p w) N p n$, ' N is the Utterance of the gods'. If it is correct that in a sentence $i n k-N O U N$ the first pronoun was the subject, then the change of the word order in Bi Bo may indicate that the copyist of this particular coffin thought that in a nominal sentence with $p w$ the noun preceding $p w$ was the predicate; or in other words, the predicate had to be placed in a predetermined initial position. This would seem to constitute a formal substantiation of the prevalent view of such sentences; but, on the other hand, sentences like $N p w r n \cdot f^{63}$ and $r n \cdot f p w N^{64-}$ in which $r n \cdot f$ is generally believed to be the subject-would indicate that the predicate was not confined to a pre-determined position and that the pattern NOUN $p w$ NOUN was flexible and not a rigid one.

[^94]In texts other than religious literature-for which we have many parallel versions-it would be impossible to analyse sentences of this pattern except by 'logical' reasoning. Pw cannot be taken here as an indicator since this is the principal (or only) nominal pattern, and it has no counterpart pattern without $p w$. The pattern NOUN-NOUN is not its counterpart but, rather, a supplementary pattern, and the relation of NOUN-NOUN to NOUN pw NOUN is exactly as the relation of NOUN-'NON-INITIAL' PRONOUN to the patterns 'INITIAL' PRONOUN-NOUN and 'INITIAL' PRONOUN pw NOUN (the last two are syntactically complementary counterparts). As matters stand now, the pattern NOUN pw NOUN does not allow the modern reader a formal differentiation between subject and predicate, although the original speaker, or writer, may well have intended to make this distinction by stress in intonation. It would therefore appear to me to be better to adopt Schenkel's system-or a similar mechanical one-as far as sentences with two nouns are concerned, and to view the patterns NOUN-NOUN and NOUN pw NOUN as 'neutral'.

The 'neutrality' of the pattern NOUN pw NOUN raises a new question concerning the pronominal pattern PRONOUN pw PRONOUN. The two constructions are similar in using the same part of speech-nouns and pronouns respectively-at the two ends of the sentence. It is also a fact that in good Middle Egyptian there are no known examples of two pronouns in direct juxtaposition in a nominal sentence ${ }^{65}$ except for possessive-adjectival sentences like ink sy 'she is mine' (Gardiner, §II4, Rev. d. Ég. 20 (1968), 55 ff.). Can it, therefore, be that also two pronouns-like most cases of two nouns-could not be placed in direct juxtaposition and had to be connected by $p w$, as copula, in order to form a sentence? Could it be that, like the pattern NOUN pw NOUN, this pronominal pattern also was not meant to differentiate between the subject and the predicate and is to be viewed as a flexible construction in which the kinds of pronouns used depend solely on their characteristics as initial and non-initial pronouns with no regard to their function? I have asserted above that there is no strong theoretical objection to the 'non-initial' pronoun being the predicate, but I tend to think that this construction is, nevertheless, a construction in which the distinction between subject and predicate may have originally existed-the predicate coming first. This assumption is supported by (a) the restriction of all other occurrences of the 'non-initial' pronoun to the employment as subject only; (b) the analysis of the pattern PRONOUN pw NOUN in which the 'initial' pronoun is the predicate; (c) above all by the change in position and the kind of pronoun in this pattern as witnessed by the parallelismus membrorum. If this assumption is correct, it would support a conclusion that the 'non-initial' pronoun was originally a 'subject' pronoun, i.e. that whenever a pronoun was to be employed as subject in a non-initial position in any kind of sentence (except verbal ones), the 'noninitial' pronoun had to be used. If, in our sentences, the 'initial' pronoun is the predicate then-as far as my feeling goes-this construction was stressed ' $I$ am she' and 'she is I', and not as we would stress it ' $I$ am she' and 'she is $I$ '. This may be a strong clue to the degree to which the ancient Egyptian language and linguistic 'logic' was different from ours.

This, I believe, was the original state of affairs, but then this unique pronominal identity construction may have undergone a certain development and change. In identity sentences like 'I am she' (which are confined to very special circumstances) the identity applies both ways and the distinction between subject and predicate tends to be neutralized. Thus this ternary pronominal pattern appears to have undergone, in the course of time, a process in which it eventually came to be 'neutral'.

It could have been like this: The 'non-initial' pronoun had gradually been restricted in its employment to sentences other than nominal sentences-i.e. adjectival and adverbial sentences-so that if
65 Two highly questionable instances are $C T$ vir, $95, i n k t m$ ? and $C T$ vir, 495 , $i n k$ wi $s p 2$ ? The parallels are $N$ wi sp 2 and $N$ pn wi sp 2. See also $C T$ iI, $37 h$, ink wi $r$ fnd $\cdot f$ which can be a mistake for mk wi $r$ fnd $\cdot f$. The identity of a person with himself is expressed in all probability by $i n k p w$, 'it is I'.

## AN UNUSUAL NOMINAL PATTERN IN MIDDLE EGYPTIAN

there was a need for a pronominal identity sentence, this pronoun could (or even needed to) be substituted by the 'initial' pronoun by virtue of the last being the only pronoun left for nominal sentences. This would result in sentences like $B D 64,5$-the only one of its kind 66 am , ntf pwink, ink pwntf, 'I am he and he is I'. This sentence, in which ntf is employed at both ends, may indicate that the formal distinction between the pronominal subject and predicate might have disappeared. 67 The employment of a specific pronoun as subject might have been not only impossible-in view of the restricted use of the 'non-initial' pronoun-but the need for it was perhaps no longer felt. This sentence may already be 'neutral'-at least formally-and resembles in this sense the pattern NOUN pw NOUN. From here it was but a small step to the omission of $p w$-which was no longer needed as copula-and to the turning of such sentences into a fully balanced pattern:
5. $m k \cdot w_{i} k_{3} \cdot k$ im $m \underline{h r t-n t r}{ }^{\circ}$ 응 " "here I am", so you shall say over there in the Netherworld. I am you'. An Ushabti figure from the Twenty-sixth Dynasty published by Raphael Giveon, 'Three Ushabti figures', Festschrift S. Yeivin (Jerusalem, 1970), 347 (in Hebrew).
 figure of the King Taharqa, B.M. 55485.
 Patterns in Late Egyptian, Ex. 109, p. 32. Anastasi, Iv, 5, 1. Sethe, Nominalsatz, §6, p. 7, translated differently.
8.
9.

The formation of such pronominal balanced sentences could have been possible in Late Egyptian (and in later academic 'Middle Egyptian') because this stage of the language did not actually use ternary (pro)nominal sentences. Coptic, however, would have to return to the ternary pattern in
 Stern, Koptische Gr., §254; Sethe, Nominalsatz, §145. As far as strict Coptic grammar is concerned the initial pronoun is formally the predicate here.

This is the time to return to N version of $P y r .703 b, N p w \underline{t} w t$. If $\underline{t} w t$ is not a mistake for $\underline{t} w^{68}$ then it can represent the beginning of the process in which the ternary pronominal sentences turned to be 'neutral', and is similar, in this respect, to the ternary sentence from $B D 64, n t f p w i n k$, ink pwntf. But, on the other hand, it can represent a new pattern-or combination-of a noun and a pronoun in a nominal sentence. If we tabulate the information obtained until now, a very interesting fact will emerge. The main combinations of nouns and pronouns in nominal sentences (but not adjectival or adverbial sentences) are as follows:

> Initial pronoun followed by a noun-'INITIAL' PRONOUN pw NOUN; 'INITIAL' PRO-NOUN-NOUN.
> Initial pronoun followed by a pronoun-'INITIAL' PRONOUN pw PRONOUN.

[^95]
## Initial noun followed by a noun-NOUN pw NOUN; NOUN-NOUN. Initial noun followed by a pronoun-

Version N of Pyr. $703 b$ may well fit in the fourth possibility and represent a new pattern, i.e., when, for one reason or another, an initial noun is to be employed in a nominal sentence together with a following pronoun, the 'initial' pronoun will be used, and the pattern will be NOUN pw 'INITIAL' PRONOUN. If this is true, it would appear that N version is the correct one while the two other versions of Pyr. 703 b ( $N \mathrm{pwt} \underline{t w}$ ) are just cases of an automatic replacement of an initial pronoun by a noun. ${ }^{69}$ It would also mean that, whenever a nominal sentence has only one pronoun, the 'initial' pronoun will be used disregarding its position and perhaps also its function-ink NOUN; ink pw NOUN; NOUN pw twt. In accordance with what has been said above about the identity sentences ( p .16 r ) and the analysis of the pattern 'INITIAL' PRONOUN pw NOUN, twt here has to be the subject (in apposition to $p w$ ?) since, in the first phrase ( $t w t p w N$ ) $\underline{t w t}$ is the predicate. $7^{70}$ All this is true, of course, only if $\underline{t w t} t$ is not a mistake for $\underline{t} w$ and I leave the decision with the reader. It should be noted, however, that N version of Pyr. 703 b does not stand alone on this front. There are three more examples that may corroborate it.
10. Pyr. 2041 ( N ) One of the sky'.
 his son'.
 It is noteworthy that $n t f$ is the pronoun used in all these peculiar sentences. It can be considered here as a Verstärker ${ }^{73}$ employed to put more emphasis on the noun preceding $p w$, or perhaps even on $p w$ itself (the 3 rd person pronoun), i.e. 'he himself (and no one else) is my father', but it can also be a member of the sentence. Edel (Altäg. Gr. §947) has analysed it in Pyr. 2041 ${ }^{74}$ as the predicate, while Sethe (Nominalsatz, §123) took $n t f$ in all these cases to be the actual subject in apposition to $p w$. Since $n t f$ can be employed as predicate in initial position before $p w$, it is difficult to conceive why it should be employed here as such after $p w$. The unusual position after $p w$ may be due to a change in its function in these sentences, and, indeed, Urk. Iv, $156,17-157$, I may favour a semiformal analysis of $n t f$ as the subject. Since, in my opinion, $s s \cdot f$, in the sentence ink $s 3 \cdot f$, must be the predicate and ink must be the subject, it would follow (for me) that also in the sentence it•i pwntf, $i t \cdot i$ is the predicate and $n t f$ is the subject. The reason for the unusual employment of $n t f$ in all these cases-if it is really the subject-is perhaps because it $\cdot i p w$ would rather mean 'it is my father' and not 'he is my father' ( $R \subset p w$ would mean 'it is Rē'' and $N p w$ 'it is N'). Thus it may possibly be that when it was desired to identify clearly a third person as subject with a noun, the construction NOUN pw ntf would have been used. ${ }^{75}$ If this is true, then we could say that ntf can be used as a subject to a noun only when it ( $n t f$ ) follows $p w$; otherwise it is always the predicate.

[^96]To sum up, I would conclude that Middle Egyptian had once possessed two complementary constructions, one for expressing a pronominal subject (ink NOUN) and one for expressing a pronominal predicate ( $i n k p w N O U N$ ). The last was gradually abandoned in favour of the more simple 'INITIAL' PRONOUN-NOUN in which the 'initial' pronoun could then be employed also for the predicate (ntf NOUN). This process may have started very early ( $C T$ Iv, $37 f$ ). The main nominal construction was always ternary-NI $p w N 2$. Such was also the construction with two pronouns which, however, turned to be a binary 'balanced sentence' and then a ternary sentence again on its way from Old Egyptian to Coptic, in which process it substituted the 'initial' pronoun for the 'non-initial' pronoun as the third member of the sentence.

The negation of nominal sentences was carried out by $n \ldots$ is (H. Satzinger, Die negativen Konstruktionen im Alt- und Mittelägyptischen, §§ 42-4; $\mathfrak{F E A} 56$ (1970), 208; Göttinger Miszellen, 2 (1972) 53 ff .), and I hope to present the evidence in a book which I am now preparing for publication. Of special interest is here the famous sentence $n r m t$ is st $n t$ šft st (Berlin, I 157, 13), 'they are not people of worth' (Gardiner, Egn. Gr. ${ }^{3}$ § 1 34). Gardiner has remarked that 'st "they" appears to be substituted for $p w$ ', and also Sethe, Nominalsatz, §79 regarded st as the subject. Since we saw that the 'non-initial' pronoun can be a subject in nominal sentences, this interpretation would seem to be strengthened, but the 'non-initial' pronoun was limited in this function to ternary pronominal sentences (and to special usages with adjectives and interrogatives); so it would be better to accept Gunn's objections and analysis in Studies, 171 (27) with n. I, '(they) are not people to be respected'. Also Sethe changed his mind (Erläuterungen zu den ägyptischen Lesestücken ( $84,7-8$ ), 138 ) and saw in this a negative nominal sentence with omitted $p w$. See also Lefebvre, Gr. §6ır.

## Postscript

It was already too late to make changes in this article when I discovered that I have failed to discuss $C T$ viI, $102 g-h$, sšst $p w i$ ( $=p w w i$ ) $r \cdot i \operatorname{ir} \cdot i \not m$, 'what am I ? what shall I do?'(?) or 'what am I myself (lit. to myself) that I shall act on my own' (read $m-r \cdot i$ or $m$-rwy $\cdot i$ ). If this is the correct reading of the passage then the conclusions reached at the top of page 174 are void. On the other hand it is possible that the Egyptians considered the interrogative sšs (=isst), 'what', in this construction as an interrogative pronoun. Interrogative sentences are peculiar in structure and I have purposely omitted any discussion of them in this article.

# BRIEF COMMUNICATIONS 

## The enclitic negation $\boldsymbol{w}$

This particle is not common with noun-subject; Edel, Altag. Gr. § inoo records only one instance, namely šsp w Ḥmn 'Ḥemen will not accept', Moalla, iII, 6. 7, where the negation precedes the subject. In $C T$ viI, II $5 i-k$ there are three consecutive sentences in which once the negation $w$ precedes the noun-subject, as in Edel's example, but twice follows it, and in all three instances it is reinforced by the enclitic particle is. The sentences in question run: wnm $w N$ is $h s, s w r^{1} N w$ is $n \cdot s n$ wsst, ${ }^{5} m N w$ is $n \cdot s n$ shdh $d^{2}$ ' N will not eat faeces, N will not drink urine for them, N will not go upside down for them'. The variation of the word-order is curious; on the function of is cf. Gilula in $\mathscr{f} E A$ 56, 208 ff .
R. O. Faulkner

## 'Hands and hearts (Berlin 1157)'-an alternative

In a recent volume of this fournal, Henry G. Fischer drew attention to an interesting palaeographic detail on the great Semna stela of Sesostris III (line 13). ${ }^{3}$ This is a hieroglyph which has invariably been read as the $h p s ̌$-sign ('foreleg of ox'-Gardiner F 23), but which, on the basis of its absence from the duplicate Uronarti text, has been largely ignored by translators. ${ }^{4}$ Fischer makes the point that the association of 'hands and hearts' ( $h p s p^{\prime} w$ and $i b w$ ) as apparently found in the Semna line-
 sidered merely as an orthographic anomaly, and in support he quotes an impressive number of parallels. ${ }^{5}$ Implicit in this interpretation, however, is an assumption as to the reading of this sign, which careful consideration of its form suggests may well be fallacious; in short, it is far from certain that the hieroglyph in question can, in fact, be correctly identified as the $h p s^{s}$-foreleg. ${ }^{6}$

That it bears a general resemblance to the latter is evident; but close comparison of the facsimile of the Semna sign published by Fischer ${ }^{7}$ with the standard contemporary form of the $h p$ š-sign (see e.g. the exemplar figured in Griffith, Beni Hasan, iii, pl. iv, 55$)^{8}$ reveals striking incongruities. Compared with the normal form, the Semna sign has a curiously disjointed aspect; it is rather disorientated, and its parts are out of proportion. Without demanding invariable perfection of the Egyptian artist or craftsman, it seems fair to say that, if the Semna sign was, indeed, meant to represent the well-known and familiar 'foreleg of ox', then it is a crude and careless piece of work, and would, for that reason alone, be strangely anomalous in an otherwise well executed royal stela. ${ }^{9}$

[^97]There is a further, not unimportant, consideration which has already been alluded to above: the sign or word, if such it be, is missing in the parallel line of the duplicate Uronarti text. Now this apparent inconsistency should not be glossed over or ignored; for it is one of the remarkable features of the Semna and Uronarti stelae that, unlike other 'duplicates' of historical texts, they are indeed 'essentially the same'. ${ }^{1}$ It is, therefore, a further corollary of Fischer's interpretation of the Semna line that an error of omission on the part of the Egyptian scribe or craftsman must be assumed in the corresponding Uronarti line.

Given these factors, we are led to ask whether an alternative reading may not be possible, which would at once be orthographically feasible and at the same time be fully consistent with the reading of the Uronarti text. The present writer would suggest that a positive answer to this question is to be found in a somewhat obscure variant determinative of the verb sd. This sign in its earliest occurrences, in the Pyramid Texts, takes (with minor variations) the basic form $\varpi ;{ }^{2}$ a later example, in the cursive hieroglyphs of a Book of the Dead, is written a little distortedly $\sim .^{3}$ Sethe ${ }^{4}$ convincingly interpreted this sign as representing a broken jar (laid on its side). This explanation receives strong support from the occurrence of the sign in the 'Ritualvermerk' $\underline{d} \boldsymbol{d} d \xi r$ 'rt 'break the red jars'5 (Pyr. 249), especially as written in the Pyramid of Unas: 䧁荡. ${ }^{6}$ Here the determinative of $s \underline{d}$ and the last sign in the group read as $d s ̌ r t$ are identical in form save for the 'indentation' in the first. The logical conclusion seems to be that the last sign in dšrt represents a complete jar ${ }^{7}$ and the determinative of $s \underline{d}$, rather appropriately, a chipped or broken one of the same type. In view of this, it is, perhaps, not entirely impossible that the origin of this obscure sign may be directly connected with the particular application of $s \underline{d}$ in this formula. At any rate, it is not difficult to imagine how such a rare determinative might in time become misunderstood and be subject to some distortion (cf. the Book of the Dead example cited above), especially, perhaps, when transmitted through the medium of hieratic. Such a process would easily account for the rather degraded, though none the less recognizable, form of the Semna sign. Though the latter is certainly distorted, the essential characteristics of the 'broken jar'-the curved and intact lower side, the chipped upper side, and the neck expanding into a rim-are all clearly discernible. Finally, it need hardly be said that the interpretation of the Semna sign as a determinative of $s \underline{d}$ ensures that the reading is fully consistent with that of the duplicate Uronarti text, which has simply ${ }_{x}$ significant difference between the two being the perfectly normal use of variant determinatives in each case.
W. V. Davies

[^98]
## BRIEF COMMUNICATIONS

## The structural failure of the Meidum Pyramid

In his recent article ( $\mathfrak{f E} A$, 1973), and subsequent book (The Riddle of the Pyramids, London, 1974), Dr. K. Mendelssohn argues that the Meidum Pyramid collapsed during construction. Dr. I. E. S. Edwards ( $f E A$, 1974) has questioned this theory on archaeological grounds, and as a Rock Mechanics Engineer, I feel that it is necessary to make some additional comments on the structural analysis of the pyramid with which Dr. Mendelssohn supports his argument. (The author has appreciated advice from Dr. I. E. S. Edwards and Miss M. Drower.)

The buttresses around the central core have three alleged structural weaknesses. Their width (ten cubits) is twice that of earlier pyramids. Mendelssohn's reasoning that the pyramid is weakened by the additional width of the buttresses is incomprehensible when it is realized that the masonry of each entire buttress is laid with an inward slope (I. E. S. Edwards, The Pyramids of Egypt, 1972, 81). Moreover, the increase in the buttress width means that proportionately the Meidum Pyramid has only half the number of weakness planes of the previous step pyramids. Secondly, the outer casings between the first step pyramid and the additional series of buttresses were dressed smooth forming planes of weakness ( $\mathcal{f E A}, 1973,65$; The Riddle of the Pyramids, ioi f.). These dressed surfaces do form a serious discontinuity although it is unlikely that this would contribute directly to the instability of the pyramid.

The third alleged cause of failure is said to have been the outward slope of the buttress tops (The Riddle of the Pyramids, 103 ; this factor is not mentioned in $\mathscr{F} E A$, 1973). Even if this is so, the stability of the outer buttresses would not have been affected, as has been demonstrated by the fact that the upper three outer buttresses (i.e. the top three steps) have remained intact for some four and a half millennia, in all weathers, in spite of the loss of the lower supporting buttresses.

The principal cause of weakness according to K. Mendelssohn is the outer casing of the true pyramid and the packing between it and the buttresses of the second stepped pyramid. The dressed limestone blocks forming the outer casing and the packing blocks were laid horizontally rather than at an inclined angle ( $\mathcal{f E A}$, 1973, 65, fig. 4; The Riddle of the Pyramids, fig. 22) as they were at the 'Bent Pyramid' at Dahshûr, but there is little, if any, evidence to indicate that an outer layer of horizontally placed blocks necessarily adds to the instability of the pyramid. This is illustrated by the large number of stable pyramids which have such a construction. An additional attestation to the stability of horizontally laid outer casing is seen at Meidum itself where the casing is intact to a height of about twenty m.; (cf. A. Rowe, 'Expedition at Meydum', Museum fournal (1929-30), 22, pls. Io and 24, fig. 2). More important is the nature of the packing which K. Mendelssohn claims is poorly laid masonry. While this claim is to some extent substantiated by A. Rowe (op. cit., pl. 18, fig. 2), Dr. Mendelssohn does not adequately demonstrate that the lower parts of the outer casing would have been subjected to pressures likely to cause failure. Finally, using the evidence of Wainwright (W. M. F. Petrie, E. Mackay, and G. A. Wainwright, Meydum and Memphis III, London, 1910, 1), he claims that the outer perimeter of the pyramid is founded on sand ( $\mathcal{f E A}, 1973,66$; The Riddle of the Pyramids, 102). However, Petrie's report does not include any drawings of this excavation although it states: 'A pit was sunk outside of the pyramid, and a tunnel cut under its foundations for 150 feet to the inner body of the mastaba.' (ibid.) The tunnel, it is said, passed through gravel which was laid under the pyramid angle casings, but the exact nature of this foundation material is not specified. A later report (W. M. F. Petrie, G. A. Wainwright, E. Mackay, The Labyrinth, Gerzeh and Mazghuneh, London, 1912) concentrates on the structure of the pyramid itself and not the nature of the foundations which must, it seems, remain largely a mystery.

The combination of these factors is said to have placed the pyramid in a critical condition so that an event like a heavy rainstorm initiated catastrophic collapse in which a considerable portion of the pyramid flowed away in a fashion similar to the Aberfan disaster ( $\mathcal{Y E A}$, 1973, 67; The Riddle of the

Pyramids, 109). This is difficult to imagine when the dissimilarity between the saturated mine tailings dam at Aberfan and the desert situation at Meidum is considered. Indeed the addition of water to sand strengthens it up to a point rather than making it flow. Drainage within the outer casing would most certainly have been sufficient to prevent saturation, the condition which facilitated liquefaction in the Aberfan mine dump. The addition of water, even in large quantities, does not provide the reason for the disaster. The analysis of the forces within the pyramid offered by K. Mendelssohn ( $\mathcal{F E A}$, 1973, 64 f .; The Riddle of the Pyramids, $97-9$ ) is also quite unhelpful for the understanding of the pyramid as it was constructed. A pyramid constructed with a core and sloping buttresses is anisotropic, having unevenly distributed forces which can only be treated by complex analysis. Elastic theory may with certain approximations establish a stress distribution, but I doubt if the data, theory, or facilities exist to demonstrate accurately the behaviour of the pyramid once it ceases to act elastically.

If the present physical shape of the Meidum Pyramid is largely due to structural failure, there are many unanswered questions concerning that collapse. Why has it failed so regularly on all four sides? Why does so much of the outer casing remain and why did some of the buttresses collapse and not others? Dr. Mendelssohn has not answered any of these questions satisfactorily. We are, however, agreed that without a large amount of expensive and tedious excavation to examine the lower parts of the Meidum Pyramid and its foundations, it will be impossible to determine why the pyramid failed, if indeed it did.

Christopher J. Davey

## Reply to Mr. C. J. Davey's Comments

Mr. Davey's comments on my theory of the collapse of the Meidum Pyramid ${ }^{\mathrm{I}, 2}$ (referred to subsequently as I and II) appear to rest on understandable misconceptions of pyramid construction and on some not so understandable misquotations from my work.

Taking the latter first, I shall deal with the points arising seriatim: (1) I have never referred to buttress walls as 'weakness planes'; they in fact provide, as will be seen later, the chief element of strength in the structure. Their part in the Meidum disaster was that of slip planes; (2) I have not said that the outward slope of the buttress tops affects the stability of the buttresses but that of the packing blocks of $\mathrm{E}_{3}$ laid on to them ( $\mathrm{II}, \mathrm{IO}$ ) ; (3) I have nowhere suggested that 'the lower parts of the outer casing would have been subjected to pressures likely to cause failure'; on the contrary this is the part of $\mathrm{E}_{3}$ that has remained intact. The mechanism of collapse has been illustrated in another publication ${ }^{3}$ of which Mr. Davey may be unaware. The outer mantle bulged (iI, 103, pl. 2r) under lateral pressure and the weight of the debris flowing down the sides saved the lower part of $\mathrm{E}_{3}$ by adding stability to it. (4) Neither have I suggested that the possible effect of rain on the sand under the pyramid corners was instrumental in the collapse. The reference (II, IO9) is to the body of the pyramid. Contrary to Mr. Davey's opinion, even small quantities of moisture can act as a dangerous lubricant at pressure points in limestone, a fact of which the Egyptian architects were fully aware and who elaborately guarded against it (II, IO3). (5) Mr. Davey is in error when doubting that 'data, theory or facilities exist' for dealing with the stress distribution in a pyramid of sloping buttress walls. Such an analysis has, in fact, been made by Rössler ${ }^{4}$ twenty-five years ago. However, it refers to an ideally built pyramid which, as we shall see, was not the case at Meidum nor anywhere else.

Having dealt with these minor inaccuracies, we now turn to the main point of Mr. Davey's

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criticism: 'Mendelssohn's reasoning that the pyramid is weakened by the additional width of the buttresses is incomprehensible', for which he quotes in support Dr. Edwards's well-known book. ${ }^{1}$ Although the page-reference given by Mr. Davey is obviously incorrect, the illustration fig. 26 on p. II3 shows buttresses composed of well-squared blocks which, if correct, would fully justify Mr. Davey's argument. Unfortunately, this diagram is somewhat misleading and, as my photograph ( I , fig. 3 and II, pl. 19) shows, does not at all represent the true state of affairs. There we see a rather thin buttress wall, backed by irregularly-shaped blocks forming the actual buttress which, but for the skin-deep wall of fitted masonry, provides little inward thrust in support of the building. Thus Mr. Davey's contention of stability by the buttress as a whole turns out to be a fallacy.

The true internal structure of buttresses has been well known since 1837 when Perring ${ }^{2}$ investigated the Step Pyramid at Saqqâra and wrote: 'The bulk of the masonry consists of loose rubble work and is enclosed by walls of rudely squared stones, set to the angle of the surface' (see also II, pls. 7 and 12). Hence my suggestion (1, fig. 2 and II, fig. 21) that halving the number of buttress walls at Meidum may have contributed to the collapse of that monument. The source of Edwards's figure 26 is a very rough drawing made by Lepsius ${ }^{3}$ in 1843 and hardly intended as more than a schematic sketch. Later investigators such as Borchardt ${ }^{4}$ and Maragioglio and Rinaldis have largely limited themselves to representation of the outer walls, not hazarding any guess as to the detailed internal structure. In I, fig. Ib and II, fig. 25 I have emphasized the rough nature of the internal masonry as revealed by my photographs. In fact, my thesis of the collapse of the Meidum Pyramid is based on yielding under the high local pressure at the contact points of badly squared blocks as the incumbent weight increases during building. It is a phenomenon moderately well known in rock mechanics. (Since much space has been devoted to this problem in I and II, it need not be reiterated here.) Finally, Mr. Davey invokes Edwards's suggestion that the pyramid may have collapsed centuries later, ${ }^{6}$ but since the Meidum Pyramid was never completed it seems more likely that the disaster occurred during building than that many hundred years later a previously unfinished building was destroyed by an earthquake.

While Mr. Davey's arguments may be fallacious, they are valuable in focusing interest on a feature of pyramid construction which has as yet received little attention. This is the effort of the Egyptian architects to minimize the use of well-squared blocks since these are difficult and expensive to quarry (iI, ioo). It seems that economy in their use at Meidum led to ultimate disaster and that at the Dahshûr Pyramids similar disasters were forestalled by lowering the angle of elevation. This leaves the large Giza Pyramids which have retained stability in spite of reverting to the steeper angle of elevation. I have drawn attention to the use of large well-squared packing blocks for their outer mantles ( $\mathrm{I}, 70 ; 1 \mathrm{I}, 122$, pls. $3 \mathrm{I}, 33,34$ ) and it has sometimes been assumed that the monuments are entirely composed of such blocks (see e.g. op. cit. in n. 5, p. 116). This would, however, have required the quarrying of no less than $2,300,000$ of these blocks-a formidable and not very credible effort. Following up my work, an Egyptian-American research team has quite recently investigated this problem further ${ }^{7}$ and has found that at Giza the internal blocks were indeed of partly

[^100]irregular shape but, unlike the dry filling at Meidum, they were firmly embedded in mortar, inhibiting lateral shift and outward bulging of the pyramid faces.

These observations have since been confirmed and extended by the author under invitation by the Egyptian Academy of Sciences and will be elaborated in due course. K. Mendelssohn

## Further Remarks on Wrt He ${ }^{\text {kiw }}$

In the article printed above (pp. 100 ff .) Dr. Robert Hari tries to draw a distinction between 'OurtHekaou' (Wrt Hksw) and 'Ouret-Hekaout', that is between 'The Great Enchantress' and 'La Grande-en-grains'. He maintains that the goddess of the pendant found in the little golden shrine of Tutcankhamūn is really 'Ouret-Hekaout', while the goddess mentioned repeatedly in the inscriptions on the outside of the shrine is 'Ouret-Hekaou' (p. Ior):

Le pendentif . . . représente la déesee Ouret-Hekaout-et non Ouret-Hekaou mentionée a dix reprises dans les textes de cette chapelle.
For reasons of etymology I cannot agree with that distinction. Dr. Hari derives the name of his so-called 'Ouret-Hekaout' from the word for 'mesure de grains' (Wb. III, 174, 15) which he reads $h k_{3} t$ ou $h k s w t$ (p. 100, note 4) but which in fact should be read $h \underset{k}{ } \mathbf{k} t$. There is no suggestion that $k$ and $k$ are here at any time interchangeable.

The Goddess Renenet, who according to Dr. Hari is frequently assimilated to or identified with 'Ouret-Hekaout' (p. 2) and is often represented as a goddess with serpent head, has, however, another frequent epithet as $n b t k_{3} w$, 'Mistress of Food' (for $k_{3} w=$ 'Speise' see $W b . v, 93$ ). Ample references for the various epithets of this goddess can be found in a list of epithets of Renenwetet collected by J. Broekhuis, De Godin Renenwetet (Assen, 1971), 142-8.

A second point of disagreement concerns the provenance of the pendant, as Dr. Hari states (p. IOI):

Si réellement, le pendentif ro8c provient bien de la chapelle, il ne lui est pas nécessairement lié, puisqu'il représente la déesse Ouret-Hekaout-et non Ouret-Hekaou.
As his distinction between two goddesses of these names has not been proved, the statement really puts the cart before the horse.

The pendant was discovered by Carter inside the shrine, as stated in his card-index concerning 108 c : 'Position under (b) bound round with thin strips of cloth', which means that it was found under the ceremonial corslet. At the most one could argue that the pendant was put into the shrine by mistake during the clearing-up operations after thieves had entered the tomb.

The actual connection between the shrine and the pendant is suggested by analogy: in a number of shrines from the tomb the King is called 'beloved' by the god who occupies the shrine. For example on the 'Hawk Standard' inside one shrine (Handlist, 283) he is called 'Osiris Neb-Kheperu-Réc, beloved by Sopdu'; in another shrine (Handlist, 296) an inscription on the figure of Menkaret calls the 'Good God Men-kheperu-Rēe' 'beloved by Menkaret', and so on.

It is logical to assume that the shrine on which the King (and twice King and Queen together) is called 'beloved by Wrt $H H_{3} w$ should contain a figure of $W r t H k s w$ '. And if a figure of a goddess is found inside this shrine on which 'the King of Upper and Lower Egypt Neb-kheperu-Rẽ' is called 'beloved by Wrt $H k s w$ ', it is difficult to escape the conclusion, that both belong together and represent the same goddess.

But I have to thank Dr. Robert Hari for drawing my attention to a picture of the pendant in an article by J. Leibovitch on 'Gods of Agriculture and Welfare in Ancient Egypt' ( 7 NES 12 (1953), $73^{-11} 3$, fig. 15). I was therefore wrong in stating that 'no picture of it had been published'. In

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fact, only the picture of the pendant in its wrapping was unpublished. However, Leibovitch mentions the pendant only very briefly. He does not state the provenance of his picture apart from the fact that the pendant belongs to the treasures of Tut'ankhamūn. He simply assumes that 'the Goddess can only be Renenutet who is being assimilated to Isis, following a principle of syncretism'. He takes 'the great one in magic' as an epithet of Isis and the King in the attitude of being suckled as an assimilation to Neper, the god of grain. Broekhuis (op. cit. 98), however, does not accept this interpretation as the King is called 'son of Neper' in the hymn of Sethos I. He concludes instead that the child nursed by a snake-headed goddess on the stela of Sethos I must be the Horus-King himself.

As Leibovitch had not noticed the factual relation between the shrine and the pendant, his interpretation of its meaning could only be conjectural, and I see no need to differentiate between the Wrt $H k ; w$ inside and outside the shrine.
A more delicate problem is the identity of this Wrt $H k ; w$ herself, as 'The great of magic' is a title which can belong to a number of goddesses. Dr. Hari wants to identify her with the lionheaded coronation goddess who appears on the stela of Horemheb in his article, and concedes

L'idée que le monument est essentiellement en relation avec le couronnement paraît donc logique.

But is it right to assume that this lion-headed goddess called nbt ch (Lady of the Palace) on the shrine and on the stela has a separate existence as a coronation goddess?

Ramesses III was nursed by Wrt hkswt (sic) nbt rh (Broekhuis, op. cit. 8) and on one of the pectorals of Tutcankhamūn (Handlist 267 q) the lion-headed Sakhmet is shown in a coronation scene together with her consort, the god Ptah, while the uraeus serpent appears behind Ptah between symbols of the Sed-festival.
Would it not be nearer to Egyptian thinking to accept the lion-headed goddess and the uraeus serpent (Wedjoyet) as different forms of appearance of the daughter of Rē as they are united already in a Middle-Kingdom hymn to Hathor in the tomb of Antefoker (Schafik Allam, Beiträge zum Hathorkult, Berlin, 1963, 139) where Sakhmet and the uraeus serpent are names for one and the same goddess?

It is important to notice that the scenes on the outside of the shrine still belong to the Amarna period with its antipathy to idols. Wrt $h k s w$ stands for the coronation deity rather than for any lion-headed or snake-bodied goddess. Dr. Hari agrees that most of the scenes on the shrine have parallels in coronation pictures; he even convincingly compares the striding king in the papyrus boat holding birds in his outstretched hand with the 'Vogel-lauf' which occasionally was part of the coronation ceremonies. Yet he finds difficulties with the scenes of King and Queen pouring out fertilizing water. But these ceremonies too, can easily be understood if one ignores the frivolities of dress and attitude and concentrates on the symbolic action and the symbolic chains of mandrake fruit (so much beloved in Amarna symbolism) worn by the King. A parallel can be found in Sedfestival scenes of Amenophis III at Luxor (Gayet, Luxor, Mém. Mission 15, pl. 8, fig. 47) where the King is pouring out two streams of life-giving water (irff $d y(n h)$ into two basins which are held up by an cankh-sign with arms. The King stands in front of Amūn and is followed by his double in the form of a Nile God.

It would be useful to collect more scenes from Amarna art itself which correspond to scenes on the shrine, and to compare also other scenes from the treasure of Tutcankhamūn with pictures of gods (as for example the coronation scene before Amūn on the pectoral of the ceremonial corslet Handlist, 54K).

But the relation between the $W r t H k ; w$ of the shrine with the coronation of Tutcankhamūn is almost beyond doubt.

Kate Bosse-Griffiths

## An Egyptianism in the Amarna Letters?

Writing in 1937 about certain Amarna Tablets, Albright ${ }^{1}$ argued that 'the letters from Abimilki, prince of Tyre, were actually written by an Egyptian scribe'. It is not surprising, therefore, to find that the closing formula of one of these letters ${ }^{2}$ can be closely paralleled with Egyptian: $a-n u-u m-m a ~ i s ̌-p u-u r ~ a-n a ~ b e-l i-i a ~ \grave{u} d a m i q ~ e-n u-m a ~ i-t e, ~ ' N o w, ~ I ~ h a v e ~ s e n t ~ t o ~ m y ~ l o r d, ~ a n d ~ i t ~ i s ~ g o o d ~$ that he should know.' The absolute use of šapāru cannot be considered as an Egyptianism, although parallel to the contemporary Egyptian use of $h_{3} b$ in such expressions as $i w \cdot i(r) h 3 b r r d i t ~ r m \cdot k$ or $h s b p w r r d i t r h p s y \cdot i n b .{ }^{3}$ The usage is perfectly good Akkadian. ${ }^{4}$ With the second part of the clause we are on firmer ground. Damiq is only exceedingly rarely followed by an enūma clause, and apparently, barring some Old Babylonian examples, ${ }^{5}$ only in the Amarna letters. ${ }^{6}$ This type of clause is also common after verbs of speaking and perception, although it is again a usage of the peripheral dialects. ${ }^{7}$ Even if we allow that the style and phraseology of Akkadian and Egyptian letters have much in common, the present passage seems more in line with Egyptian than Akkadian usage, and specifically with the Egyptian formula $n f r \operatorname{sdm} n b \cdot i$ or $n f r s d m \cdot k$. This formula is extremely common in the Middle Kingdom, ${ }^{8}$ but quite rare later. ${ }^{9}$ It is used almost exclusively by inferiors talking to their superiors, and in sense, if not specifically in form, it is a polite command to pay attention. ${ }^{10}$ Late Egyptian uses for such a closing command, although normally from a superior, the phrase $i \underline{h} r h \cdot k s w,{ }^{11}$ and in the body of the letter the constructions formed with dit $h r \ldots n .{ }^{12}$ The basic sense of the $s \underline{d} m, r h$, and dit $\underset{r}{ } r$ of these constructions is 'to pay attention to', so that the use of $i d \hat{u}$ rather than $\check{s e m e m} \hat{u}$ in the Akkadian in no way vitiates the parallel. ${ }^{13}$

The main interest of this parallel between the Akkadian and the Egyptian is the light it may throw on the way the Egyptian scribe dealt with Akkadian grammar. The sentence $n f r \mathrm{~s} d m \cdot k$ is, in Gardiner's terminology, a sentence with adjectival predicate, ${ }^{14}$ with the $s d m \cdot k$ a 'noun clause'15 acting as subject; in Polotsky's terminology a 'that' form ${ }^{16}$ for which Akkadian and West Semitic have no strict parallel, so that a 'that' clause introduced by en $\bar{u} m a$ is substituted. Thus, although the construction may be Canaanite, ${ }^{17}$ the use throughout the Amarna letters of an enüma clause following verbs of speaking and perception is closely parallel to the Egyptian use of a 'that' form. There is, however, an example in a letter from Byblos that has a very Egyptian look about it, both in sense and

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construction. Here apparently râmu, 'love' has the sense 'desire, want', and is followed by an enūma clause: ${ }^{1} \dot{u}$ gab-bi awī̄̄̄̄ti ha-za-nu-ti, la-a ra-i-mu i-nu-ma tu-ṣú ṣābū pi-ṭá-tu, 'And all the city rulers do not like it that archer-troops come forth.'

Chris. Eyre

## The Berlin Head of Nefertiti

I would like to discuss the editorial footnote in $\mathcal{F E A} 60,200$ :
A widely held view is that the missing eye (in the Berlin head of Nefertiti) is due to the fact that the piece is incomplete, deriving from a sculptor's workshop.

I have not been to Berlin and seen this famous statue, but I do query 'the widely held view'. Judging from photographs, the head is perfectly finished, and I find it hard to accept that the craftsman would not have finished both eyes at once. Next, what is the right eye? Is it a composite artificial eye, fitted into the head, as was normal practice? It certainly looks such to me. In that case the left eye would have been left as a hollow, if indeed the head was unfinished. To me the left eye is finished, a portrayal of a blind eye. It is possible to think that the working ink marks on the 'Unfinished Head' in Cairo hint at some such defect. But personally I do not think that that head and the Berlin head are portraits of the same woman.

Nial Charlton

## The Horizon of the Aten

Recently when sailing downstream from Luxor and passing Tell el-'Amarna in daylight, it occurred to me that it might be of interest to see whether there was any topographical peculiarity in the landscape that might have induced Akhenaten to settle upon this particular site in preference to all others as 'the place of origin' of the Aten. I persuaded myself that such a feature is to be found on the eastern bank as soon as the boat rounds the bluff of the Gebel Abu Fedah and the whole of the plain of Tell el-'Amarna comes into view. This region is bounded on the east by cliffs which make a band of uniform height except at one point where there is a remarkable gap of almost rectangular shape. This interruption in the line of the horizon is visible as a notable landmark from a long way off; and as the site is approached is seen to be formed by the Wadi Abu Hasan el-Bahri, virtually in the middle of the amphitheatre of cliffs that encompasses the plain of modern Tell el-'Amarna. This gap in the cliffs forms a huge natural silhouette of the $3 h t$-sign $\simeq$ and suggests that its appearance determined not only the location of the place of origin of the Aten but its name also, 3ht-itn, 'the Horizon of the Aten'. An additional recommendation was recognized, of course, as soon as Akhenaten found that the site so chosen had not previously belonged to any god or man. It is perhaps not without significance that it was in the wadi that forms this gap that the royal tomb was hewn. When the king died and flew to his horizon it was to a point where the reborn Aten originated at dawn every day.

Cyril Aldred

## Serological evidence for the parentage of Tutcankhamūn and Smenkhkarē

Earlier theories that Amenophis IV (Akhenaten) was the father of Tutcankhamūn through his marriage to Nefertiti have now been discarded in favour of the more acceptable descent from Amenophis III. The mother of Tutcankhamūn is, however, less clearly identifiable. Two possible candidates have been suggested, namely Tiye, chief wife and favourite of Amenophis III, and Sitamūn, eldest daughter of Amenophis III (Aldred, 1968).
 141, 6.

Unfortunately, the remains of Amenophis IV, Queen Tiye, and Sitamūn have not yet been discovered but the body of Amenophis III is on display in the Mummy Room in the Museum of Antiquities in Cairo and the remains of Yuya and Thuyu, parents of Queen Tiye, are also available in their mummified coffins. An opportunity was recently presented for the examination of these three mummies from the serological and anthropological standpoint; this short communication describes the results of the serological investigation.

Only small pieces of tissue were obtainable from Yuya and Thuyu, consisting of a few mg of soft tissue from the feet but two larger pieces, both amounting to several g , were obtainable from Amenophis III. The methods employed to extract the blood group substances from this tissue were identical to those used in the previous investigations (Connolly, i969; Harrison, Connolly, and Abdalla, 1969) and enable the determination of blood groups of the ABH and MN systems. In addition, the relatively large amounts of material available from Amenophis III permitted crosschecking of the experimental methods by performance of standardized inhibition of agglutination procedures (Boyd and Boyd, 1934).

The results of these investigations demonstrate that all three mummified remains are group A and by differential exclusion $\mathrm{A}_{2}$. Amenophis III, in addition, was shown to be group M, whereas both Yuya and Thuyu were group N. Both fragments from Amenophis III yielded identical serological reactions. These results enabled the following interpretations to be made.

It may be argued that Queen Tiye, daughter of Yuya and Thuyu, would have demonstrated the blood group $\mathrm{A}_{2} \mathrm{~N}$. It would follow, therefore, that Sitamūn, daughter of Amenophis III, and Queen Tiye would have had the blood group $\mathrm{A}_{2} \mathrm{MN}$. By these analyses, Amenophis III and Queen Tiye could, therefore, have been the parents of Sitamūn as well as both Smenkhkarēr and Tut'ankhamūn-both previously demonstrated to have the blood group $\mathrm{A}_{2} \mathrm{MN}$ (Harrison, Connolly, and Abdalla, 1969). The possibility of Amenophis III and Sitamūn being the parents of Smenkhkarē $\overline{\text { e }}$ and Tut'ankhamūn cannot be excluded, but the probability of this event is slightly different in that such a union would theoretically produce equal numbers of offspring of groups M and MN whereas Queen Tiye in any union with Amenophis III would always have created offspring with the blood group of Tutcankhamūn and Smenkhkarē that is, MN. There is some evidence in modern populations for a heterozygous advantage yielding excess MN offspring (Moreton and Chung, 1959) from the type of union which would have existed between Amenophis III and Sitamūn and, therefore, the probability of such a union producing offspring of group MN like Smenkhkarē and Tutcankhamūn, is slightly greater than that of the alternative group M appearing. However, since by inference Queen Tiye must have been group N, any union between her and Amenophis III would always yield offspring of this MN group, like Tutcankhamūn and Smenkhkarēc. Clearly then, with Amenophis III as father, union with either Queen Tiye (route r), or Sitamūn (route 2), would, in practical terms, equally accord with both Smenkhkarē̌ and Tutcankhamūn as possible offspring.

The results enumerated above, therefore, are sufficiently significant to provide an interpretation indicated below, which should be considered entirely at its face value, assuming the usual limitations to interpretations of this kind of data. That is that the antigens isolated are, in fact, true bloodgroup substances and not of microbial origin and that no blood-group substance has been lost since death, thereby concealing possible heterozygosity.

Two features which emerge from this study in addition to the two possible family routes indicated above, are that assuming the authenticity of the blood-group determinations of Yuya and Thuyu, then Queen Tiye must be $\mathrm{A}_{2} \mathrm{~N}$ and assuming the same for Amenophis III, then Sitamūn must be $\mathrm{A}_{2} \mathrm{MN}$. Consequently, when the mummies of these two individuals are found, confirmation of these blood-groups proposed for them should be possible, thereby adding further authority to the relationships outlined above. Similarly, if the groupings described in this communication

Cf. Drioton, Le Texte dramatique d'Edfou (Cairo, 1948) 5, 'Tiens bon, Horus, tiens bon!'; he was, however, avowedly following the version in $\mathcal{F} E A$. If we ask what Horus is being urged to hold fast to, the answer apparently is the harpoon which the reliefs show him to be holding in his right hand; or less probably the rope which he often holds in his left hand. In either case, the sense is rather insipid. To hold fast on to an object already held in one's hand is an easy job.

I have looked at thirty-four occurrences of the verb, sixteen in the refrain and eighteen elsewhere. In Edfou, vi, 81, 3-4 the refrain is expanded: Horus is urged to $n d r$ the spear or harpoon-shaft. This might seem decisive, but in vi, 79, in the refrain is followed by an exhortation to Horus to $n \underline{d} r$ his war-galley. In other cases the context implies that the object of the verb is the enemy of Horus. Isis says in vi, 67, 2 that Horus has done this to Seth, and the refrain follows; in vi, 69, in the refrain is preceded by the statement that the enemy is 'in thy rope', and in vi, $7 \mathbf{1}, 4$ by the statement that the shaft of Horus has been planted in him (cf. $\mathcal{F} E A$ 29, 13 with n. $m$ : "Him" must be Seth'; in The Triumph of Horus, 93, the pronoun has been changed to 'them' for no more apparent reason than that crocodiles are mentioned just before this). In occurrences outside the refrain the verb usually governs an object, although this sometimes follows the preposition $m$; occasionally no object appears. In vi, 64, 7, vi, 67,3 and vi, 69,8 the harpoon seems to be the object, but vi, 66, 12 ( $n \underset{d}{ } r b i \xi \cdot k i m \cdot f$ ), ('let thy harpoon $n \underline{d} r$ him') invites the possibility of taking it as the subject in these instances, ('the harpoon $n d r$ 's' or 'let the harpoon $n d r$ '). This will not apply to vi, 83, 12 ('it is Ptah who ndr's thy spear'). In one case the object is 'thy mat (or, throne)': vi, 79, 8, on which see $\mathcal{F} E A 30,17 \mathrm{n}$. 37. In the majority of cases, however, the Sethian hippopotamus is the object, or certain parts of it: see vi, 62, 7, for which $\mathcal{f} E A$ 29, 4 cogently gives 'pierce thou the Hippopotamus'; vi, 6i, 7 and vi, 64, 3 (his head); 'him' is the object in vi, 66, 12; vi, 67, 5; vi, 67, 6; vi, $73,5-6$; vi, 87,5 ; in vi, 73,6 the object is 'his bones'.

The conclusion is fairly clear. In general $n d r$ means 'to seize, take possession of', and this sense explains the varying objects governed by it. In the Edfu refrain a semantic narrowing emerges from the hunting context; here the reference is to the hitting and piercing of the hippopotamus, the pars pro toto in the capture of the animal. 'Hit, Horus, hit!' is the meaning borne out also by the reliefs, where the significant action is the smiting and piercing of the hippopotamus (its head, back, or testicles) by Horus with his harpoon. The verb is naturally used too of the action of the harpoon which Horus hurls, as in vi, 66,12 , 'Let thy harpoon hit him!' where $\mathcal{F} E A 29$, 10 is awkward ('Let thy harpoon fasten on to him'). Wb. II, 383 , II is content with the general sense of seizure in the hunt; and Alliot, Le Culte d'Horus à Edfou, II (1954), 708 n. 2, translating the refrain as 'grippe (-le), Horus, grippe (-le)' with a reference to the animal attacked, strangely relates the verb to the action of binding the prey with the harpoon rope. Certainly some of the reliefs show this end process, but they are not nearly as frequent as the scenes of smiting and piercing. M. E. Abd El-Latief Ibrahim, Aspects of Egyptian Kingship according to the Inscriptions of the Temple of Edfu (Cairo, 1972), 215 f., rightly argues that $n d r$ in the refrain is directed to the Sethian enemy rather than to the harpoon.

A further question is who may be thought to have shouted or chanted this refrain. It is assigned in the $\mathcal{F} E A$ articles and in The Triumph of Horus to the 'Chorus and Onlookers'. It would seem natural that actors and spectators, including temple singers, should have joined in. The concept of a Chorus, however, is more sophisticated. Perhaps an approach is made by the six women who are behind the Queen in pl. 509; they are, in one row, the Lower Egyptian princesses and women of Busiris, and, in the other, the Upper Egyptian princesses and the women of Pe and Dep. See further my forthcoming review of Fairman's admirable book in $O L Z$.

## J. Gwyn Griffiths

NB. Professor Fairman has kindly supplied two references in the above discussion.

Current research for higher degrees in Egyptology, Coptic, and related studies in the United Kingdom, No. 2

For the previous list see $\mathscr{f} E A 60$ (1974), 261-3. Thesis titles which have been significantly modified since the publication of the previous list are included again. The compilers wish to thank colleagues who have provided information.

The following dissertations are being prepared:

## Cambridge University

1. Hassan, A. el-H. M. 'Leases in Roman Egypt'. 1975. Ph.D. Prof. M. I. Finley (Jesus College, Cambridge).
2. Leahy, M. A. 'The Thinite Nome of Egypt in the Late Period'. 1973. Ph.D. Mr. B. J. Kemp (Faculty of Oriental Studies, Sidgwick Ave., Cambridge).
3. Mohammed, A. A. S. A. 'The Neolithic of the Northern Sudan'. 1974. Ph.D. Dr. J. Alexander (Faculty of Archaeology and Anthropology, Downing St., Cambridge).
4. Tillett, L. S. ‘The work of the Robert Hay expedition, 1826-38'. 1975. M.Phil. Prof. J. M. Plumley (Faculty of Oriental Studies, Sidgwick Ave., Cambridge).

## Durham University. School of Oriental Studies.

1. Robins, Miss G. 'Women in the Royal Family in Egypt in the New Kingdom'. 1975. Ph.D. Prof. J. R. Baines (Griffith Institute, Oxford).

Liverpool University. School of Archaeology and Oriental Studies.
I. Green, M. A. 'Studies in Late-Egyptian syntax'. 1974. Ph.D. Prof. A. F. Shore.
2. Lowle, D. A. 'The Army in Pharaonic Egypt'. 1974. Ph.D. Dr. K. A. Kitchen.
3. Pickavance, Mrs. K. M. 'Early British travellers in Egypt'. 1972. M.A. Dr. K. A. Kitchen.
4. Simpson, W. G. 'Studies in Hamito-Semitic'. 1974. Ph.D. Mr. A. R. Millard and Dr. K. A. Kitchen.
5. Watson, Mrs. A. 'Egyptian terms relating to agricultural land and its working'. 1975. Ph.D. Prof. A. F. Shore.
6. Watson, P. 'International trade (2nd millennium b.c.) in the Ancient Near East (including Egypt)'. 1975. Ph.D. Mr. A. R. Millard.

London University. Department of Egyptology, University College.
r. Heaver, Miss P. 'A study of the Fayyum and adjacent areas during the Old and Middle Kingdoms from written sources'. 1975. M.Phil. Prof. H. S. Smith.
2. Spencer, Mrs. P. A. 'Lexicographical studies in Ancient Egyptian architecture'. 1975. M.Phil. Prof. H. S. Smith.

London University. Institute of Archaeology.
r. Hillson, S. 'To what extent can biological variation in Ancient North East African populations be related to variations in their environment?' 1974. Ph.D. Mr. D. R. Brothwell and Dr. D. M. Dixon (University College London).

## Oxford University. Griffith Institute.

I. Jones, D. 'The economy and administration of Egyptian monasticism in the Fifth to Seventh centuries'. 1975. B.Litt./D. Phil. Dr. C. C. Walters (University College, Oxford).

The following theses, mentioned in the previous list, will not now be submitted: Liverpool, no. 2, London, nos. 2, 5. Geoffrey T. Martin W. V. Davies

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Ancient Egyptian Literature. A Book of Readings. Volume 1: The Old and Middle Kingdoms. By Miriam Lichtheim. Pp. xxi +245 . Los Angeles, Berkeley, and London, 1973. Price \$7.95.
This excellent book is a wide-ranging anthology of ancient Egyptian texts from the Old and Middle Kingdoms, translated into English, with short prefaces (giving the essential bibliography) and notes for each selection. It also contains a brief but interesting introduction on 'Literary Genres and Literary Styles', a chronological table (listing only the kings mentioned in the text), and good indexes on 'Divinities', 'Kings and Queens', 'Personal Names', 'Geographical and Ethical Terms', 'Egyptian Words', and 'Some Major Concepts'.

What distinguishes this anthology from most others currently available is the fact that it is not limited to the narrow confines of belles-lettres. Rather, it includes, in addition to the standard literary works written on papyri and ostraca, a generous sprinkling of biographical and historical inscriptions carved on stone. Thus, in these pages are to be found not only excerpts from the Pyramid and Coffin Texts, songs and hymns (such as the 'Harpers' Songs' and the 'Cycle of Hymns to King Sesostris III'), a fairly complete selection of didactic treatises (for example, the 'Instruction of Ptahhotep' and the 'Instruction of King Amenemhet I for His Son Sesostris I') and of pessimistic compositions (among which are the 'Complaints of Khakheperresonb' and the 'Admonitions of Ipuwer'), and, of course, such famous prose tales as the 'Shipwrecked Sailor' and 'Sinuhe'; but also monumental inscriptions from private tombs (some examples being the autobiographies of Weni and Harkhuf from the Old Kingdom, and the stelae of Tjetji and Sehetep-ib-rē̌ from the end of the First Intermediate Period and the Middle Kingdom respectively), four royal inscriptions (of Pepi I, Mentuhotep IV, Sesostris I, and Sesostris III), and the difficult but fascinating work known as 'The Memphite Theology'. The inclusion of the non-literary texts is all the more welcome because many of these can only be found in the antiquated translations of Breasted's Ancient Records or in the very expensive ANET. Moreover, contrary to the practice of the latter, the arrangement in this volume is chronological and therefore 'designed to bring out the evolution of literary forms' (p. vi).
The translations are, for the most part, accurate and up to date; and, unlike some translators, Dr. Lichtheim certainly does possess the requisite philological expertise as well as that less tangible but equally essential linguistic attribute, Sprachgefïhl. Nevertheless, as she herself states in her 'Preface', 'those who are familiar with the texts . . . are aware of the limitations of our understanding, of the conjectural nature of much that is passed off as a translation, and of the considerable differences between the several translations of one and the same text'. This has to be stressed because non-philologists and scholars in related fields (who have the greatest need of translations) often do not realize, and would be surprised to learn, just how tentative are many of the renditions accepted by them as if they were the originals. It must always be borne in mind that 'translations serve two purposes: they substitute-inadequately-for the original works; and they aid in the study of the originals' (p. vi).

Given all the good qualities embodied in this book, it would be churlish to quibble about the interpretation of individual sentences or even passages with which one happens to disagree. In any case, limitations of space would forbid this. One criticism that must be made, however, is that the notes should have been either simplified or (preferably) expanded; for, in their present form, despite the author's best intentions (see p. vii), they are mostly too technical for the layman, yet not detailed enough for the specialist.

To conclude, we should be grateful to Dr. Lichtheim for having produced an outstanding work that ought constantly to be in the hands of the student of ancient Egyptian literature, and we look forward to the next volume with keen anticipation.

Stephan W. Gruen

Der königliche Harim im alten Agypten und seine Verwaltung. By Elfriede Reiser. Dissertationen der Universität Wien, 77. Pp. iv + I 34.3 figs. Vienna, 1972. DM 14.

Any lingering hopes that the popular Western view of the harîm as a place of erotic fantasy had some reality in ancient Egypt will find no encouragement in this brisk and sober treatment of the evidence. Primarily the book is a review of textual references, largely the titles held by people within the institution, or institutions to which, for want of an alternative, the word 'harim' is applied. Though there seems to be no doubt that it was essentially there to serve court females, and the author notes that the words are not used to describe parts of a private household, because of the nature of much of the evidence the author's opinion that it was 'an independent institution and administrative unit of an economic significance' has a certain inevitability about it. How it might have appeared to the people who lived in it we cannot tell, though one's imagination might suggest that its activities were not confined to issuing loaves of bread and weaving linen. It is characteristic of this type of textual approach that the harim conspiracy records of Ramesses III are employed only as a source of administrative titles.

Part I deals with words to which the translation 'harîm' is commonly applied, and with words designating its female occupants. Part II summarizes the textual evidence for individual harîms. Part IV covers the administration, by which is meant mainly a summary treatment of the resources owned by harîms and of the various titles of officials connected with them. Part V discusses briefly the status and background of the ladies for whom the whole thing was intended, with treatments of the titles 'royal ornament' and 'child of the nursery'. A final excursus on eunuchs and castration brings us a little closer to the physical realities, though for the former the author concludes that, happily, the evidence is quite negative.

Thus far the book is a useful collection of annotated references, though without index or prosopography. It is when, in part III, the author ventures to relate the textual material to archaeology that a significant inconsistency emerges. For this part simply once more summarizes the obvious data, in this case the plans of buildings to which others have applied the label 'harîm', and in a manner which suggests that they had in mind something other than the 'administrative unit of an economic significance' that the author employs as her introductory definition. Her first example is the Palace of the King at Malkata, where the author strangely uses the incomplete plan from Ricke's Der Grundriss des Amarna-Wohnhauses, itself derived from the Tytus excavations, instead of the much more complete plan in W. Stevenson Smith's The art and architecture of ancient Egypt, fig. 55 on p. 162. The term harìm has been applied to the central part evidently because, with its matching smaller suites opening from the main hall from which also opens the king's bedroom, it provides a setting for the multiple romantic encounters of popular imagination. The identification may well be correct: one has only the plan and one's imagination. But at the same time it can scarcely have actually housed court ladies of any importance for the little suites are too cramped, particularly when one reads, as the author reminds us, that one of Amenophis III's queens, Gilukhepa, arrived from Mitanni with a retinue of 317 harîm ladies. Similarly at El-Amarna the term 'harîm' has been applied by the excavators to parts of buildings as a vivid and convenient designation without reference to how the Egyptian equivalent was used in texts. The harîms at the Great Palace are a mixture of gardens, little chambers probably for storage, and pillared halls. The same elements occur, as the author herself notes (p. 37 n .1 ), in the North Palace, so that this could equally be called a harîm, and the only reason why it is not described at length in this book alongside the other examples must be because the excavators did not feel like using the term on this occasion. It is entirely a matter of whim, with nothing to suggest whether or not the Egyptians themselves would have used their words for 'harîm' to describe any of these buildings.

It is therefore surprising to find that the one building complex from Egypt for which there are real grounds for identification with a harìm as referred to in texts is entirely omitted from this archaeological chapter. This is the site of Medinet el-Ghurab. By the simple expedient of superimposing the plans of Petrie and Brunton and Borchardt (in his Der Porträtkopf der Königin Teje) one obtains the plan of a site which, whilst not very illuminating in its architectural detail, nevertheless supplies one with the sort of large self-contained establishment that many of Dr. Reiser's textual references evidently apply to. Here, one might feel, is indeed a building big enough to house Gilukhepa and her 317 ladies, and to provide a centre for the activities (of an economic significance) of the harîm officials who are well documented at this site.

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As long as one bears in mind that part III of this book is probably irrelevant to the establishments to which the other chapters are constantly referring, this book can be accepted as a useful philological aid, though one must deplore the absence of indices.

Barry J. Kemp

The Rock Drawings. By Pontus Hellström, in collaboration with Hans Langballe. Vol. i: i: Text pp. 238. Vol. i: 2: Plates, pp. II, 25 maps, 56 pp. of drawings, 17 I pls., i folding map. $\mathrm{f}_{2} 28$. Preceramic Sites. By Anthony E. Marks. Pp. 77, 28 figs., 9 pls. $£ 7$. Late Nubian Sites: churches and settlements. By C. J. Gardberg. Pp. 54,7 figs., 85 pls. No price given. Human Remains: metrical and non-metrical variations. By Ole Vagn Nielsen. Pp. 139, 6i figs., 96 tables, 20 pls. fio. The Scandinavian Joint Expedition to Sudanese Nubia, volumes 1, 2, 7, and 9. Stockholm, Läromedelsförlagen/Svenska Bokförlaget and New York, Africana Publishing Corporation, 1970.

The archaeological rescue campaigns of the 1960 in Lower Nubia provided, in more than one sense, a test for archaeology and archaeologists. It was at the time a test of scholarly and institutional co-operation, of finding field methods appropriate to the situation, and now, as the results and discussions are gradually published, it is reasonable to see the whole vast enterprise as a test of just how far archaeology and its various types of evidence can go in explaining not merely the particular and the local in Nubian history, but wider issues of cultural process as well. It may in earlier days have seemed enough to cast Nubian history in the form of a simple episodic struggle between two different peoples, but, as seen, for example, through the eyes of W. Y. Adams and others, Nubia also offers a possibly unique opportunity for studying cultural and population trends over virtually the entire period that man has been leaving behind him traces of his industry, and this, one might think, ought to contribute in an important way to answering some of the 'hows' and 'whys' of historical and cultural development. Adams himself has used Nubia as a point of departure to stress the need to seek internal processes rather than foreign invasion to explain culture changes (articles in Antiquity, 42 (1968), 194-215; Orientalia, 39 (1970), 269-77); and if so, to take one problem, one might hope to observe in microcosm the operation of those factors which, given the outward similarity between the 'Neolithic' of Egypt and Lower Nubia, should be held responsible for the birth of civilization in the Nile Valley as a whole.
The results of the Scandinavian Joint Expedition should be welcomed with particular interest, partly because a large staff, well qualified in diverse ways, was able to conduct an imaginative programme of work over an extensive area, and partly because the area itself was relatively untouched. The organization and progress of the expedition is covered in the introduction to volume I of the series, which also briefly describes the geography of the concession which, by straddling part of the Second Cataract and a portion of the open river valley to the north, adds the element of cultural adaptation to differing environments to the over-all value of the results. It is, however, somewhat ironic to read that the expedition's very laudable concern to treat settlement sites with the attention they so much deserve was largely thwarted by the consequences of the re-siting, after an extraordinarily high flood in 1946, of a great many modern houses on the sites of greatest archaeological potential.

In the case of the preceramic sites (Palaeolithic and Mesolithic) responsibility for interpreting and publishing the results was taken over by A. E. Marks of the Combined Prehistoric Expedition whose own massive report, edited by F. Wendorf, already had incorporated the main results of the Scandinavian Joint Expedition work, as well as full reports on sites within the concession excavated wholly by the Combined Prehistoric Expedition. To avoid duplication, therefore, the SJE volume publishes only some small collections of early Palaeolithic material, a workshop-cum-camp site from the end of the Palaeolithic, and a group of surface sites which must bring one close to the beginnings of Neolithic culture in the area, apparently in the late fifth or early fourth millennium b.c. It is thus essentially an appendix to the Combined Prehistoric Expedition work, and as such includes a résumé of their chronological scheme. It also exemplifies the extremely concise methods of classification which have become standard amongst lithic prehistorians, combining the presence of individual types with their relative frequencies within an assemblage as a whole, the purpose being to express by means of graphs its precise character.

The achievement of the prehistorians in Nubia has been considerable. Starting from almost nothing, they have elucidated a detailed sequence of cultures and stages which displays a satisfying degree of continuity from the Acheulean onwards, so helping to dispel the earlier impression of a major break at the end of the Palaeolithic sequence, as well as considerable local complexity, exemplified in this particular report by a group of sites from the microlithic Nubian Final Stone Age which seem to be without 'demonstrable progenitor' and belong to a complex of stages in which the transition to the use of pottery and to a more settled way of life took place. From an overwhelming body of lithic material collected by the various prehistoric expeditions the changing and developing character of certain habits and technical processes can now be followed, providing, so it would seem, a sensitive index for differentiating groups of people. Geology adds evidence for their natural environment, and a disappointingly slight amount of faunal and floral data sometimes gives a clue to diet and to food collecting habits.
The Egyptologist may feel somewhat unmoved by material so remote, but he may feel entitled to ask in what sense were these people the ancestors of the historic Nubians and, since some of the Nubian stages (e.g. the Sebilian and the Halfan) occur in southern Egypt as well, how far were they also ancestral to the Egyptians of predynastic times. Two Final Palaeolithic cemeteries in the Wadi Halfa area containing contracted burials (F. Wendorf, The prehistory of Nubia, II, 954-95) give some substance to this query. But the problems of proceeding beyond the chronicling of changes in lithic industry and subsistence patterns and of attempting to reconstruct something of the form of the societies themselves are formidable indeed. Even the basic question of relating artefact assemblages and ethnic groups seems to remain almost insuperable (see the discussion by H.- $\AA$. Nordström, Neolithic and $A$-group sites, 106-7) so that the relative continuity/discontinuity between the various stages cannot readily be taken as evidence for population stability or for immigration. For some archaeologists the answer to these deeper problems lies in constructing paradigmatic models, and in the New World in particular, to complex evaluations of the minutiae of occupation sites for the purpose of reconstructing social and symbolic behaviour. To specific attempts at doing this the answer has sometimes been made that, beneath the jargon and the statistics is little more than a combination of old-fashioned intuition, the application of gross ethnographic analogy, and occasionally of social science theory which may already be outmoded amongst the social scientists themselves. Nubia has, so many might think, been spared so far the embarrassment of this approach, but it must also be recognized that the demands of explanation go far beyond typology, and that as yet the great Nubian rescue operation has generated relatively little in this direction.

This is particularly evident in the matter of the pace of change. Over an immense period of time one can now follow, thanks to the work of the Nubian prehistorians, the evolution of lithic technology in a relatively restricted yet highly important area. The earlier phases span enormous periods, and even some of the later phases cover several millennia. Then between about 5000 and 4000 B.c. pottery enters the range of products, and perhaps by five centuries later a culture showing close similarities to the contemporary late predynastic cultures of Egypt-the A-group-is found to be occupying the whole of Lower Nubia. The accelerating pace of change and development is very obvious, to the extent that, despite the unfashionable nature of diffusion or invasion as explanatory methods, even Nordström in his account of the A-group for the SJE series (not reviewed here) falls back on to something akin to this. Yet, granted the serious shortcomings of the equivalent archaeological record from Egypt, such evidence as exists suggests that events may have followed a similar accelerating and ultimately somewhat rather abrupt course in Egypt as well. The alternative mode of explanation is the internally self-multiplying dynamic local process (as attempted, for example, perhaps somewhat rashly, by C. Renfrew in his The Emergence of Civilisation) which is presumably implicit in the approach of Adams and which can still be made to accommodate the possibility of external influence, but even though Nubia might seem to offer as good an opportunity as any for at least trying to construct explanatory schemes of this type, there is still little real sign of this.

It would be quite unfair to level this as a criticism against highly competent and well-produced field reports such as those under review, but the dispersal of many of those most closely involved in the prehistoric side of the Nubian campaign may not bode well for the fullest utilization of all the results.

The Scandinavian concession was rich also in rock drawings, although 85 per cent of the inventoried total of 6,999 occurred in a limited area of the Second Cataract, in the Abka district. They form the subject of the first, two-part, volume of reports. Most of the text volume is a descriptive catalogue of sites and their

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individual petroglyphs with a summary table showing the distribution by site of the basic twenty-nine subject types. The plates volume contains the illustrations for this typological scheme, presenting the individual figures as a sort of visual index, grouped by subject, and leaving the presentation of the figures as parts of larger compositions to a number of photographs. Anyone interested in the compositions themselves, perhaps seeing them even as an art form, or in the mutual relationships of the figures will, in the absence of facsimile copies of complete scenes, probably experience some difficulty in combining descriptions, photographs, and copies of individual figures to his satisfaction; which is a pity since some of the groupings were evidently quite elaborate (e.g. station 378 g ).

The authors have little to say by way of explanation or dating; such matters are evidently reserved for a separate study, and, indeed, interpretation of rock drawings is fraught with even more difficulties than is the case with lithic assemblages, for even as a form of behaviour it remains somewhat puzzling (cf. the review by P. E. L. Smith in African Historical Studies, 1 (1968), 1-39). Why, for example, to judge from the small numbers of camel pictures (a mere seventeen), did the practice die out in late antiquity? Did people instead transfer their artistic urges to the more permanent dwellings that must have gradually replaced camping sites? The similarly small number of goats (twenty-seven) and complete absence of sheep are also striking, and have been noted by others. Furthermore, the immense difficulty of dating them still prevents an effective correlation with the groups of people distinguished by their archaeological characteristics. Something may come of attempting to extend Winkler's stylistic dating of the Egyptian rock pictures (cf. W. Resch, 'Das Alter der ostägyptischen und nubischen Felsbilder', IPEK 22 (1966-1969), 114-22), though the Nubian material understandably contains its own characteristics and probably a history of development long after rock drawing had declined in and around Egypt itself. For the early stages some of the Abka sites are of particular importance because of their association with evidence for changing river levels and with archaeological deposits. This was to have been the subject of a book by O. H. Myers who excavated some of the key sites, and happily the Scandinavian Joint Expedition has taken over responsibility for Myers' manuscripts. His copies of rock drawings are incorporated into this volume, but for the all-important records of their contexts we must still await a separate study. Note should also be taken of a recent attempt to use patination for dating (P. Cerviček, 'Datierung der nordafrikanischen Felsbilder durch die Patina', IPEK 23 ( $1970 / 3$ ), 82-7), not by reference to a simple absolute scale, which would be meaningless, but by an elaborate formula which takes into account the nature of the rock and the position of the carved surface. By using hieroglyphic inscriptions in the Kalabsha-Korosko area as a means of absolute dating some surprising results were obtained, in particular the inclusion of elephants, giraffes, and Felidae in groups dated to the Middle Kingdom, New Kingdom, and post-New Kingdom. This SJE volume attempts to indicate patination by a simple scheme of classification, but it would evidently be very difficult, if not impossible, to verify Cerviček's work on this basis.

In one particularly important respect the SJE petroglyph material conforms to an already established pattern: the great importance of cattle drawings ( $41 \%$ of all subject types in the cataract area). This has been the subject of several studies attempting to establish the existence of a widespread cattle-oriented culture in North Africa, derived either from within North Africa itself (e.g. P. Huard in Kush 15 (1967-8), 84-124) or from western Asia (W. Resch, Das Rind in den Felsbilddarstellungen Nordafrikas, Wiesbaden, 1967), with the trend of current work probably now favouring the former. In either case there seems to be no doubt that in this case at least the Nile valley became the object of a process of diffusion even if indications of common cultural features need not imply a common ethnic identity. The apparent demonstration by the Austrian Sayala expedition that the pan-grave culture was born by a group of people physically distinct from the indigenous Nile valley people is a suitable warning. Resch, for example, has argued from the petroglyphs for ethnic identity between Nile and desert dwellers in prehistoric Upper Egypt.

One of the SJE volumes is itself devoted to the human remains found in the course of excavation, though not all periods are well represented. The book begins with a summary both of Nubian history and of previous anthropological work, and offers a formulation of five questions where anthropological evidence might be expected to supply valuable data. The bulk of the book is a detailed presentation of the data in a necessarily dense form which few who are not anthropologists will be able to follow. The material is classified, measured, compared, reclassified by non-metrical means; the data are plotted to discover how far the various groups were internally uniform and how far individuals were deviating from the normal. There is a chapter
on physical stature. Egyptologists will probably hurry on to the 'conclusions', which are placed at the end of each chapter. These, in general, seem to follow the basic patterns which have emerged from earlier work. The easiest to understand is the degree of similarity among Meroitic, X-group, and Christian, which agrees well with the continuity stressed by Adams. Quite baffling, however, is the strong contrast between the characteristics of the people buried in Egyptian fashion in New-Kingdom graves (the Pharaonic series) and the C-group people, some of whose graves were contemporary with the former. Various explanations are suggested, none of them quite satisfactory. The C-group population seems to stand out by virtue of its difference from all other groups (except perhaps the A-group, for which the SJE data was slight) and by its greater internal variability. This is, at first sight, hard to equate with Adams's firm statements on ethnic continuity, but one is also prompted to ask if the conclusions would vary if the material was divided into the various component cultural phases of the C-group, and if it could prove possible to separate any pan-grave material from the older analyses in view of the Sayala evidence that pan-grave people were in fact different from the contemporary C-group with which they seem to have been long confused (see E. Strouhal and J. Jungwirth, 'Anthropological problems of the Middle Empire and Late Roman Sayala', Mitt. Anthrop. Gesell. Wien, 101 (1971), 10-23). This latter study did try to distinguish C-group phases, and suggests that early C-group shows more the sort of features that one might expect. Kerma material is also discussed in the SJE volume, but since there is so little comparative material from other periods in Upper Nubia it is impossible to place it in an acceptable context. Negroid influence is touched upon, being noted as especially visible amongst the X -group.

The main problem for the general reader is whether the simple statements which drop from the seemingly impenetrable tangle of statistics really mean what they seem to mean. For anthropologists are themselves by no means united on their interpretation. In particular, attention should be drawn to the article by D. P. van Gerven, D. S. Carlson, and G. J. Armelagos, 'Racial history and bio-cultural adaptation of Nubian archaeological populations', 7 . African History, 14 (1973), 555-64, where the point is argued that variations in human population may be as dependent on the operation of cultural and environmental change as on the movements of people: 'the explanation of morphological similarity between two populations in terms of racial origins and affinities is totally inadequate unless the role played by natural selection and possible parallel evolution has been determined and incorporated into the analysis'(p.558), and the same presumably applies equally to dissimilarities. There may thus be a danger in the non-specialist manipulating the more tangible results of a study like this SJE volume for his own purpose of explaining cultural change and human events. It may be wiser simply to leave it alone.

Fortunately, the last chapter on palaeopathology is not so hidden behind a barrier of uncertainty. All groups, we learn, were 'loaded with osteoarthroses' and suffered from alveolar abscesses from grinding their teeth down on gritty food. The irritability which this must have caused might just, perhaps, be seen to explain why the most frequent types of fracture were to the skull. In particular, one might suspect that it was expressed in wife-beating since most of the serious injuries were inflicted on females, and mostly young ones at that. As compensation, however, syphilis was absent, as was tuberculosis and leprosy.

It is with the volume on Late Nubian Sites that the grim archaeological realities of rescue work are brought home. Serious work on the churches and settlements had to be left until the last season, and although traces of settlement were a lot less numerous in the concession than one might have expected, nevertheless the abbreviated nature of some of the work is apparent. Yet in the circumstances it can hardly be faulted. Five somewhat isolated churches were dealt with, together with three 'washing basins' whose purpose still seems, to judge from the brief discussion on $\mathrm{p} .4^{2}$, to be not settled, a number of fortifications and defences and other settlement sites. It is these latter sites where the record is limited essentially to that of survey. The Egyptologist will find something of direct interest at site 51 , Gebel Sahaba, a hill in a commanding position beside the river, to the north of Wadi Halfa. Its table-like top was occupied by an irregular mudbrick fortress, dated by pottery to the New Kingdom, though to what period within the New Kingdom is not stated. A full report will appear in volume 5 of the SJE publications dealing with Pharaonic New Kingdom sites. Gardberg prefaces his volume with a general survey of history and cultural development in Christian Nubia, which follows a straightforward chronological form.

It is hard, in the end, to know how to react to the Nubian campaign. There has been an enormous increase in the amount of archaeological material, there has been a great advance in the sophistication with

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which material is classified and dated. Early prehistory and the latest cultural phases have been written from virtually nothing. The Scandinavian Joint Expedition volumes are very commendable contributions, representing a high measure of success in difficult circumstances. Yet the message of anthropology and of the social sciences which has been growing increasingly obvious for some time is that human individual and social behaviour really is a lot more complex than straightforward empirical deduction from archaeological data is likely to show. At the time, the Nubian campaigns did not generate much of an interest beyond the immediate one of salvage, and as the people involved gradually turn to other areas or interests it will become increasingly difficult to capture the necessary sensitivity for understanding more deeply the material remains from an area now wholly lost. But this view may turn out to be far too sanguine. There are many signs that the means for unravelling a lot more from archaeological evidence may still be very far off indeed.

Barry J. Kemp

Die $\mathfrak{f a h r e s z e i t e n r e l i e f s ~ a u s ~ d e m ~ S o n n e n h e i l i g t u m ~ d e s ~ K o ̈ n i g s ~ N e - u s e r - R e . ~ P l a t e ~ v o l u m e . ~ B y ~ E l m a r ~ E d e l ~ a n d ~}$ Steffen Wenig. Staatliche Museen zu Berlin. Mitteilungen aus der ägyptischen Sammlung. Bd. VII. Portfolio. $396 \times 298 \mathrm{~mm}$. Text supplement: pp. 48. Plates 54 (A-F, coloured; 1-28, line drawings; 2948, black and white photographs). Berlin, 1974. Akademie-Verlag. Price M 80.

In 1898-190r Schäfer and Borchardt excavated the sun-temple of Niuserrē on behalf of the Berlin Museum and at the instigation and cost of von Bissing. Amongst the finds were the remains of the decoration of a chamber which had contained coloured reliefs depicting the season of Inundation and that of Summer, with scenes illustrating the activities considered characteristic of each. These scenes appeared twice over, once on the east wall and once on the west of the chamber in question. The Winter season was not included. The remains of these scenes were found in a fragmentary condition and not always in the chamber itself so that a reconstruction presents many difficulties, but this, with detailed commentaries, will be dealt with in the text volume which is to follow.

The publication of the finds from this temple has been very slow and not even the interruptions consequent upon two wars seem to me quite a sufficient reason. However that may be, there are now before us all the fragments of relief which came or are thought to have come from this chamber. The work on this material has had to face the added difficulty that the fragments themselves had been divided during the war into two groups, those already published in various places, and those unpublished. Both groups were sent away for safe keeping. The first survived and was eventually taken to Russia but later returned, the second was destroyed by fire. After the war it was at first thought that all records had been lost, but in the end most of the original drawings were found, while others existed in the form of blue-prints. The survival of this material is the more important in that drawings or blue-prints exist of numerous small fragments not considered worth removal from the excavation site.

The plates themselves are loose, of folio size, and packed into a portfolio. They are divided into three groups. The first comprises six plates with coloured illustrations of a number of pieces where sufficient colour survived to make this worth while. Since even at the time of finding little colour was well preserved, more coloured illustrations would have served no good purpose. The second consists of twenty-four plates of line drawings of the fragments to a scale of $\mathrm{I}: 4$, and four additional plates with sketches of fragments not otherwise accounted for and taken from the Catalogue of Finds. These twenty-eight plates present every fragment known to have been found. A detailed perusal of them shows that all the really good pieces have already appeared in some publication or other. This does not, however, mean that the numbers of small fragments now published for the first time are without value, for they will certainly serve to build up and to control the production of an authoritative attempt to present a complete restoration of the scenes. The third group of plates, twenty in number, presents reproductions of black and white photographs of as many pieces as possible, and these include practically all the important pieces. These photographs are of course very important for comparison with the outline drawings. Each photograph is referred back to the appropriate outline drawing by plate and fragment number, so facilitating quick comparison.

To return to the set of plates with outline drawings, these themselves are divided into groups made up of the personifications of the two seasons, the accompanying inscriptions, the nomes and the fertility gods and goddesses, the scenes on the east wall, those on the west wall, scenes which might come from either wall, fragments with human figures, animal figures, birds, plants, fishes, tortoises, inscriptions, and miscellaneous, and finally the sketches from the Catalogue of Finds already mentioned.

Included with the portfolio is a brief text supplement which gives a short account of the history of the publication of the excavation of the Niuserréc sun-temple and some other technical details, the bulk, however, is taken up with descriptive matter with reference to each plate in turn. Firstly the colour plates are listed and their fragment numbers given; then the plates with the outline drawings are dealt with giving fragment number, museum number if any, whether the piece survives today or not, dimensions, various descriptive and discovery details, and lastly reference to any place where the fragment has already been published; finally the plates with reproductions of photographs are listed with their fragment and museum numbers. At the end there is a list in number order of the fragments indicating the fate of the piece in question, the plate on which it is depicted, and, if it has survived the war, its present whereabouts and museum number.

There can be no doubt that this set of plates is one which every Egyptologist and Egyptological institute will wish to possess. C. H. S. Spaull

Topographical Bibliography of Ancient Egyptian Hieroglyphic Texts, Reliefs, and Paintings. III. Memphis. Part i. Abû Rawâsh to Abûṣîr. By the late Bertha Porter and Rosalind L. B. Moss. Assisted by Ethel W. Burney. Second Edition revised and augmented by Jaromír Málek. $278 \times 188 \mathrm{~mm}$. Pp. $\mathrm{xxx}+392$, plans $40+$ general map. Oxford University Press, 1974. Price $f_{\mathrm{I}} \mathrm{I} \cdot 50$. ISBN 0-19-920041-6.

The Memphis volume of the bibliography familiarly known as 'Porter and Moss' appeared in 1931, nearly half a century ago. It covered Egypt from Abû Rawâsh southwards to Dahshûr and this in a modest 254 pages. The new edition is appearing in two parts, of which the first is now to hand. It runs from Abû Rawâsh as far as Abûṣ̂r and in so doing requires 392 pages as against only 83 in the first edition: almost a fivefold increase!

This edition is described as 'revised and augmented', but it is far more than this for, although the basic skeleton of the first edition has been retained, the actual material has not only been augmented but largely rewritten. For instance, the section dealing with the Giza Necropolis, quite the largest in the book, has been rearranged in accordance with the Reisner numbers so far as such exist, whereas before the Lepsius numbers were used. Even the older material put under contribution has grown, as a perusal of the list of unpublished sources will show, where additional manuscripts, drawings, and photos from England and elsewhere will be found. The hieroglyphic spelling of the names of persons and the elements composing them have been revised where necessary in accordance with more recent information and ideas. The original concept of the bibliography has been extended by the inclusion of many references to purely archaeological material because, says the editor, 'it has been felt that since the philologist and the archaeologist are beginning to work in much closer co-operation than ever before the inclusion of these references is fully justified'. The maps have all been removed from the body of the text and placed together at the end of the book.

A number of appendices serve greatly to add to the usefulness of the present volume. The first of these contains an index arranged under such headings as Agriculture, Crafts, Baking and Cooking, to name but a few, enabling scenes dealing with various aspects of life to be found with ease. The second contains a Classification of Selected Texts likewise arranged under headings such as Biographical, Legal Texts, Graffiti of Masons, etc. Thirdly there is a list of pyramids with the numbers that have been assigned to them by previous authorities, and finally individual lists of the numbers given to tombs at Gîza by Reisner, Lepsius, Junker, Steindorff, Hassan, and Abu-Bakr, all with appropriate page references. The extensive indexes cover Kings, Private Names, Divinities, and Objects in Museums.

This second edition of the first part of the Memphis volume is indeed a magnificent tool making readily accessible the vast amount of work done or published since the original edition. It is an indispensable

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reference work for every Egyptologist and the more especially because of the great importance of the area that it covers. Concluding his introduction Jaromír Málek says, 'I cannot wish more than that this publication may live up to the standards set by the previous editors'. This, I think he can be assured it does.
C. H. S. Spaull

Corpus of Hieroglyphic Inscriptions in the Brooklyn Museum. I. From Dynasty I to the End of Dynasty XVIII. By T. G. H. James. Wilbour Monographs. VI. $285 \times 218 \mathrm{~mm}$. Pp. xxiv $+215, \mathrm{pls} .89$ (including coloured frontispiece). The Brooklyn Museum, Brooklyn, N.Y., 1974. Price \$ı. ISBN o-913696-16-1. Lib. of Congress Cat. Cd. No. 73-78018.
This handsome bound volume, excellently printed on good paper, deals with all the hieroglyphic texts to be found on various objects in the Brooklyn Museum which date between the beginning of the Old Kingdom and the end of the Eighteenth Dynasty.
The objects themselves are in the main cylinder seals from the Old and Middle Kingdoms, statues and parts of statues from the whole of the period concerned, a few stelae from the Middle and New Kingdoms, New Kingdom shawabtis and funerary cones, and a miscellany of stone blocks from tombs, offering tables, vessels, amulets, etc. In addition there are numerous broken shawabtis of Akhenaten and very many stone fragments of various objects originating from Amarna. However, the objects, not being the theme of this corpus, remain largely unillustrated; the texts inscribed upon them, on the other hand, are all set forth in handcopies in seventy-six plates at the end of the book. Dispersed through the book are twelve photographic plates showing a selected few of the inscriptions while a coloured frontispiece depicts a shawabti of Amenemhet.
The inscriptions, over 400 in number, are mostly quite short. Each is the subject of an adequate notice briefly describing the object upon which the particular text is written, accompanied by a description of that text and, on occasion, a full translation. The museum accession number, the height, the material of which the object is made, its date, the donor, the provenance and a bibliography are appended in each case. The notices conclude with a commentary giving archaeological notes and an account of the previous collections of which the objects have formed part, in which connection it is to be noticed how many stem from the Abbott Collection.

This thorough book, which does not omit even the smallest text, is equipped with all the indexes which could be wished: royal names, private names, divine names, place-names, titles, provenances. Following the indexes are three concordances covering the Brooklyn Museum objects by corpus number and then by accession number, and finally objects from other collections cited in this corpus.

I have noticed one small error: p. 65 , item 15 Ib , the plate number should be lxxxix and not xlii.

> C. H. S. Spaull

Ramesside Inscriptions, Historical and Biographical. By K. A. Kitchen. Oxford. B. H. Blackwell Ltd. Vol. I, fasc. 2, 1971, pp. 33-64, $£ 0 \cdot 75$. Vol. I, fasc. 3, 1973, pp. 65-96, $£ 0 \cdot 75$. Vol. I, fasc. 4, 1973, pp. 97-128, £0•75. Vol. I, fasc. 5, 1974, pp. 129-92, £1•50. Vol. II, fasc. 6, 1971, pp. 289-352, £ $1 \cdot 50$. Vol. V, fasc. 2, 1972, pp. 65-128, £1•50. Vol. V, fasc. 3, 1972, pp. 129-92, $£_{1} \cdot 50$.
In $\mathscr{f} E A 56$ (1970) the first two fascicules of Kitchen's Ramesside Inscriptions were reviewed, and in $\mathcal{F} E A$ 58 (1972) six more. Since that time another seven have appeared. It is a continuing pleasure to welcome the progress of this enterprise, the utility of which cannot be too highly praised. Some texts are new, others have been collated either with the original or with the aid of photographs. Inevitably the majority have appeared elsewhere, but either widely scattered in books and periodicals, or in folio volumes which, although magnificent in themselves and models of clarity and accuracy, are most unwieldy in actual use. Kitchen's work is of a most practical size, while in this age of astronomical book prices its cheapness is a matter for gratitude indeed.

The first fascicules to be dealt with are numbers $2,3,4,5$, of volume I. It will, of course, be remembered that the parts of this work are being published as they are ready and not in any regular order. This batch contains texts from the time of Sethos I, mainly stelae and temple inscriptions. In fascicule 2 the most outstanding items are the Great Dedicatory Inscription in the Speos Artemidos and the Abydos Decree of Sethos I at Nauri. Number 3 has the Great Threefold Inscription from Kanais and the stelae of Sethos I, Ramesses II, Merenptah and Ramesses III which contain an invocation and offerings to the Nile, all four versions being given in parallel. Number 4 has an assortment of stelae and other texts, while number 5 is devoted to texts from the Great Temple of Sethos I at Abydos; the parts dealt with being the hypostyle halls, the seven chapels, the Osiris suite, the Sokar and Nefertem suites, the gallery of the kings, and the stairway corridor.

For volume II only one more fascicule has appeared, number 6. This continues the reign of Ramesses II and contains many stelae but also includes the Great Dedicatory Inscription of the temple of Sethos I at Abydos, and texts from the Luxor temple, among which are those recently uncovered beneath the mosque which stands over a corner of the forecourt.

The last two fascicules included in this review are numbers 2 and 3 of volume V. The main item is the famous Medinet Habu Calendar of the time of Ramesses III, the longest hieroglyphic text in existence. It occupies a quarter of fascicule 2 and all but the last page or so of fascicule 3 .
C. H. S. Spaull

Greek Terms for Roman Institutions: a Lexicon and Analysis. By Hugh J. Mason. American Studies in Papyrology Vol. 13. Pp. xxiii +207 . Hakkert, Toronto; 1974. No price given.

This book is something of an anomaly: it appears in the series 'American Studies in Papyrology', yet the material with which it is concerned is overwhelmingly literary and epigraphic. Mason's intention is to bring up to date Magie's monograph De Romanorum iuris publici sacrique vocabulis sollemnibus in Graecum sermonem conversis, published in 1906, but his approach is different from Magie's, since his interest lies in the use of Greek words. Therefore, although there is a list of Latin words with Greek equivalents, this is for ease of reference only, and the heart of the book ( $\mathrm{pp} .19-\mathrm{roo}$ ) is a Greek-to-Latin lexicon. This includes transliterations of Latin words into Greek but not vice versa; thus ídoos $\lambda o ́ \gamma o s$ and $\epsilon \pi \tau \sigma \tau \rho \alpha ́ \tau \eta \gamma o s$, for example, do not appear because they have no Latin equivalent. One result of this is that Egypt and the papyri play only a very small part in the book.

Mason gives us by way of introduction some general considerations, notably on the use of translations, transliterations, and comparative terms, and on variations to be found at different periods and in different places (such variations are slight). Then follows the lexicon, which in turn is followed by a more detailed discussion of a range of terms which need fuller treatment. Here I would draw particular attention to his
 $\dot{\eta} \gamma \epsilon \mu \omega \nu, \sigma \tau \rho a \tau \eta \gamma \delta^{\prime}$, and $\dot{v} \pi \alpha \tau o s$, in each case accompanied by a discussion of related words. Of special importance for historians are his remarks on è $\pi i \not \subset \rho o \pi o s$ as equivalent to procurator and praefectus under the early Empire (pp. 142 f.).

The Greek-to-Latin lexicon includes for each Greek word its Latin equivalent or equivalents, and at least one example is quoted for each. The lexicon is not limited, however, to straightforward equivalences, but includes a number of examples which are better described as comparable expressions or paraphrases, e.g. $\pi \rho о \tau \iota$ д́o $\mu a \iota$ : maius habere imperium, this being indicated by the use of brackets. The aim is not to be comprehensive; the words chosen, as Mason says, are almost all official, with private law and technical military language being for the most part ignored (perhaps unwisely). In general the time span covers the period up to Diocletian only. The lexicon will prove extremely valuable to scholars working in a variety of fields. In using it, however, I have found one major drawback: in the quotations the key word illustrated is abbreviated to its initial letter only; this is bad enough with nouns, where one needs to know the case (e.g. if governed by $\delta \iota a ́$, whether the case is genitive or accusative), and becomes far worse with verbs, where the lexicon tells us neither mood, tense, voice, nor person. In short, it cannot be used without constantly referring back to the original publications. For whatever reason this method was chosen, enabling perhaps
a ha'porth of tar to be saved, it was, I believe, a great mistake. Similarly, when a word is partly restored on the stone, etc., Mason indicates this by [a]... or . . . [a]. What we need to know is whether sufficient of the word survives to make the restoration possible, probable or certain, and again we cannot get this information from the lexicon. Further drawbacks are that we are given insufficient indication of when a particular equivalence is first used (e.g. when is í $\epsilon$ ós first attested in the meaning imperialis?); or whether an equivalence is found in only documentary or literary sources and, if the latter, whether in more than one; or whether in the case of any particular example it is common, rare, or occurs once only.

Mason states that he has been unable to use material later than 1970. He is therefore unacquainted with, for example, S. Weinstock, Divus fulius, H. Eideneier on the suffix -arius when used in Greek words, $Z P E$ 7 (1971), 55-8, S. Daris, Il lessico latino nel greco d'Egitto, and A. Blanchard, Sigles et abréviations dans les papyrus documentaires grecs (BICS Suppl. 30), who deals at length (pp. 8-15) with Latin influence on the Greek system of abbreviation.

On individual entries I offer a few random comments. a: prior is misleading; $\pi \rho o ́ \tau \epsilon \rho o s$ and prior are equivalents and $\pi \rho o ́ \tau \epsilon \rho o s$ can be represented by $a$. Is $\delta \epsilon \sigma \pi o ́ \tau \eta s$ ever an equivalent of princeps? $\delta \iota a ́ \delta o \chi o s$ does not have an entry referring to its use for vice agens. The meaning imperialis is not given for $i \in \rho \dot{\omega} \tau \alpha \tau o s$. The statement 'каӨо入ıкоi Aegypti non ante Diocletiani tempus' is wrong, see Parsons, ffRS 57 (1967), 138 f . I suspect that $\mu \epsilon ́ \rho \eta$ followed by the name of an office is a literal translation of partes. $\mu$ '́ $\boldsymbol{\tau} \%$ रos:publicanus is a misstatement; in SB 7579 (which is not a pap. bil.) the idea of publicanus is wholly contained in the word $\pi \epsilon \nu \tau \eta(\kappa о \sigma \tau \omega ิ \nu a \iota)$, whereas каi $\mu \epsilon ́ \tau \sigma \chi o \iota$, as usual, means 'and co.'. On $\pi \alpha \rho \epsilon \mu \beta \circ \lambda{ }_{\eta}$ in Act. Alex. 4 b I 16 Mason says 'sic supplevit editor princeps Bell, nescio quibus exemplis usus'; a glance at Archiv f. Pap. Io (1932) in would have shown him that Bell stated clearly that the supplement was without parallel and only advanced
 the Ptolemaic $\bar{\epsilon} \pi i \tau \hat{\omega} \nu \pi \rho o \sigma o \delta \delta \omega \nu$. Under $\sigma \epsilon \beta \dot{a} \sigma \mu \iota o s$ the quotation wrongly gives [ $\sigma .$. .] in P.Tebt. 407; the word $\sigma \epsilon \beta a \sigma \mu \omega \dot{\epsilon} \tau \alpha \tau o s$ appears in full in the papyrus. ${ }_{\rho}^{\chi}=$ centurio should not appear under $\chi \rho$; the cross over the $r h o$ is there to indicate that $r h o$ is a numeral, and has nothing to do with the letter chi, see Blanchard, op. cit. 26. On p. 130 a reference should have been given to G. Chalon, $L^{\prime}$ 'Edit de Tiberius fulius Alexander (1964). Papyrological usages do not support the implication of the statement on p . 143 that $\pi \rho o \nu o \eta \tau \eta \eta^{\prime}$ always means a procurator of a private individual; like $\phi \rho o \nu \tau \iota \sigma \tau \eta{ }^{\prime} s$ and $\chi \epsilon \rho \iota \sigma \tau \eta$ 's it can be used of government officials. p. 165: in Inscr. Délos 1528 for $\dot{v} \pi \epsilon \in \rho[\tau a \tau o s]$ we should read Mitford's $\dot{v} \pi \epsilon^{\prime} \rho[\mu a \chi o s]$, see Bull. Epig. 1954, 181 n. 258. I miss entries in the lexicon for $\delta \epsilon \kappa \alpha ́ \pi \rho \omega \tau о s:$ decemprimus and for $\pi v \rho o \dot{s} \sigma v \nu a \gamma o \rho a-$ बтькós: frumentum emptum.

It is inevitable that a work of this nature will contain some blemishes and the above remarks are offered in the hope that they may prove of some help when the time comes to produce a second edition of this lexicon. For we must certainly hope that there will one day be a second edition and that we shall not have to wait seventy years for it. In the meantime the present work is sure to prove, indeed has already proved to the reviewer, most useful.
J. David Thomas

La Papirologia. By Orsolina Montevecchi. Pp. xvi+544, 104 pls., 2 maps. Società Editrice Internazionale, Torino, 1973. Price 20,000 L.
This book is a comprehensive manual. It surveys the whole world of papyrology both Greek and Latin: papyrus itself; the scope and history of the subject; palaeography, chronology, metrology, philology; geography, and political and administrative history; documentary types and documentary archives; religion, pagan and Christian; schooling and cultural life (the literary papyri). The appendices (by S. Daris) include a bibliography of papyrus-publications and a topography of papyrus-collections. There are admirably full indices; maps of the Fayûm and of Egypt as a whole; and 104 plates, designed to illustrate the development of the scripts and also to exemplify the variety of texts discussed. The plates generally suffer from poor definition; otherwise the production is extremely handsome.

The book was intended in the first place for university students. The expository sections therefore deal largely in accepted truths; controversies are alluded to but not discussed in detail; the student may pursue
the topic through the formidable (often undifferentiated) bibliographies. The weight falls on content and interpretation, not on decipherment (the palaeographic sections are uncertain and theoretical; the beginner will need more help if he is to become a good reader or a good critic of readings). Here Professor Montevecchi shows all her wide learning and sound judgement, enlivened by the firm belief that the papyri must be seen in the context of the society which produced them. One main object was to illustrate what GrecoRoman Egypt has to offer: in this she succeeds admirably.

But there is much more. The bibliographies attached to each section are the most comprehensive and up-to-date available. The material collected includes several invaluable aids to research: the survey of documentary types, with the examples listed (177-233); the catalogue of archives (248-61) and of Christian papyri (295-334); the list (by Professor Daris) of reproductions of dated papyri (437-48). Students may find this book useful or interesting; professional papyrologists will certainly find it indispensable.
P. J. Parsons

1. Baedeker's Egypt, 1929. Reprint of 8th English Edition of Egypt and the Sudan. Handbook for Travellers by Karl Baedeker. $165 \times 105 \mathrm{~mm}$. Pp. ccviii +495 , 20 maps, 81 plans, 62 woodcuts. Newton Abbott, David \& Charles (Holdings) Ltd., 1974. Price: $£_{6} 6 \cdot 00$. ISBN-0-7153-6392-r.
(Note. For the previous review in this journal see $\mathcal{F} E A{ }_{5} 5$ (1929), 277 [anon.])
An attractively produced reprint; typography is clear and generally easy to read despite the small size of some of the original, and the site plans have been reproduced. One criticism here is the poor quality of these as compared with the originals in two or more colours; doubtless cost precluded their being done in more than black and white, but the details could surely have been made to stand out clearly. The plan of central Karnak has also been omitted opposite p. 279, which is a pity as it is one of the most important from the tourist's point of view. In general the publishers are, however, to be commended for having made available again what is certainly the best general travellers' guide to Egypt, and at what is not too unreasonable a cost at today's prices.
E. P. Uphill

Aegyptiaca Helvetica. I. Studien zum Sedfest. By Erik Hornung and Elisabeth Staehelin. Pp. ioz. Geneva, 1974. 20 Swiss fr.
A warm welcome is extended to this new periodical which is edited by Dr. Robert Hari. It is the fruit of co-operation between the 'Ägyptologisches Seminar' of the University of Basle and the 'Centre d'Études Orientales' of the University of Geneva, and the publishers are 'Editions de Belles-Lettres' at Geneva (Case postale 32, CH-12II, Genève 20). The first volume is devoted to the Sed-festival, and the authors have been assisted by Barbara Begelsbacher, Bertrand Jaeger, and Christine Seeber, three doctoral candidates at Basle.
After a brief introduction there is a systematic assemblage of the various types of evidence arranged chronologically. Notes on this material are then appended, after which comes the main discussion under headings which include 'Criteria for "true" Sed-festivals', 'Exceptions to the 30 -Year-Rule', 'The Sedfestival and the rising of Sothis', 'The Murder of the King and the Sed-festival' and 'The "historical" Sed-festivals'; sections are devoted also to the representations and to the statues. The whole work is well ordered, and is a stimulating example of scholarly collaboration by a group of five Egyptologists.
A detailed critique is not possible in a brief notice. What is especially valuable in the exposition is the new insight provided by E. Staehelin on matters relating to iconography and also the rigorous application by Hornung of his distinction between the ideal and the actual in the Egyptian source-material. We have here, then, an auspicious start to a new venture.
J. Gwyn Griffiths

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[^0]:    ${ }^{1}$ Gratitude is expressed to H.E. Dr. Gamal Moukhtar and to the Higher Committee of the Antiquities Department for their generosity in permitting work in the area. The support of Professor H. S. Smith was crucial when application was made to the Higher Committee. A brief account of the discovery, with some photographs, has appeared in ILN 6925 (Aug. 1975), 73, 75.

[^1]:    ${ }^{2}$ PM III, 145, 175 ff., 19I ff.
    ${ }^{3}$ See now H. D. Schneider, BSFE 69 (Mar. 1974), 20-48, with plan on p. 34; R. Hari, Orientalia 43 (1974), 153-61 ; E. Graefe, $G M$ 16 (1975), 9-15.

    4 Schneider, op. cit., 20-1, 32-3. Attention may also be drawn to the unpublished thesis of Mme J. Berlandini-Grenier, 'La nécropole memphite du Nouvel Empire (de l'époque post-amarnienne à la fin de la XIX ${ }^{e}$ dynastie)', Paris, 1973.

[^2]:    5 For a discussion of the tomb see R. Hari, Horemheb et la reine Moutnedjemet (Geneva, 1965), 69-128.
    6 Details of the blocks, door-jambs, and stelae removed from the tomb in the nineteenth century are dealt with at length in ch. 4 of the important study of M. Hari. A convenient list of the pieces and their present location is given on p. 70, where a number of reliefs are rejected as being wrongly attributed. Other pieces are not considered by him to belong to the tomb, e.g., Leiden stela V29, the Zizinia fragment, and the stela, jambs, etc., Louvre C68-70. All this material will naturally have to be reconsidered in the light of the new discoveries. Stylistic criteria, and the presence or absence of the uraeus, cannot alone decide the rejection of blocks.

[^3]:    7 The uppermost course must have been removed for re-use or for lime-burning in antiquity, since this is missing in the tomb and is not represented in the museum reliefs. The blocks found this season and those removed in the last century by no means cover the available wall-space of the Great Courtyard.
    ${ }^{8}$ Not all the representations of Horemheb found in the tomb this season have the added uraeus.
    ${ }^{9}$ For the king leaning on a staff see for example Davies, RTA I, pls. 25, 30; VI, pl. 3 (Akhenaten); Noblecourt, Tutankhamen (London, 1963), col. pl. $5=$ Aldred, Akhenaten (London, 1968), pl. 93 (Tut‘ankhamūn); Noblecourt, op. cit., 166, fig. $98=$ Aldred, op. cit., pl. 9 (uncertain, but Amarna or immediate post-Amarna period). The 'civilian' dress too need not be a hindrance if the king were Ay, in view of that monarch's known o rigins. The direction of the signs of the hieroglyphic inscription above may be decisive.

[^4]:    ${ }^{10}$ The scale in the illustration is a half-metre.
    ${ }^{11}$ Cf. however Hari, Horemheb, 73-6.
    ${ }^{12}$ A. Mariette, Monuments divers (Paris, 1872-89), pl. 74.

[^5]:    ${ }^{13}$ For example the tomb of the $\mathfrak{i m y - r i p t ~ n s w ~} P 3 y$, a tomb naming the snt nsw Tis (see now J. Málek, fe $A 60$ (1974), r6i-7), and a tomb naming the nbt pr 'Iwy. One of the Old-Kingdom blocks bears the name of the imy-r šm•w Mnw-nfr.
    ${ }^{14}$ Slides of the stirrup-jars were kindly examined by Dr. P. M. Warren and Dr. O. T. P. K. Dickinson, who date the sherds to LH IIIA2-IIIB.

[^6]:    ${ }^{1}$ Helena Edith Mond (née Levis), d. December 28, 1905.
    ${ }^{2}$ In particular the work of Gardiner and Weigall on the Topographical Catalogue of the Private Tombs of Thebes, published in 1913. He also paid the cost of the building of the large enclosure wall at Sheikh Abd elGurneh.
    ${ }^{3}$ Reports of the work of these seasons appeared in $L A A A{ }_{13}$ (1926); 14 (1927); 16 (1929).

[^7]:    4 It appears from the notes that photographs and drawings of some of the objects were made, but they have since disappeared.
    ${ }^{5}$ Daressy, Recueil de Cones Funéraires (Paris, 1893).
    ${ }^{6}$ Davies and Macadam, Corpus of Inscribed Egyptian Funerary Cones (Oxford, 1957). Hereinafter referred to as DMC.

[^8]:    ${ }^{7}$ R. Mond and W. B. Emery, 'Excavations at Sheikh Abd el-Gurneh 1925-26', in LAAA 14 (1927), 26-8.
    ${ }^{8}$ Cf. Ranke, $P N$ (1935) Vol. I, 357, no. 5.
    9 Described by Mond as being in the south-east corner of the courtyard. He was probably using Nile north for his orientations. All directions are given here according to magnetic north.

[^9]:    ${ }^{10}$ R. Mond, 'Report of work in the necropolis of Thebes during the Winter of 1903-1904' in ASAE 6 (1905), 69-71.
    ${ }_{11}$ N. de G. Davies, Two Ramesside Tombs at Thebes (New York, 1927), pl. 19 [6], pp. 3, 28-9.
    ${ }_{12}$ E. Mackay, 'Report of excavations and other work carried out in the necropolis of Thebes for the Department of Antiquities by Robert Mond during the year beginning on March 9th 1913' in $A S A E$ 14 (1914), 91 .
    ${ }_{13}$ R. Mond in $A S A E 6$ (1905), $71 . \quad{ }_{14}$ R. Mond and W. B. Emery in LAAA 14 (1927), 30.
    ${ }_{15}$ It is stated in the notes to be 50 yds. due east of the tomb of Nakht but this would probably be Nile east see note 9, p. 32).

[^10]:    ${ }_{16}$ This destruction must have occurred since 1933 as a photograph of it still complete appears in H. H. Nelson and U. Hölscher, Work in Western Thebes 1931-33 (Chicago, 1934), fig. 21.

[^11]:    17 E. Mackay in $A S A E$ 14 (1914), 9 r.
    ${ }^{18}$ H. W. Helck, 'Inhaber und Bauleiter des thebanischen Grabs 107' in MIO 4 (1956), in ff.
    ${ }^{19}$ Given to Borchardt for the Berlin Museum.

[^12]:    ${ }^{20}$ R. Mond, 'An Egyptian funerary cap' in LAAA 3 (1910), 137.
    ${ }^{21}$ Porter and Moss, Top. Bibl. I. $2^{2}$ (1964), 676, states that the pit adjoins Tomb 68. This probably follows Mond's account in LAAA 3.
    ${ }_{22}$ In Cairo Museum, no. 37694.
    ${ }^{23}$ Published by Mond, 'An Egyptian funerary cap' in LAAA 3 (1910), 137, with illustration on frontispiece.
    ${ }^{24}$ From the inscription numbers it is clear that they must have been found somewhere in this area.

[^13]:    ${ }_{25}$ N. de G. Davies, Five Theban Tombs (1913), 22 and pl. 20. 3.
    26 In Liverpool City Museum, no. 39.4042, formerly in Liverpool School of Archaeology.
    ${ }^{27}$ In Toronto, Royal Ontario Museum of Archaeology, no. 910.11. See Porter and Moss, Top. Bibl. I. $2^{2}$ (1964), 833. My thanks to Dr. M. L. Bierbrier for verifying this.
    ${ }_{28}$ No. 39.4042.

[^14]:    29 M. Baud, 'Les Dessins ébauchés de la nécropole thébaine' in MIFAO 63 (1935).
    ${ }^{30}$ This coffin may have been found in a different pit from all the other objects. It is the only object described as being from 'Pit B' in the court of Neferronpet.
    ${ }^{31}$ R. Mond in $A S A E 6$ (1905), 66-7.

[^15]:    ${ }^{32}$ R. Mond, $A S A E 6$ (1905), 7 1-2.
    ${ }^{33}$ In British Museum, no. 1 182. Published by H. R. Hall, Hieroglyphic texts from Egyptian stelae etc. in the British Museum, Part VII (1925), pl. 7. See also E. A. W. Budge, Guide to the Egyptian Galleries (Sculpture) (1909), 119.

[^16]:    ${ }^{1}$ Accession no. 51.276, Founders Society Purchase through Sarah Bacon Hill Memorial Fund. Height 48 cm ., base width 10.75 cm ., base length 22.2 cm ., maximum base height 4.5 cm . Additional piece of base: height 3.25 cm ., width 16.5 cm ., depth 3.25 cm . The statuette was first noted in Bulletin of the Detroit Institute of Fine Arts 3 ( $1951-2$ ), 60, and was later discussed by William H. Peck, 'The Present State of Egyptian Art in Detroit', The Connoisseur 175 (no. 706, December, 1970), 269, illus., p. 266, fig. 2. The material is indurated yellow limestone. It is broken at the base and repaired, and there is a second piece of the base of an inferior limestone added separately by the sculptor to provide an additional line of text.
    ${ }^{2}$ H. G. Evers, Staat aus dem Stein I, pl. 133. $\quad{ }^{3}$ Evers, op. cit., pl. 142.
    ${ }^{4}$ Evers, op. cit., pls. 95, 96, 98, 138-9, 142; J. Vandier, Manuel d'archéologie égyptienne, iII, pls. 54, 73, 75, 78, 84, 85; W. K. Simpson, in The Museum Year, 1972-73, The Ninety-Seventh Annual Report of the Museum of Fine Arts, Boston, 48-9.

[^17]:    ${ }^{5}$ For the site and its finds, see Porter and Moss, Top. Bibl. iv. Lower and Middle Egypt, 59-65.
    ${ }^{6}$ W. Barta, Aufbau und Bedeutung der altägyptischen Opferformel (Äg. Forsch. 24), 54, 73.
    ${ }^{7}$ Mem. Miss. I, 121, 124.
    ${ }^{8}$ Gardiner, Egn. Gr. ${ }^{3}$ §§ 362-79.

    - Wb. II, 17. 1 I-14.

[^18]:    ${ }^{10}$ Ranke, $P N$ 1, 322, 4; Te Velde, Seth, God of Confusion, 136.
    ${ }^{11}$ Goedicke, $C d E$ ( 4 (1966), 35 n. 3, for the references.
    12 Montet, Géographie I, 159.
    ${ }_{13} \mathrm{H}$. Ricke, 'Eine Inventartafel aus Heliopolis im Turiner Museum', $Z \ddot{A} \mathrm{~S}_{71}$ (1935), in 1-13.
    14 There is, of course, another alternative which explains and eliminates the curious reading of the Seth animal as an unattested filiation term as well as the anomalous circumstance of the text on the base having a title without a following name. This alternative would be to read the text on the back support as titles followed by the compound name Sebekemhet-Seth, followed by the dative $n$, and concluding with the name of a second person, an untitled Sebekemhet, conceived of Sit-Hathor. On the base this first individual is then cited by the shortened form of his name, Seth, no temple of Seth is mentioned, and the designation hwt $13 t$ can be taken as a designation for Heliopolis. Consistent as this reading is, it nevertheless assumes that two separate individuals are mentioned on the back pillar of a statue of a single individual and that the $n$ following the Seth animal is essentially an abbreviation for $n k 3 n$. Although this alternative reading eliminates some of the problems, it raises others.
    ${ }_{15} \mathcal{F} E A$ 18 (1932), 142, fig. 5. For this reference I am indebted to Mr. Edward Brovarski of the staff of the Museum of Fine Arts, Boston, and for the drawing of the text of the Detroit statue to Dr. Timothy Kendall of the same department. Newberry's reading of the name on the Blanchard scarab as a compound name is followed by Martin, Egyptian Administrative and Private Name Seals, 53, no. 637, wherein its location at that time is recorded as the Michaelides Collection.

[^19]:    8 The eastern desert has necessarily been closed to scholars in recent years. Our more detailed geographical information must therefore come from the reports of travellers of earlier generations such as J. G. Wilkinson, James Burton, Robert Hay, Georg Schweinfurth, and others, as well as from the geological surveys published early this century by T. Barron and W. F. Hume. For a complete bibliography of these travellers see Ibrahim Hilmy, The Literature of Egypt and the Soudan from the earliest times to the year 1885 inclusive (London, 1886).
    ${ }^{9}$ In this catalogue the stelae are shown as nos. 379 and 380 on pp. 33-4. They are described by Burton as being of black basalt. They are clearly not of the same stone, however. Dr. G. A. L. Johnson of the Department of Geological Sciences of the University of Durham very kindly examined these stelae for us and his conclusions were:

[^20]:    ${ }_{12}$ Op. cit. 34. A rough note in one of Wilkinson's notebooks (Wilkinson MSS. xxxviii. 140) confirms that 'the Wadi lies in a basin filled by the decayed particles of rock and sand'. In the absence of fine and shifting sand in this area it is unlikely that other inscriptions would have been missed by the succession of travellers through this region.
    ${ }^{13}$ J. G. Wilkinson, Manners and Customs of the Ancient Egyptians (London, 1837), 1, 45.
    ${ }^{14}$ Schweinfurth, op. cit. 6 f.
    ${ }^{15}$ James Burton, B.M. Add. MSS. 25. 626, fol. 67. Schweinfurth also makes this point, op. cit. 6.
    ${ }^{16}$ T. Barron and W. F. Hume, Topography and Geography of the Eastern Desert of Egypt (Cairo, 1902), 62. It is to be noted that the mouth of the Wadi Gasus here mentioned is not on the sea. See map by Schweinfurth, op. cit., Tafel I.
    ${ }_{17}$ Barron and Hume, op. cit. 260. However, had this site been worked by the Egyptians like Wadi El Allaki (see Cerný, $\mathcal{f} E A 33$ (1947)) or other gold-bearing sites, one would expect to find some inscriptions commemorating the work. See also Wilkinson, Manners and Customs (ed. 1878 by Samuel Birch), ir, 238 ff.
    ${ }^{18}$ Egyptian Years (London, 1958), 176 and $180 . \quad 19$ Op. cit., Tafel I.
    ${ }^{20}$ 'Notes on a Part of the Eastern Desert of Upper Egypt', read Nov. 28, 1830, see fournal and Proceedings of the Royal Geographic Society, London.
    ${ }^{21}$ James Burton's map is in the British Museum among Hay's papers: R. Hay, A roll, 29, 860. As one might expect, existing maps of the eastern desert contain some discrepancies and many variations of the place-names. Before we can make much progress in understanding these areas, we need some fresh surveys and a generally consistent nomenclature. It is, nevertheless, important to retain records of the popular names of these areas, as we may well find them going back to ancient times and telling us a story. We know that place-names tend to remain constant and change least of all linguistically. Schweinfurth was impressed by the name of Gasus, which, he emphasized, means $s p y$ (op. cit. 4 f.).
    ${ }^{22}$ For a history of the new Qoseir see C. B. Klunzinger, Upper Egypt, Its People and Its Products (1878), 271 f.

[^21]:    ${ }_{2} 3$ Op. cit. 131; see also Map 3. They refer also to Klunzinger's work on these hills, 102.
    ${ }^{24}$ Nouvelles Inscriptions du Wadi Hammamat (1957), Introduction.
    ${ }_{25}$ Goyon, op. cit. 2.
    ${ }^{26}$ Goyon, op. cit. 3.
    ${ }^{27}$ Stela North. 1934 is dated from the reign of Ammenemes II while North. 1935 carries the name of Sesostris II. The few Ptolemaic inscriptions from an adjoining area in the Wadi Gasus are discussed by V. Vikentiev in Ann. Serv. 52 (1952), 15 I ff.

[^22]:    28 BIFAO, 17 (1920), 120 ff.

[^23]:    29 Sethe, Urk. Iv, 345, 13.
    ${ }^{30}$ Urk. IV, 322, 1-2.
    ${ }^{31}$ Urk. Iv, 328 f., lines I and 2.
    ${ }^{33}$ Medinet Habu v (1957), pl. 328.
    ${ }^{32}$ Urk. Iv, 334, 1.
    ${ }^{34}$ R. Herzog, Punt (1968); also 'Ägypten und das negride Afrika; Überprüfung einer bekannten Hypothese', Paideuma, 19-20 (1973-4).
    ${ }^{35}$ K. Kitchen, Orientalia n.s. 40 (1971); G. Kadish, Bibliotheca Orientalis, 28 (1971); W. Vycichl, CdE 45 (1970); for a recent general discussion of the problem, see Abdel-Aziz Saleh, $7 E A 58$ (1972).
    ${ }_{36}$ The most recent serious study of climatic changes in ancient times is by A. M. Snodgrass: 'Climatic Change and the Fall of the Mycenaean Civilization', Mycenaean Seminar, March 12, 1975, Institute of Classical Studies, London, in which he considers all the theories put forward so far for the Mediterranean and the Aegean.

[^24]:    ${ }^{37}$ Plants of the Bible (Waltham, Mass., 1952), 56 f.
    ${ }^{38}$ F. Nigel Hepper, $\mathcal{F} E A 55$ (1969), 64 ff.; see also D. M. Dixon, ibid. 55 ff.
    ${ }^{39}$ Op. cit. 71. $\quad{ }^{40}$ Op. cit. 57.
    ${ }^{41}$ It is odd that only later writings have been considered in deciding the provenance of incense while contemporary texts have been neglected. Moreover, we cannot accept any arguments presented on the basis of present-day vegetation anywhere. Many factors are involved, the climatic situation being only one of these.
    ${ }^{42}$ Op. cit. (1837), 1, 43.
    ${ }^{43}$ Incense is listed in campaigns $2,5,8,9,13,14 . \quad 44 \mathrm{Pyr}$ 3Ib.

[^25]:    ${ }^{45}$ Goyon, op. cit. 6. $\quad 46 \mathcal{F} E A$ 33, $90 . \quad 47$ Op. cit. 173 f.
    48 Der Eine und die Vielen (1971), 20 ff.
    ${ }^{49}$ Nibbi, The Sea Peoples and Egypt, chapter 2; Nibbi, GM, 15, 16, and 17, 1975.
    ${ }^{50}$ L. Habachi, The Second Stela of Kamose (1972), 37 f.
    ${ }^{51}$ P. Lacau, Stèles du Nouvel Empire (CCG), 1, $50 . \quad 52$ Kuentz, op. cit. 175.
    ${ }^{53}$ Ancient Egyptian Materials and Industries, 429 ff .
    ${ }^{54}$ Most Ancient Egypt (1965), chapter 1. ${ }_{55}$ Beyond History (1968).
    ${ }^{56}$ Studien zum vor- und frühgeschichtlichen Landschaftswandel der Sahara (1959).
    57 Ibid. 88. $\quad{ }^{58}$ Ibid. 89.
    59 'The Woodlands of Ancient Western Asia', $\mathcal{F} N E S 26$ (1967), 26i ff.; also 'The Topological Factor in the Hapiru Problem', in Studies Landberger (1965), 385 f.
    ${ }^{60}$ Rowton, op. cit. (1965), 380 f.; op. cit. (1967), 265.
    ${ }^{61}$ Theophrastus, Enquiry into Plants, 4. 2. 8; Pliny, HN, 13. 19; quoted in Lucas and Harris, op. cit. 438.

[^26]:    ${ }^{62}$ Lucas and Harris, op. cit. 438.
    ${ }^{63}$ J. William Dawson, Egypt and Syria (1887), 34; also Lucas and Harris, op. cit. 455 f.
    ${ }^{64}$ G. Schweinfurth, 'Terra incognita dell'Egitto', from L'Esploratore, 2 (1878), 13; also E. Schiaparelli, La Catena Orientale dell'Egitto ( 1890 ), 17 f. and 67.
    ${ }^{65}$ H. Kees, Ancient Egypt (London, 1961), 20; also G. W. Murray, 'Graves of Oxen in the Eastern Desert of Egypt', $\mathcal{f} E A$, 12 (1926), 248 f.
    ${ }^{66}$ V. Täckholm, 'Ancient Egypt, Landscape, Flora and Agriculture', in J. Rzoska, ed., The Nile, Biological Studies on an Ancient River, to appear in Monographiae Biologicae, ed. J. Illies, The Hague.
    ${ }^{67}$ E. Naville, Goshen and the Shrine of Saft El Henneh (1887), pl. 5; also H. Bonnet, Reallexikon, 741.
    ${ }^{68}$ Naville, op. cit. p. 5, line $2 . \quad{ }^{69}$ Pyr. 480d; 994; 1476c. ${ }^{70}$ Pyr. 456 b.
    ${ }^{71}$ A. H. Gardiner, 'The Supposed Egyptian Equivalent of the Name of Goshen', $\mathcal{F} E A 5$ (1918), 222 f.
    72 'SSM.T', Studies presented to F. Ll. Griffith (1932), 316 f.

[^27]:    ${ }^{73}$ Ibid. 322.
    ${ }^{74}$ Op. cit. (1918), 222 f.
    ${ }_{75}$ Nibbi, 'YM and the Wadi Tumilat', $G M_{\mathrm{I}}$ (1975), 35 ff . and 'The Wadi Tumilat, Atika and $M W-Q D$ ', GM 16 (1975), 33 ff . ${ }^{76}$ Porter and Moss, iv, 53.
    ${ }_{77}$ Researches in Sinai (1906), $105 \mathrm{f} . \quad{ }^{78} \mathrm{~Wb} ., \mathrm{v}, 225$.
    ${ }^{79}$ Only in Ptolemaic times does this expression reappear referring to a region, but it is then written in a completely different way without the šsmt-girdle, as Gardiner noted, op. cit. (1918), 218 f .
    ${ }^{80}$ A. H. Gardiner, T. E. Peet, and J. Cerný, The Inscriptions of Sinai (1952-5); see Sopdu in Index. His title 'lord of the foreign countries' is found a number of times in these inscriptions, pp. 29, 42, 115, 121, as is the title 'lord of the east'. In the Fifth-Dynasty Mortuary Temple of Saḥurē he is called 'lord of the foreign countries', Borchardt, vili.
    ${ }^{81}$ R. Givéon, Les Bédouins-Shosu des documents égyptiens (1971). See illustrations of costume and hair styles.

[^28]:    ${ }^{1}$ I would like to thank Dr. Wilson for his permission to use his notes which are kept on permanent file in the Oriental Institute Museum Office, and for his encouragement in my study of this badly damaged but interesting monument. I would also like to express my gratitude to Drs. Edward F. Wente and William Kelly Simpson for reading the manuscript of this article and for their many helpful suggestions, and to Dr. George R. Hughes for discussions and help in the course of its writing. Special thanks are due to Miss Mary Cairns for her patience in typing the manuscript.
    ${ }^{2}$ Pierret, Recueil d'inscriptions inédites du Musée du Louvre, II, 31. I have excellent photographs of this Senenu's monument which consists of the two jambs and lintel of a stone portal. At the bottom of both jambs

[^29]:    are kneeling figures with the inscription: 'It was his son who caused his name to live, the Scribe of the Army of the Lord of the Two Lands, S3-'Imn.' The same man appears together with his father on a stela of the latter in the Bologna Museum (Silvio Curto, L'Egitto Antico, pls. 25, 41) where Senenu has, in addition to the titles 'King's Scribe, Scribe of the Army, and Scribe of Recruits', as on the Louvre monument, the title 'First Reporter of the King (whm nswt tpy)'. My thanks to Dr. William Kelly Simpson for this last reference.
    ${ }^{3}$ Pierret, op. cit., 3 I.
    ${ }^{4}$ Edouard Naville, The Temple of Deir el Bahari: Introductory Memoir (London, 1894), 6.
    5 'Ägyptische Jenseitswünsche in Sprüchen ungewöhnlicher Fassung aus dem Neuen Reich', ZÄS 77

[^30]:    ${ }^{7}$ Budge, The Papyrus of $A n i$ (London, 1895), 150.
    ${ }^{8}$ Naville, Totdenbuch, II, 177.
    9 Ibid. 440 (Af).
    ${ }^{10}$ Op. cit. 63; Lacau, Stèles du Nouvel Empire, 101-3, pl. 34.
    ${ }_{11}$ 'Statue of the Steward Roy Singing the Psalm to Rēe', $\mathcal{F} E A 6$ (1920), i. See also H. M. Stewart, 'Stelophorous Statuettes in the British Museum', $\mathscr{f} E A 46$ (1960), 83.

[^31]:    12 Louis A. Christophe, Karnak-Nord, iII, 87-9, pl. 15. Helck, 'Die Opferstiftung des Sn-mwt', ZÄS 85 (1960), 24, 30, 34, reads the date as 'year 4'. A close examination of the spacing of the signs on pl. 15 of Christophe's publication has suggested both to myself and to Prof. Charles F. Nims that the grouping is better read as 'year 3'.
    ${ }_{13}$ S. Schott, Nachr. Gott. (1955), $212 . \quad 14$ Habachi, $\mathcal{F} N E S$ 16 (1957), 88 ff.
    ${ }_{15}$ Helck, op. cit. 23 ff.

[^32]:    ${ }^{16}$ James H. Breasted, A History of Egypt (1905, repr. Bantam, 1964), 227.
    ${ }_{17}$ Breasted, Anc. Rec. II, 372, n. b.
    18 'A Selection of Tuthmoside Ostraca from Dēr El-Bahri', $\mathcal{F} E A 46$ (1960), 38.
    19 'Names and History of the Sanctuaries Built by Tuthmosis III at Deir el-Baḥri', $\mathscr{F} E A 53$ (1967), 31.
    ${ }^{20}$ Urk. Iv, 929; Lipinska, 'List of objects . . ', $A S A E 59$ (1966), cat. nos. 18-41.
    ${ }^{21} L D$ III, pl. 236: The temple lay open at the time of the Aten iconoclasts who hacked out the name and image of Amūn throughout the temple and in the time of Ramesses II, who inscribed his restoration inscriptions on almost every wall of the temple. Mummy pits dug all over above the temple, however, indicate that by the time of the 22nd Dynasty the temple had fallen into disuse and silted up; cf. Naville, Introductory Memoir, 10-1I.
    ${ }_{22}$ Unless one counts Sn-mn as does Helck, op. cit. 1, 92 ( = Macadam, Corpus of Funerary Cones, no. 375). $\boldsymbol{S} n-M n$ 's cone is in such poor state of preservation, however, that such a conclusion seems unwarranted.
    ${ }^{23}$ Helck, Materialien, 1, 92-3.
    ${ }_{24}$ The 'Imn-m-h3t of Macadam, Corpus, no. 27, who is High Priest of Hathor, Chieftainess of Thebes, almost certainly served in the Hathor chapel at Karnak, since no mention is made on his cone of Djeser-djeseru.
    ${ }_{25}$ It would be of interest to know if the Imn-m-h3t mentioned in the last note, or Senenu of Orinst 8798, or yet a third and unknown High Priest of Hathor was the owner of Theban Tomb 225, dating to the reign

[^33]:    on yet another wall in the same guise as Hathor, Chieftainess of Thebes (Orinst P 40649). In the Hathor speos of Tuthmosis III in the Eleventh-Dynasty temple, however, the situation is exactly opposite: the goddess in her bovine form is named Hathor, Chieftainess of Thebes, while the goddess with horns and disk is Hathor, Lady of Dendera (Nims, Thebes of the Pharaohs, fig. io).
    ${ }^{33}$ Urk. iv, 763 ff .
    ${ }^{34}$ Naville, op. cit., pls. 90-1.
    ${ }^{35}$ Naville, op. cit., pls. 88, 89. The cow's head of Hathor actually appears twice, with disk and horns on the bark in the second register from the bottom (pls. 90, 91) and with plumes added to the horns and disk on the figurehead on the boat behind. The front barge has a kiosk from which the portable image of the goddess has been removed. In the outer sanctuary of the Hathor shrine (ibid., pl. 104), the bark room, it rests on its portable bark while on the southern wall of the inner sanctuary, the statue stands as it would have for the duration of the procession, having been removed from its portable boat. The scene of the procession is interesting in another aspect. At least three royal barges appear (ibid., pls. 88, 89, 91) with their thrones empty as though the royal occupants had left to join the procession. In the Theban tomb of Kha'emhat (TT 57), a similar representation of an empty chair (with two bouquets) is a poignant allusion to the final departure of the deceased for the Beyond (Wreszinski, Atlas, I, Taf. 209). As two seem to be assigned to Hatshepsut and Tuthmosis, and Nefrurē‘ elsewhere seems to have been assigned royal prerogatives (Redford, History and Chronology of the Eighteenth Dynasty of Egypt [Toronto, 1967], 85), the third royal bark may have belonged to the Queen's daughter and the heir to her throne.
    ${ }^{36}$ For a discussion of the meaning of the term tp-rnpt, see Richard A. Parker, The Calendars of Ancient Egypt (Chicago, 1950), Excursus B, 6i-2.
    ${ }^{37}$ For $M n-h p r-k s-r c$, a variant of Tuthmosis III's prenomen which appears to have been used during the period of his co-regency with Hatshepsut, see Urk. Iv, 215, 6-7. A superficial examination of the occurrences of the prenomina of Tuthmosis III in Gauthier, Livre des Rois and Cerný-Gardiner, Inscriptions of Sinai yielded dates between Years 5 and 20 for the form $M n-h p r-k s-r$ : see Gauthier, $L R$, in-B, 254, iv; and Sinai, nos. 175, 176, 180, 181. The shorter prenomen $M n-h p r-r$ appeared in inscriptions dated to Years 1 and 2 ( $L R, \mathrm{iI}-\mathrm{B}, 253-4$, i and ii), 3 or 4 (see $\mathrm{n} . \mathrm{I} 2$ above), and 5 ( $L R, \mathrm{ii}-\mathrm{B}, 254$, iii). After Year 2 I ( $L R, \mathrm{ii}-\mathrm{B}, 255, \mathrm{vi}$ ) the form $M n-h p r-r c$ becomes ubiquitous.

[^34]:    ${ }^{38} \mathcal{F} E A 53$ (1967), 25, 33. $\quad{ }^{39}$ Lipinska, MDAIK 25 (1969), 85-7.
    ${ }^{40}$ Naville, The XIth Dynasty Temple at Deir el-Bahari, 1, 65.
    ${ }^{41}$ Ibid., p. 69, pl. 25E. $42 L D$ ini, 236a.
    ${ }^{43}$ See Helck, Materialien, I, 81.
    ${ }^{44}$ Naville, op. cit. III, pl. 7, 3 = Hieroglyphic Texts from Egyptian Stelae, etc., in the British Museum, v, pl. ı9, British Museum 40963. 45 Naville, op. cit., pl. 8, Fa.
    ${ }^{46} \mathcal{f} E A$ 53, $29 . \quad{ }^{47}$ Naville, op. cit., pl. 8, Fd.

[^35]:    ${ }^{48}$ E. Otto, Topographie des thebanischen Gaues (Leipzig, 1952), 24.
    ${ }^{49}$ Nims, $\mathcal{F} N E S$ 14, $114 . \quad{ }^{50}$ Otto, op. cit. 14.
    ${ }^{51}$ BIFAO 63, 201.
    ${ }_{52}$ Puyemre, i1, p. 84. ${ }^{53}$ BIFAO 63, 205-6. 54 Materialien, $1,93$.
    ${ }_{55}$ Mélanges Maspero, 1, $4^{\mathrm{e}}$ fasc. 17-29.
    ${ }^{56}$ For bark sanctuaries of the 18th Dynasty, see Vandier, Manuel d'Arch. 1I, 2, 799 ff .
    ${ }^{57}$ E.g., $A S A E$ 23, pl. 4.
    ${ }^{58}$ Nims, $\mathcal{F} N E S$ 14, 113.

[^36]:    ${ }^{59}$ Otto, op. cit. 23. ${ }^{60}$ Barguet, Karnak, 136-7.
    ${ }^{61}$ Medinet Habu, vi, pls. 409, 441, 45I ; viI, pl. 501.
    ${ }_{62}$ Otto, op. cit. $63 . \quad{ }^{63}$ Naville, Deir el Bahari, v, pl. $139 . \quad 64$ FEA 46, 36 n. 2.
    ${ }^{65}$ Nims, $9 N E S$ 14, 113 ; Inscriptions 4a, b. ${ }^{66} L D$ III, 7 ra, b. ${ }^{67} L D$ III, $7 \mathrm{Ia}, \mathrm{b}$.
    ${ }^{68}$ I would like to thank both Mr. John Sanders, of the Oriental Institute Nippur Expedition staff and Dr. Timothy Kendall, of the Egyptian Department of the Boston Museum of Fine Arts, for long hours spent on the reconstruction drawing of the stela of Senenu presented herein as pl. XI A.

[^37]:    ${ }^{1}$ C. Blankenberg-van Delden, The Large Commemorative Scarabs of Amenhotep III (Leiden, 1969). Page numbers in the following text, when mentioned alone, refer to those of my book.

[^38]:    ${ }^{1}$ See above, p. 75.

[^39]:    ${ }^{1}$ Cf. A. Badawy, Le dessin architectural chez les anciens égyptiens (Cairo, 1948), 109, fig. 1 rib, after H. Ricke, Der Grundriss des Amarna-Wohnhauses (Leipzig, 1932), 58-63. The reconstructions of the similar scenes on the Karnak blocks by P. Anus, BIFAO 69 (1971), fig. 10, and by L. Greener, Archaeology, 28 (1975), 22, represent the same approach.
    ${ }^{2}$ J. D. S. Pendlebury, The City of Akhenaten, III, 34, 43, 76, 78; pls. 2, 14.
    ${ }^{3}$ Ibid., pp. 86-92; also J. D. S. Pendlebury, Tell el-Amarna (London, 1935), 89-92.
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[^40]:    ${ }^{4}$ The City of Akhenaten, iII, 87; pl. 46. 4.
    ${ }^{5}$ Ibid., p. 86.
    ${ }^{6}$ Ibid., p. 88; also p. 38 for a brief description of the subject-matter.
    7 Tell el Amarna, 15.
    ${ }^{8}$ W. C. Hayes, Glazed tiles from a palace of Ramesses II at Kantīr (New York, 1937), 15-16, pl. 4; also p. 13, fig. 1; id., The Scepter of Egypt, in (New York, 1959), 336, fig. 21 I.
    ${ }^{9}$ U. Hölscher, The mortuary temple of Ramses III, I (Chicago, 1941), 37-59.

[^41]:    ${ }^{10}$ The City of Akhenaten, III, 86-92, pls. 2, 16.
    ${ }^{11}$ N. de G. Davies, The rock tombs of El Amarna, iI, pl. 32; in, pl. 5.
    ${ }^{12}$ Ibid. III, pl. 33; vi, pls. 17, 19, $28 . \quad{ }^{13}$ Ibid. I, pls. 10, 19; cf. II, pls. 13, 15.

[^42]:    ${ }^{14}$ Davies, op. cit., iII, pls. 33, 34; cf. II, pl. 32; int, pls. 4, 6; iv, pl. 10.
    ${ }^{15}$ Ibid. I, pl. 8; II, pl. ı0; vi, pl. 4. Cf. also A. Hermann, 'Jubel bei der Audienz', ZÄS 90 (1963), 49-66.
    ${ }^{16}$ Ibid. vi, pl. 4.
    ${ }_{17}$ W. M. F. Petrie, Tell el Amarna, 15, 23; pl. 1. 12; N. de G. Davies, 'Mural paintings in the city of Akhetaten', $\mathscr{f} E A 7$ (1921), r-7.
    ${ }^{18}$ Davies, The rock tombs of El Amarna, i, pls. 10, 18, 25, 26; mi, pls. 13, 33; iv, pl. 8; vi, pls. 4, 28, and possibly the palace scenes of pls. 17-19, though damage renders it uncertain.

[^43]:    ${ }^{19}$ E.g. Davies, The rock tombs of El Amarna, III, pl. 7.
    ${ }^{22}$ Ibid. Iv, pl. 8; cf. II, pl. 41; vi, pls. 6, 17.
    ${ }^{20}$ Ibid. III, pl. 16.
    ${ }^{21}$ Ibid. IV, pl. 26.
    ${ }^{23}$ Ibid. vi, pl. 4.

[^44]:    ${ }^{24}$ Useful discussions of the evidence are Davies, op. cit. vi, pp. 36-7; id., 'The Place of Audience in the Palace', $Z \ddot{A} S 60$ (1925), 50-6; U. Hölscher, 'Erscheinungsfenster und Erscheinungsbalkon im königlichen Palast', $Z \ddot{A} S 67$ (1931), 43-51; the article cited in note 41.
    ${ }^{25}$ Davies, The rock tombs of El Amarna, 1, pl. 6; 1iI, pl. 17.
    ${ }^{26}$ Ibid. II, pl. 33; vi, pls. 4, 19.
    ${ }^{27}$ Davies, $\mathcal{F E A} 7$ (1921), 6, and pl. 4. 23, cf. also pl. 4. 22, which publishes fragments apparently from a painted scene of foreign captives and the 'unification' sign, but unfortunately it is not known from which building they come, although the King's House (house no. 13 to Petrie) is a strong possibility.
    ${ }^{28}$ Davies, The rock tombs of El Amarna, III, pls. 16, 17; v, pl. 5(?); vi, pls. 4, 19, 29. Three scenes omit this feature: ibid. I, pl. 6; II, pls. 10, 11, 33, 34.
    ${ }^{29}$ Ibid. Iv, 14, and pl. 29.

[^45]:    ${ }^{30}$ Davies, op. cit., IV, pl. 18.
    ${ }^{31}$ Ibid. I, pls. 18, 26; II, pls. 14, 41 ; III, pl. 13; iv, pl. 8; vi, pl. 17.
    ${ }^{32}$ G. Roeder, Amarna-Reliefs aus Hermopolis (Hildesheim, 1969), 71, 208-9, 317, and blocks 235/VIC = 619/VIII, Taf. 82; 436/VIIA, Taf. 60; 138 and 202/VIIIA, Taf. 6ı (dubious); PCi25, Taf. 191; PCi27, Taf. 191; PC264, Taf. 207 (not definitely in a palace); PC270, Taf. 208. PCi27 also appears in J. D. Cooney, Amarna reliefs from Hermopolis in American collections (The Brooklyn Museum, 1965), 77-8, no. 48; C. Aldred, Akhenaten and Nefertiti (London, 1973), 139, no. 63. Aldred suggests, too, that Medinet Habu and the Ramesseum offer the most reliable guides to the form of the Windows.
    ${ }^{33}$ P. Anus, 'Un domaine thébain d'époque "amarnienne" sur quelques blocs de remploi trouvés à Karnak', BIFAO 69 (1971), 69-88; L. Greener's reconstruction based on other blocks appears in D. B. Redford, 'Reconstructing the temples of a heretical Pharaoh', Archaeology, 28 (1975), 16-22.
    ${ }^{34}$ Davies, op. cit. I, pls. 25, 26.
    ${ }^{35}$ F. G. Newton, 'Excavations at el-rAmarnah, 1923-24', $\mathcal{F} E A$ 10 (1924), 289-98, the North Palace being dealt with on pp. 294 ff.; H. Frankfort, ed., The mural painting of El-「Amarneh (London, 1929), 59.

[^46]:    ${ }^{36}$ See note 33.
    ${ }_{37}$ Davies, op. cit. II, pls. 33, 36; Iv, pl. 26.
    ${ }^{38}$ One might draw attention to the large and evidently official building to the south of the Great Palace, see note 44. ${ }^{39}$ The City of Akhenaten, iII, 81, pl. 13 C.

[^47]:    ${ }^{40}$ The City of Akhenaten, III, pp. 93-4, pl. 16, called 'priest's house'.
    ${ }_{41}$ 'Tempelpalast und Erscheinungsfenster in den Thebanischen Totentempeln', MDAIK 29 (1973), 22 I-42.

[^48]:    ${ }^{42}$ Stadelmann also suggests that the smaller Window, in the Hat-Aten temple, was a 'House of Morning', where the king was purified before entering the temple, cf. Blackman, $\mathscr{f} E A 5$ (1918), 148-65.
    ${ }^{43}$ See the discussion by E. P. Uphill, 'The Per Aten at Amarna', fNES 29 (1970), 151-66; J. Assmann, 'Palast oder Tempel ? U'berlegungen zur Architektur und Topographie von Amarna', fiNES 3I (1972), 143-55.

[^49]:    ${ }^{48}$ Porter and Moss, Top. Bibl. iv, 193, 196, 200.
    ${ }^{49}$ No over-all plan seems to have survived. Fig. 4 is a composite plan made on the basis of an elderly and somewhat indistinct aerial photograph. On this I have inserted the outlines of the published plans of the North Administrative Building, the North Palace, and the house groups U. 25.7 and ir, see the references in note 48, and the outlines of the unpublished plans of the North Riverside Palace and the Ramp, these latter with the kind permission of the Egypt Exploration Society. A clear aerial photograph of the North Riverside Palace and large estates is in E. Bille-de-Mot, The Age of Akhenaten (London, 1966), pl. 26.

[^50]:    ${ }^{50}$ Davies, op. cit. Iv, pls. 20-8.
    ${ }^{51}$ Cf. the standard representations of fortified cities in the New Kingdom, conveniently collected in Badawy, op. cit. 147-58. A representation of towered walls with crenellations occurs on an Amarna-period block from Medamud, see R. Cottevielle-Giraudet, Rapport sur les fouilles de Médamoud. Les reliefs d'Aménophis IVAkhenaton (Cairo, 1936), pl. 4, fig. 30 and p. 67, fig. 97 = Badawy, op. cit. 94-5, fig. 100. The block illustrated in The City of Akhenaten, III, pl. 68. 6, cf. p. 71, no. $36 / \mathrm{II}$, also possibly depicts a towered enclosure wall, though this may be the smaller Aten temple.

[^51]:    ${ }^{52}$ Cf. the remarks by B. J. Kemp, 'Temple and town in ancient Egypt', in P. J. Ucko, R. Tringham, and G. W. Dimbleby, ed., Man, Settlement and Urbanism (London, 1972), 668-76.
    ${ }^{53}$ The City of Akhenaten, III, 122-30, pl. 20. Note that a cuneiform letter was found in one of them. H. W. Fairman in his 'Town planning in pharaonic Egypt', Town Planning Review, 20 (1949), 41 and fig. 15, identified them as offices rather than houses.

[^52]:    ${ }^{1} \mathcal{F} E A 59$ (1973), 100 ss. 'The great enchantress in the little golden shrine of Tut'ankhamūn.'
    ${ }_{2}$ Caire, No. 14 du Trésor de Toutankhamon; JE 61481.
    ${ }^{3}$ Il a en fait été publié par Leibovitch: $\mathcal{F} N E S$ 12 (1953), fig. 15. No. 108 c de l'inventaire de H. Carter.
    ${ }^{4}$ Son nom vient certainement-comme l'indiquent ses attributs, et son association fréquente avec Nepride $\int_{0}^{\Delta}{ }_{0}{ }^{W}, 1, h k 3 t$, ou $h k 3 w t$, mesure de grains ( $W b$. III 174, 15 ). Son nom signifie sans doute la Grande-en-grains.

    Il n'existe pas, à notre connaissance, d'étude sur Ouret-Hekaou et sur Ouret-Hekaout, que les auteurs ne distinguent pas (cf. Bonnet, Reallexikon, art. Urt-Hekau). Par ailleurs, la lecture du texte par Dr. BosseGriffiths est apparemment inexacte (The king of Upper and Lower Egypt, Neb-Kheperu-Rēr, beloved by Wrt $\mathrm{H}_{3} \mathrm{w}$, the mistress of heaven-p. 102). Bien que les derniers signes soient peu clairs, je pense qu'il faut lire le texte (écrit de droite à gauche):

[^53]:    ${ }^{6}$ Parfois représentée, comme Ouret-Hekaou, en déesse à tête de lionne, coiffée d'un grand disque solaire; cf. par exemple la stèle de Penrou à Leyde (no. 33)-Boeser, op. cit., pl. 21, où elle est parèdre d'OnourisAtoum, par substitution à Tefnet. Cette association (Onuris-Shou-Tefnout) se retrouve dans le Temple de Khonsou à Karnak (LD Text ini, 69) où elle porte correctement le nom d'Ouret-Hekaout.
    ${ }^{7}$ La statuette 42002 du Caire (Legrain, Stat. I, pl. i et p. 2) représente Ouret-Hekaout à tête de serpent, assise, et allaitant un jeune roi nu. Le nom est cependant orthographié $A$ comporte curieusement le nom, dans un cartouche, de Chéops. Pour Legrain, il s'agit d'une copie de la XVIII ${ }^{e}$ Dynastie d'une œuvre contemporaine de Chéops-ce qui, si c'est exact, constituerait la plus ancienne représentation d'Ouret-Hekaout.

    Inversement, sur la colonne 105 de la salle hypostyle, dans une scène de Ramsès IV, Ouret-Hekaout
     corps de femme...
    ${ }^{8}$ Urk. iv 2117, 12-15.
    ${ }^{9}$ Champollion, ND II, 331. $\quad{ }^{10}$ Legrain, Karnak, fig. 127.

[^54]:    ${ }^{16}$ Les signes épars relevés par Legrain semblent signifier (après la première ligne réservée à une date disparue et au protocole du roi): . . . pour faire ce qui plaît à leur Ka. C'est Ré qui existe(?). Son père jubile(. . .) comme Aton qui existe en son devenir (. . .).
    17 Säve-Söderbergh, Four Eighteenth Dynasty Tombs; Private Tombs at Thebes 1, pl. 1.
    ${ }^{18} L D$ III, $15 . \quad 19$ En fait, Hatshepsout corrigée en Thoutmès II. $\quad{ }^{20} L D$ III, 14.

[^55]:    ${ }^{27}$ Groupe de Turin 768 d'Amon-Ré et Horemheb, et Groupe de Vienne 8301 ; l'attribution à Horemheb (bien que les inscriptions paraissent assez nettement originales) est défendue en particulier par Scamuzzi (Museo Egizio di Torino, pl. xxx).
    ${ }^{28}$ Cf. Dr. Bosse-Griffiths, op. cit. roo-r.
    ${ }^{29}$ Naville, Temple . . . iv, pl. ıor.
    ${ }^{30}$ Ramsès II, paroi ouest de la salle hypostyle de Karnak, $4^{e}$ registre. Cf. Kees, ZÄS 52 (1915), 6I.

[^56]:    ${ }^{31}$ Qui tient, par ailleurs, un collier identique à celui représenté dans la chapelle dorée: Champollion, Monuments III, 273, 3 .
    ${ }^{32}$ J.-C. Goyon, Rituels funéraires de l'ancienne Égypte (1972), 105.
    ${ }^{33}$ Ibid. 127.
    ${ }^{34}$ Ibid. 155.
    ${ }^{35}$ Champollion, Mon. 38 bis, 3 ; $L D$ inf, 185 cet Text v, $159 ; L D$ inf, 89 c et d; etc.
    ${ }^{36}$ LD Text III, 69.
    ${ }^{37}$ Champollion, Mon. 273, 3 et N.D. I, 445; Lefébure, Mém. Miss. III (1), 4.
    ${ }^{38}$ Salle hypostyle, site N.E. du $2^{\mathrm{e}}$ Pylône (Ramsès II): Legrain, Karnak, 144-8; Medinet Habou, salle 35, paroi sud: Hölscher, Medinet Habou vir, 504. Dans ce dernier cas, Mout-Ouret-Hekaou est nbt ch.
    ${ }^{39}$ Colonne 105 de la salle hypostyle (Ramsès IV: $L D$ iII, 221 a).

[^57]:    $408^{e}$ Pylône.
    ${ }^{41}$ Chapelle d'Hathor à Deir el Bahri; chapelle rouge de Karnak; Spéos Artemidos.
    ${ }^{42}$ Fragments de son trône-Carter, The Tomb of Thoutmosis IV, pl. vi et vii.-On remarquera l'absence dans cette liste de Thoutmès III; cela tient peut-être aux conditions particulières de son élévation au trône.
    ${ }^{43}$ Temple de Louxor, où elle est symétrique de Sekhmet ( ${ }^{\mathrm{e}}$ Antichambre); stèle de Toura (LD III, 7I b);
    Temple de Sedeinga, où une statue lui était dressée et où elle est présentée comme 'celle qui est à la tête du Temple de Soleb' (LD Text v, 230 ).
    ${ }^{44} 8^{\mathrm{e}}$ Pylône; Spéos Artemidos; Salle hypostyle de Karnak.
    ${ }^{45}$ Salle hypostyle; Abou Simbel (petit temple et grand temple); Derr.
    ${ }^{46}$ Salle hypostyle de Medinet-Habou et Temple de Khonsou à Karnak.
    ${ }^{47}$ Temple de Khonsou.
    48 Tombe, chambre B.
    ${ }^{49}$ Chapelle d'Hathor à Deir el Bahri et Spéos Artemidos.
    ${ }^{50}$ Deir el Bahri, Salle hypostyle et chapelle de Toutankhamon.
    ${ }^{51}$ Stèle de l'an II d'Aménophis III: $L D$ iII, 7 II b.
    ${ }^{52}$ Aile droite du VIIIe Pylône de Karnak; Spéos Artemidos; chapelle rouge d'Hatshepsout à Karnak.

[^58]:    ${ }^{1}$ This adjective is used here as a convenient term, for lack of a better one, to designate the population of the eastern littoral of the Mediterranean in the 3 rd and 2 nd millennia b.c., without either ethnic or linguistic implications; though that population was most probably neither ethnically nor linguistically homogeneous.
    ${ }_{2}$ May be published shortly in the Proceedings of that Congress.
    ${ }^{3}$ See W. F. Albright, $T B M$ III ( $=A A S O R 21-2$ [1941-3]) (New Haven, 1943), 72; a full discussion of the subject on pp. 70-3 (§§ 40-2). This, by the way, is the latest publication dealing with the subject, and giving a more or less full bibliography of previous literature on the bowls under discussion.

    4 See Hedwig Fechheimer, Die Plastik der Aegypter (Berlin, 1922), pl. 151.

[^59]:    5 In coloured scenes this hollow stem appears painted yellow (gold ?); see Alan H. Gardiner (ed.), The Temple of King Sethos I at Abydos, copied by Amice M. Calverley with the assistance of Myrtle B. Broome, London-Chicago, 1935, pl. II (on the right); in this connection cf. Mishnah Yomah, 4, 4 (H. Danby's translation, Oxford, 1933, p. 167) : 'Other days he (i.e. the High-priest) used to scoop out [the cinders] with a [fire-pan $=m a h t \bar{a}]$ of silver and empty it into one of gold, but this day (i.e. the Day of Atonement.-S. Y.) he scoops them out with that of gold, in which also he brought in [the cinders].'

    6 This pot with flaring sides seems to have held the incense pellets, while the officiating personage would throw the pellets from time to time from this pot (part (d) of the apparatus) into the front cup or bowl (part (a) of the apparatus) to feed the flame burning up the incense, since the cup in which the latter burned was too small to hold more than three or four pellets at a time; cf. the scene quoted in the preceding note.

    7 In the Reber Collection at Lausanne; see H. Th. Bossert, Altsyrien (Tübingen, 1951), 51 and fig. 763, 1-2 [(on p. 225)].

    8 See, e.g., the scene quoted above (in n. 5), and several others ibid. (above, n. 5), pls. 5 (top left), 8 (bottom left). These 'lion-headed covers' must have had a hole in the centre of the top of the head, through which the officiating person could blow, and inflame the glowing embers in the bowl holding the burning incense pellets.

[^60]:    9 Albright, op. cit. (above, n. 3).
    ${ }_{10}$ Such as contents, or inner decorations, of vessels; cf., e.g., H. Schaefer, Von aegyptischer Kunst ${ }^{2}$ (Leipzig, 1922), 156 ff., figs. 38, 104, 112 = Principles of Egyptian Art (tr. Baines, Oxford, 1974), 177 ff., figs. 63, 154 a-b, 16ı a-b.
    ${ }^{11}$ In the author's above-mentioned paper (n. 2), he points out that most vessels, which are either dubbed or considered 'ritual', are really such as serve both 'religious' and 'lay' purposes, while only very very few are of exclusively 'ritual' usage. Now, while the vessel in question could at a pinch be possibly imagined as serving for 'lay' functions, such as, e.g., a sort of a 'spices-cellar', both the extremely small quantity of any given spice that each thumbler within the cup (or bowl) could possibly contain, and-first and foremost-the place and circumstance of the discovery of these vessels, militate against assigning to them any lay role.
    ${ }_{12}$ See Dr. M. Dothan, IEf 6 (1956), 19, fig. 3 (= fig. 2 here), pl. 3, b.
    ${ }_{13}$ See G. Laud, Megiddo, 11 (Chicago, 1949), 84 ff.; 91 ff.; pls. 19, 9; 47, 9.
    ${ }^{14}$ See M. Dothan, loc. cit.
    15 See C. F. A. Schaeffer, Ugaritica, II (Paris, 1949), 178-9, fig. 71, 17; unfortunately the stand had been anciently damaged, and only its top, to which the bowl had been originally attached, remains, so that it is impossible to say how high a stand and of what exact shape it had originally been. The Egyptian relief in question gives us an idea of what sort of a stand it may have been. The exact place of discovery of this implement is not stated, but it seems to have been recovered from the ruins of the High-priest's residence (the bibliothèque?) near the temple of Dagon.
    ${ }^{16}$ See M. Dunand, Les Fouilles de Byblos, I (Paris, 1937), 277; 287; 314; 320; pl. 121, 4110, 4114.

[^61]:    ${ }^{17}$ See Olga Tufnell et alii, Lachish, in (London, 1940), 41, pls. 6, 4; 7, 3. I am grateful to Miss Tufnell and to Miss Geraldine Talbot for facilitating pl. XV, 2.
    ${ }^{18}$ See above, n. i ; cf., for type, M. Avi-Yonah and Sh. Yeivin, The Antiquities of Israel, 1, (Tel-Aviv, 1955), 145 ff .; Yeivin, $E B \mathrm{v}$, (Jerusalem, 1968), cols. 319 ff ., pl. 10 (both in Hebrew).

[^62]:    ${ }^{\text {I }}$ The plates themselves are reduced $4 / 5$. Photographs of all the texts are to be deposited in the International Papyrus Archive in Brussels.

[^63]:    ${ }^{1}$ Had Dr. P. H. Greenwood been cited as co-author, only justice would have been done, as he was responsible for all the ichthyological information and also for much help and guidance, for all of which I am most grateful. He preferred, however, this form of acknowledgement.
    ${ }^{2}$ Radiograph by courtesy of E. G. Mercer of Ilford Radiograph Department, London: for this and other help I am most appreciative.
    ${ }^{3}$ Cf. in general, Cl. Gaillard and G. Daressy, La Faune Momifiée (CCG, 1905); Dr. Loret and Cl. Gaillard, La Faune Momifiée de l'ancienne Egypte (Lyon, 1905).
    ${ }^{4}$ C. F. Nims and W. Swaan, Thebes of the Pharaohs (London, 1965), 195, pl. 97. This picture was brought to my notice by the kindness of Dr. Peter K. Gray. See also the discussions by Christiane DesrochesNoblecourt, Mon. Piot, 47 (1953), 16, and J. Gwyn Griffiths, Plutarch's De Iside et Osiride (1970), 343 n. 4.

[^64]:    5 This was confirmed by the staff of Kew Herbarium, Kew, England, to whom I am grateful.
    6 The following report was received from Miss E. Crowfoot, who most kindly undertook the examination of the outer and inner linen wrappings. 'Three fragments, $c .6 .0 \times 4.0,7.0 \times 1.5,5.0 \times 1.7 \mathrm{~cm}$ over all. The threads are of flax, S spun in both systems, even yarns, the weave a regular tabby, rather loose and liable to pull, with counts of $19 / 6,22 / 5-6$ threads per cm ; no selvedge is preserved, but in a fairly coarse Egyptian linen like this the closer count is more likely to be the warp. The yellow colour may be staining from the conditions of preservation, or from the organic matter or the spices used for mummification rather than a dye.'

    7 Plates nos. XXI-XXII are by courtesy of the British Museum (Natural History) Photographic Unit; Plate no. XX, I by P. A. Clayton. I wish to express appreciation to all concerned.

[^65]:    ${ }^{8}$ To Dr. F. C. Newman, BP Chemicals International Ltd., I am indebted for the following spectroscopical report.
    'The skin of the fish certainly contains sodium chloride and some potassium which can probably be assumed to be present as the chloride. Thus, if the fish is indeed a fresh water variety, salting may well be the method of curing or preservation that was used. Although $\alpha$-quartz and calcium carbonate are present, X-ray diffraction has not shown the presence of montmorillonites and so the use of a clay type mud for preservation seems unlikely. Similarly no sodium or potassium carbonate could be detected. An investigation was made for the presence of heavy metals, that might have indicated the use of an interesting dye, but only iron was found, which is probably too widespread in nature to be useful as an indicator.'

[^66]:    ${ }^{1}$ Not the definite article (although homonymic and certainly related to it ), but belonging to a different category (paradigm) : the substantivated relative may be, in many cases, further determined by $\pi-$, or-/2ent or $\varnothing$-(zero), and the relative form (єт-) itself is not otherwise commutable with a noun. пет- on its own is in some respects treated as a zero-determined substantive: consider the following (among many other examples): Job II: 8 (пет- as antecedent of the adnominal circumstantial, see n. 3); Shenoute, ed. Chassinat, 117.32, ed.
     Amélineau, I, 133. ıо (пет- uree); Shenoute, ed. Chassinat, 63. 9, ed. Leipoldt, iv, 128. 27 (пет- as direct and immediate object of a Bipartite Pattern predicate, in defiance of the Stern-Jernstedt rule); Mich. 3. II (Akhm.: '展-meedr naer axwri'), see Polotsky, 'The Coptic Conjugation System' (in Orientalia 29 [1960], §§ 19, 35).
    ${ }^{2}$ Polotsky's conversion terminology, op. cit. §§ ro-18.
    ${ }^{3}$ The so-called 'pseudo' ('unecht' or 'uneigentlich') relative clause (Till, Kopt. Gr. ${ }^{2}$ § 475 : an unfortunate appellation, signifying, from the structural-descriptive point of view, precisely nothing), already commented upon by Prätorius (his review of Stern's $G r$., $Z D M G 35$ [181], 758). The present writer has tried, in an unpublished doctoral thesis (1972) to formulate structurally the distributional details, as well as the functioning, of the circumstantial and relative conversion-forms in the Sahidic corpus of Shenoute's works, arriving at the conclusion that there actually exists a circumstantial : relative opposition (predicative vs. attributive junction), which is neutralizable in certain environments.

    4 Unlike the Second Future when object of $\sigma$ me in a negative predication (see Spiegelberg, $Z \ddot{A} S_{5} 8$. 157). See in Shenoute, ed. Leipoldt, III, I3. 9, ed. Chassinat, 33. 14, 36.9, 73. 20. In Subakhmîmic, see Manichaean Psalmbook 151. 27, 156. 9 ( (еппобп-єү пе пооте), 203. 25, 207. 23. This idiom is attested also in Late Coptic: Budge, Miscellaneous Texts 168. 19, Drescher, Coptic Legends, 55. 19.

[^67]:    ${ }^{5}$ Nominal additional predication is effected by the nota relationis $\bar{\pi}$, e.g. 1 Cor. $5: 11$; Joel $2: 13$ (ed. Malinine); Clemens 45. I (ed. Schmidt); Shenoute, ed. Leipoldt, iII, I35. io f., ed. Chassinat, 108. 15 ff. In Bohairic this use is extended to non-predicative status, e.g. Acta Martyrum (edd. Balestri-Hyvernat), I, 158. 18; 164 . 11; 175. 10 f.; 179. 15; 207. 3 etc.

[^68]:    ${ }^{6}$ Polotsky, Études de syntaxe copte (Cairo, 1944), 52 f., ('C').
    ${ }^{7}$ Cf. also Pistis Sophia (ed. Schmidt) 275. 19; Patres Apostolici (ed. Lefort) 91. 7; Athanasius (ed. Lefort) 66. 15 f .

    8 See Prätorius, op. cit. 757, and Jelanskaja in Palestinskij Sbornyk 5. 68 (1960), 40 f.
    ${ }^{9}$ See Mallon, Mélanges de la Faculté Orientale de l'Université St. Fosef (Beyrouth), II (1907), 213-64.

[^69]:    ${ }^{10}$ For the terminology of the Cleft Sentence ('phrase coupée') analysis see Polotsky, op. cit. 57 ff ., idem, Orientalia 31 (1962), 413 n. 1, 414 ff ., and the references there.
    ${ }^{11}$ A listing of the variant formulas, with extensive documentation, in Kahle, Bala'izah 183 ff .
    ${ }_{12}$ The circumstantial glose-form (after nominal and adverbial 'vedettes', or logical predicates) has been extensively discussed by the present writer in the aforementioned doctoral thesis, The Circumstantial Sentence in Shenoute's Coptic (Jerusalem, 1972). An interesting parallel to the non-predicative function of a participial verb-form may be found in Greek; see Rosén, 'Die "zweiten" Tempora des Griechischen. Zum Prädikatsausdruck beim griechischen Verbum', Mus. Helvet. 14 (1957), 133-54.
    ${ }^{13}$ Cf. my remarks in fe 6 6I (1975), 256-7.
    ${ }^{14}$ This seems to be Stern's explanation, at least of (c): Grammatik § 406 (our example (iI)).

[^70]:    I This more technical work will give the relevant mineralogical and metallurgical references.
    $2^{2}$ W. M. F. Petrie, J. E. Quibell, Naqada $\xi^{\circ}$ Ballas, 66; C. R. Williams, Cat. of Egyptian Antiquities, Gold $\xi^{\circ}$ Silver and related Objects (New York Historical Society, 1924), 27-8 and passim; G. Maspero, Dawn of Civilisation (1901), 493; A. Lucas, Ancient Egyptian Materials and Industries ${ }^{4}$ (1962), 245.
    ${ }^{3}$ J. D. Dana, Manual of Mineralogy (London, 1857), 310.

[^71]:    ${ }^{4}$ P. M. Roberts, 'Gold Braising in Antiquity', Chamber of Mines of South Africa, Gold Bulletin, vi, 4 (1973), 112-19.
    ${ }^{5}$ Johnson Matthey \& Co. Research Laboratory Probe report No. 958. I am indebted to Mr. P. M. Roberts for bringing this report to my notice.
    ${ }^{6}$ In particular I offer thanks to Messrs. P. L. Bird and P. R. Monk at the Analytical Services Laboratory, Imperial College, London, and Mr. J. J. Fuggle at the Dept. of Metallurgy, University of Aston in Birmingham.
    ${ }^{7}$ F. L. Whitmore, W. J. Young, 'Application of the laser Microprobe and Electron Microprobe in the Analysis of Platiniridium Inclusions in Gold', in The Application of Science in the examination of Works of Art, ed. N. J. Young, (Boston Museum of Fine Arts, 1973 ; report of the 1970 seminar); W. J. Young, 'The Fabulous Gold of the Pactolus Valley', BMFA 70 (1972), 5-13.

[^72]:    ${ }^{8}$ J. B. Mertie, Economic Geology of the Platinum Metals (Geological Soc. Prof. Paper 630; Washington, 1969), 15, table 10.
    ${ }^{9}$ Lucas, op. cit. $245 . \quad{ }^{10}$ Private communication.
    ${ }^{11}$ A. J. Whiteman, The Geology of the Sudan Republic (Oxford, 1971).
    ${ }_{12}$ F. Cailliaud, Voyage à Méroé, III (1826), 19. Several later writers repeat his findings.
    ${ }^{13}$ Numerous works on the Ethiopian platinum metals, those of Birbir in particular, include: E. W. Molly, 'Platinum Deposits of Ethiopia', Econ. Geol. 54 (1959), 467 ff.; J. Ottemann, S. S. Augustithis, ‘Geochemistry and Origin of "Platinum-Nuggets" in Lateritic Covers from Ultrabasic Rocks and Birbirites of W. Ethiopia', Mineralium Deposita, I (1967), 269-77; J. B. Mertie, op. cit. 49.

[^73]:    ${ }^{14}$ Possible ancient knowledge of the platinum metals will be dealt with in the forthcoming full study of platinum metals and ancient gold.
    ${ }^{15}$ See Lucas, op. cit. 226-7. ${ }^{16}$ M. Berthelot, Mon. Piot. 7 (1900), 132-3.
    ${ }^{17}$ Wisdom of the Egyptians, 91; Naucratis, 43.

[^74]:    18 E. W. Molly, op. cit. 476.
    19 This ring was briefly inspected when it came up for sale at Sotheby's 21 April 1975, Lot No. 165. The mode of construction (i.e. shank soldered to bezel rather than all cast in one piece) and method of chasing in the inscription would tend to dispel the doubts, voiced in some quarters, regarding the authenticity of this piece.

[^75]:    ${ }^{1}$ To be published shortly; inscription read by Jaromír Málek.

[^76]:    I I am grateful to the Ashmolean Museum for offering me the opportunity of publishing this text; and to Dr. John Shelton for some added references. The papyrus was presented by Mr. G. Johnson of Hornsea.
    ${ }^{2}$ Sijpesteijn's proposal, Penthemeros-Certificates, 48 under no. 16, may be rejected; incidentally, his " $O_{\rho \mu}(o v)$ (cf. nos. $5^{-6}$ in his list) must also be rejected, since $\pi o^{\prime} \tau^{\prime}$ seems fairly clear, and I take the beginning of line 7 to run [ $\tau o \hat{v}] \Pi_{a \mu \epsilon i \tau o[s ~} \mu \eta$ ] ( $\left.\tau \rho \rho_{s}\right)$. P. Grenf. is only two years later than P. Ashm. and similarly from Socnopaei Nesus; the hands, though not dissimilar, are probably different.

[^77]:    ${ }^{1}$ There are suggestions of a connection also in $8,354 \mathrm{~A} ; 39,366 \mathrm{~F} ; 42,367 \mathrm{E} ; 42,368 \mathrm{~A} ; 44,368 \mathrm{~d}$. See my Commentary (1970), pp. 28I; $453 ; 456 \mathrm{ff}$; $460 ; 465$. The best discussion of the place of the moon in Egyptian religious texts is that by Philippe Derchain in La Lune: mythes et rites (Sources Orientales, 5; Paris, 1962), 19-68. On p. 46 he quotes from a stela of Ramesses IV in which Osiris is addressed as the moon. It is only in the Ptolemaic era that the association becomes more prominent.
    ${ }^{2}$ See my Commentary, pp. 463 f . The basic idea is probably the reflection of the sun's light by the moon. Cf. Lanzone, Diz. Mit. II, 692; Brugsch, Thes. I, 30; 54; Boylan, Thoth, 69.
    ${ }^{3}$ Cf. Boylan, Thoth, 63-5; Maria Cramer, ZÄS 72 (1936), 96; Roeder, Urk. Rel. 148 and Bronzefiguren, 209; Bonnet, RÄRG, 356.
    ${ }^{4}$ Cf. Roeder, Bronzefiguren, 207.

[^78]:    ${ }^{5}$ Bronzefiguren, 206, § 244; cf. his Bronzewerke, 26.
    ${ }^{6}$ Roeder, Bronzefiguren, 207, § 245 (c) and Taf. 29 a-b. See also his Kulte, Orakel und Naturverehrung im alten Ägypten (Zürich, 1960), 407 and Taf. 19 (b).
    7 Bronzefiguren, 208, § 245 (d) and Taf. 29 e. Berlin no. 208 is similar in form; see ibid. 207, § 245 (b) and Taf. $28 \mathrm{~h}-\mathrm{i}$.
    ${ }^{8}$ I am grateful to the authorities of the museum for permission to study and publish this and another figure. Dr. P. R. S. Moorey gave me every facility and I profited from discussions with him and Dr. J. Málek.
    ${ }^{9}$ Exhibition of Ancient Persian Bronzes . . . and other selected items of Ancient Art, From the collection of Mrs Brenda Bomford (Oxford, 1966), 38 and pl. 12, no. 194.
    ${ }^{10}$ Kindly provided by the Ashmolean Museum.
    ${ }^{11}$ Bronzefiguren, i8if. 12 Ibid. $186 \mathrm{f} . \quad 13$ Cf. Wb. I, 42.

[^79]:    ${ }^{14}$ I must thank Mr. T. G. H. James for help and facilities; also his staff, especially Dr. M. L. Bierbrier.
    ${ }^{15}$ See F. Arundale and J. Bonomi, The Gallery of Antiquities, Selected from the British Museum (London, 1844), 3 I and pl. 15, fig. 53; Budge, A Guide to the Third and Fourth Egyptian Rooms (1904), 145, no. 50.
    ${ }^{16}$ Cf. the late hieratic form in Möller, Hierat. Pal. III, no. 525. It does not occur often in writings of the word.
    ${ }_{17}$ An exhaustive list is not intended. Information kindly supplied by Mr. Bernard V. Bothmer, Mr. R. V. Nicholls, and Miss Janine Bourriau points to the absence of examples in the Brooklyn Museum and the Fitzwilliam Museum, Cambridge. For possible instances in the Louvre see C. Boreux, Guide-Catalogue Sommaire, II (1932), 373.
    ${ }^{18}$ Cat. of the Egyptian Sculpture in the Walters Art Gallery (Baltimore, 1946), 106 (nos. 385 and 386) and pl. 68.
    ${ }_{19}$ Daressy, op. cit. 65 and pl. 12, nos. 38228-9; Roeder, Bronzefiguren, 107; 111.
    ${ }^{20}$ Daressy, no. 38229; Boreaux, op. cit. 37 I and pl. 50.
    ${ }^{21}$ Budge, Osiris, 1, $59=$ Hopfner, Plutarch über Isis und Osiris, II, 187, both regarding it as 'Osiris the Moongod'. Lanzone, Diz. Mit. pl. 35, explained it as I'aḥ.

[^80]:    ${ }^{22}$ This was pointed out to me by K. Bosse-Griffiths; see my Commentary on the De Is. et Os., 453 n. 3. Cf. Bonnet, $R \ddot{A} R G$, 141, fig. 43; Hornemann, Types, 1235 (with the flail only). On the possibility that the flail ( $n h_{3} h^{3}$ ) was a fly-whisk see V. Wessetsky in Bull. du musée hongrois des beaux-arts 44 (1975), 3 ff. and H. G. Fischer in Lex. Ägyptol. 84 (with fig. a).
    ${ }^{23}$ Bronzewerke, 26 and pl. 15.
    ${ }^{24}$ Roeder, Bronzefiguren, 204; id. Die ägyptische Götterwelt, pl. 23; Kees, Götterglaube, pl. 10. The crook, flail, and was-sceptre are held; the forelock again points to Khons. See also Hornemann, Types, nos. 39, 67, $70,460,600,601$. It is very rarely that Osiris is not mummiform; see Bonnet, $R \ddot{A} R G, 575$ with a ref. to Calverley, Temple of Sethos I at Abydos (1933), pl. 4 ( $=$ pl. 1 also).
    25 See also Roeder, Bronzewerke, § 111 (c) and Bronzefiguren, $\S 244$ (b) with Taf. 78 g. Roeder had been misled about this figure, for he discusses (p.207) the Ashmolean bronze i888. r66 and that from Teh elBarûd as though they were two different objects. Hornemann, Types, 777 (Leiden E. 28. 40) is similar, save that an atef-crown tops the lunar disc.
    ${ }^{26}$ It is true that a similar figure in Copenhagen (no. 607) has the inscription 'Irh only. See V. Schmidt, Ny Carlsberg Glyptotek (1908), 332 f. and Maria Mogensen, La Glyptothèque ny Carlsberg: La collection égyptienne (1930), 90, who calls it 'Osiris-Lunus', stressing the Osirian aspect. The piece is dated by her to the Saite epoch.

[^81]:    ${ }^{27}$ Thus on the museum label and in P. R. S. Moorey, Ancient Egypt: Ashmolean Museum (Oxford, 1970), 7. Dr. Moorey now agrees with me in rejecting this idea.
    ${ }^{28}$ Cf. the figures mentioned in nn. 21 and 24; also the falcon-headed Khons in P. Harris: see Erman, Rel. (1934, tr. H. Wild, 1952), pl. I facing p. 96; again the seated form of Khons in S. A. B. Mercer, Rel. (1949), ${ }^{153}$, fig. 33 (with no ref. to source); cf. J. Vandier, Musée du Louvre: Le département des antiquités égyptiennes (1952), 95 . On the falcon-headed Khons see also Ph.Derchain, op. cit. 40.
    ${ }^{29}$ Staatliche Sammlung ägyptischer Kunst (Munich, 1972), pl. 61, 93. The number there assigned to it is 1534, but on p. 106 it is numbered 5306 , which seems to be correct.
    ${ }^{30}$ See n. 20 above.
    ${ }^{31}$ Thus in the Munich guide, p. 106. A clear instance of I'ah with inscription is Hornemann, Types, $166=$ Roeder, Bronzewerke, $5-6, \S 24$, pl. 3 c, d. Here a cap is worn; there is no wig or crown apart from the disc and crescent.

[^82]:    ${ }^{32}$ Cf. Budge, $A$ Guide to the Third and Fourth Egyptian Rooms (1904), 145: 'No. 51. Bronze seated figure of "Osiris the Moon", holding in his hands an Utchat, or "Eye of Horus". [No. 12, 589.]'. See also B.M. Guide to 4th, 5th and 6th Egyptian Rooms and Coptic Room (1922), 88, no. 102. The carrying of a wedjat-eye points to the influence of Thoth as a moon-god; cf. Derchain, op. cit. 37. Ibis-headed bronze figures show him doing this, as in Daressy, Statues, 174, nos. 38680-2 (two of them on pl. 36), and Roeder, Bronzefiguren, 73, § 108, referring to an example in the B.M. New York Metr. Mus. 23. 6. io = Hornemann, Types, 210, shows a moongod raising a wedjat-eye in his raised left hand, and here there is no ibis-head; cf. Roeder, Bronzefiguren, 27, § 29. In Hornemann, Types, $219=$ Roeder, Bronzewerke, § $21, \mathrm{pl} .3 \mathrm{e}, \mathrm{f}$ the eye is held on a plate in the right hand by a moon-god who has no ibis-head; cf. Berlin $13124=$ Roeder, Bronzefiguren, 27, § 29 (b) and pl. 5 d. On the general theme, cf. Roeder in Roscher, Lex. Myth. s.v. Thoth (1922), 860 and Boylan, Thoth, 72 ff . The wedjat-eye, restored by Thoth, is interpreted as the moon.
    ${ }^{33}$ A rare feature of the bronze is that it represents a chair with papyroform legs. The papyrus shape is imitated in the seating frames of chairs, but not usually in the legs; see H. Schäfer (tr. Baines), Principles of Egyptian Art (Oxford, 1974), 138 ff.
    ${ }^{34}$ Cf. the remarks of John Baines on a bronze statuette of Atum which has plainly Osirian features: $\mathscr{F} E A 56$ (1970), 135-40, esp. p. 138, where he refers also to a figure of 'Osiris-Moon'. See too his additional remarks in $\mathcal{F} E A 58$ (1972), $303-6$. In $\mathscr{F} E A 56,138 \mathrm{n}$. i he rightly suggests that engravers may sometimes have inscribed the wrong name.
    ${ }^{35}$ Emerging from the lotus: see Bonnet, Bilderatlas, 8; within the sun-disc, Sauneron, Le Papyrus illustré de Brooklyn (1970), figs. 2-3 and pp. 12-13.
    ${ }^{36}$ Guide-Cat. Sommaire, II, 373.
    ${ }^{37}$ Cf. E. Otto, Egyptian Art and the Cults of Osiris and Amon (London, 1968), 25 f.; E. Hornung, Der Eine und die Vielen (1971), 82 ff .
    ${ }^{38}$ Derchain, op. cit. 43 (Khons) and 46 (Osiris).

[^83]:    ${ }^{1}$ Sethe, Nominalsatz, §145, p. 96; Edel, Altäg. Gr. §§966c, 969; C. E. Sander-Hansen, Studien zur Gr. der Pyramidentexte, §481.

    * This is, by no means, a comprehensive study of nominal sentences. If in some cases my discussion will appear to be incomplete or too concise, I hope to be able to rectify it in the future.
    ${ }^{2} i n k$, and not wi, is required at the end of the first phrase because of $t w t$ at the end of the second phrase. This is true, of course, only if the second $t w t$ is not a mistake for $t w$.
    ${ }^{3}$ See Sethe's Komm., ad. loc.

[^84]:    ${ }^{4} C T$ iv, $99 h$, ink $p w$ stt $p w$ ts p $\underline{h} r$ might have also belonged here-stt being mistakenly written with the determinative of sti 'to shoot'. Compare, for example, $B D 64$ (Nebseni), ntf pwink pw ts phr with Sethe, Nominalsatz, 97 n. 1, ntf pwink, ink pw ntf. See also $C T$ vir, ro2g-h.
    ${ }^{5}$ For the usages of this pronoun see, e.g., Gardiner, Egn. Gr. ${ }^{3}$ §44. But see Edel, Altäg. Gr. §942.
    ${ }^{6}$ Although a shift of positions takes place in $P y r .703 b(\mathrm{~N})$ the employment of $\underline{t} w t$ at the end of the phrase might be counted against that version. See Sethe ad. loc. It is not, however, necessarily so as will be shown below.
    ${ }^{7}$ Gardiner, Egn. Gr. ${ }^{3}$ §43. This term was first suggested by Gunn, Studies in Egn. Syntax, p. xiii.
    ${ }^{8}$ Edel, Altäg. Gr. §r58.

[^85]:    ${ }^{9}$ Gardiner, op. cit. §125; §130. Lefebvre, Gr. ${ }^{2} \S 607$ ff. ${ }^{10}$ Gardiner, op. cit. §130.
    ${ }^{11}$ Ibid.
    ${ }^{12}$ Sethe, Nominalsatz, §ı41. Edel, op. cit. §§969, 970.
    ${ }^{13}$ Sethe, loc. cit. Gardiner quoted Ebers 1, 10 in §385.
    14 Cf. Edel, ibid.

[^86]:    15 Another opinion Gunn, Studies, p. xiii.
    ${ }^{16}$ Gardiner, op. cit. §§44, 3; 137; 114, 3; and see Rev. d'Ég. 20 (1968), esp. p. 59, with notes 2 and 5.
    ${ }_{17}$ Gardiner, op. cit. $\S \$ 44,2 ; 104,120 ; 334$. In these sentences $n n$ is the predicate and the following clause is its subject. The dependent pronoun is the subject of the clause.
    ${ }^{18}$ Gardiner, op. cit. §44, 1.
    ${ }^{19}$ Gardiner, op. cit. §300.
    ${ }^{20}$ A discussion of the pronouns and their accent, as well as other prosodic matters, is to be found in G. Fecht, Wortakzent und Silbenstruktur, Ägyptologische Forschungen 21 ; 1960.
    ${ }^{21}$ Compare Schenkel's 'zweites nominales Satzglied', ZÄS 88 (1963), 126.
    22 Compare Schenkel's 'erstes nominales Satzglied', loc. cit.
    ${ }_{23}$ Compare Sethe's commentary to Pyr. 703 b; also Nominalsatz, §145 and Edel, Altäg. Gr. §§966\%, 969.
    24 Gardiner, op. cit., §§ı 26, 130.

[^87]:    ${ }^{25}$ The 'enclitic' particles are of no great help, contrary to Gardiner, op. cit. §127, 4. For example is is found mostly in the second place, ink is NOUN, NOUN is pw whereas grt is not: $i n k$ grt NOUN, $i n k$ pw grt; so also $\operatorname{irf}$ in $\operatorname{ink} p w \operatorname{irf}(C T \mathrm{I}, 173 a)$, ink irf NOUN. The evidence is similarly inconclusive in non-nominal sentences -affirmative and negative.
    ${ }^{26}$ E.g., Gardiner, op. cit. §ı26; Sander-Hansen, op. cit. §428 about our pronominal sentences; Sethe, Nominalsatz, §I41, p. 95 and passim. See Otto Jespersen, The Philosophy of Grammar, ch. XI and H. J. Polotsky, Orientalia 31 (1962), 414-16 = Collected Papers, 419-21.
    ${ }^{27}$ E.g., Jespersen ibid. I am using the word predicate in the sense of the new informative element.
    ${ }^{28}$ A possibility of two pronouns was not discussed by Gardiner.

[^88]:    ${ }^{29}$ This is the basic idea of Schenkel's article.
    ${ }^{31}$ Gardiner, §§127, 3; 137.
    ${ }^{32}$ E.g., Gardiner, §§137; 127, 3; 132.
    ${ }^{33}$ Cf. Schenkel's discussion, pp. 120 ff .
    ${ }^{34}$ The interrogative $m$ can either precede its pronoun, $m t y t w$, 'Who are you?' (Lefebvre, $G r, \S 679,606$ ) or follow it, $\underline{\underline{t}} \mathbf{w r} m t r$, 'Who are you?', $C T$ III, $59 b$, also $95 g$; iv, 249a, $\underline{\underline{t} w t} \operatorname{tr} m, 288 b, 314 h$. When a sentence is constructed of a genuine adjective and a ist person singular pronoun, it is the 'initial' and not the 'non-initial' pronoun that is generally used-Gardiner $\S_{1} 36$. When the adjectival predicate is an expression of possession (or even a participle) the 'non-initial' wi is employed-Gardiner, §127, p. 109 n. 6. There are, however, cases of $w i$ after a real adjective-see Gardiner, loc. cit., and particularly $C T$ ir, $242 c$ (perhaps also $C T$ iII, $54 b$ ).
    ${ }^{35}$ Interrogative words are predicates by their very nature. Adjectives are discernible as predicates by (a.) being in initial position; (b.) being invariable in number and gender. See Gardiner, op. cit. §1 37 . See also W. Schenkel, Grundformen Mittelägyptischer Sätze (Berlin, 1965. = MÄS 7), §80 p. 30. A unique example of $s w$ after a personal name ( $W s i r$ ) is found in $C T$ vir, $219 f$.
    ${ }^{36}$ In adverbial sentences the same pronoun precedes its predicate. The 'non-initial' pronoun can formally be described as a 'non-initial pronominal subject' and the pronouns in the pair NOUN+'NON-INITIAL' PRONOUN and 'INITIAL PRONOUN' + NOUN may be considered in complementary relationship of subjects only from the point of view of a non-pronominal predicate. In possessive sentences, however, these two kinds of pronouns can form a complementary paradigm, i.e. the 'initial' pronoun is always the predicate while the 'non-initial' pronoun is the subject. See below.

[^89]:    ${ }^{37}$ Gardiner, op. cit. §§125-6.

[^90]:    ${ }^{40}$ Such was Gardiner's argumentation, op. cit. 102, top. A discussion of this pattern in Late Egyptian is found in S. Israelit Groll, Non-verbal Sentence Patterns in Late Egyptian (London, 1967), ch. I.
    ${ }^{41}$ Rev. d'Ég. 20 (1968), 55 ff.
    ${ }_{42}$ Ibid. Lefebvre, Gr. §630; Gardiner, Egn. Gr. 89 n. 5; Urk. iv, 1822, 14; $C T$ vi, $253 d$ (Sq6C)-the earliest known example.
    ${ }^{43} B D_{5}$ (Budge, 1898), p. 38, 7, 9; BD i B (Budge), p. 25, 7 ( $=$ Neville if, p. 16 Ba). $B D$ i7 (Budge), 67 last line; compare $U r k . \mathrm{v}, 86,9$ and 90 , 1. $B D_{17}$ (Budge), p. 68, 4; cf. Urk.v, 87, 1 and 90 , 10. Urk. iv, 2053, 7; 2052, 14; 1984, 4, 10, 17; 2150, 5(?). Urk. Iv, 1675, 10 is a reconstruction. Urk. Iv, 2151 , 13 is already a Cleft Sentence on the lines of Late Egyptian and Coptic. All other occurrences of ntf known to me up to the 18 th Dynasty appear to be either possessive or in the Participial Statement. Ntf $R \mathrm{f}$ is found in the Leiden hymn to Amūn (1, 350) 4, 22.
    ${ }^{44}$ I know of only two early examples of $n t f+N O U N: C T \mathrm{iv}, 37 f(\mathrm{Sq6C}), n t f s^{3} W \operatorname{sir}$ and $C T$ vi, 283a(BiBo), $n$-ntt ntf is nwo pw ${ }^{\prime} 3$. The first is from the coffin that also has the earliest known example of the possessive $n t f$ (note 42). If the text is not corrupted the two phenomena may perhaps be connected. The second example has is between $n t f$ and the noun. Also the 3 rd person feminine $n t s$ is found in such a construction, $C T$ vi, $184 d\left(\mathrm{~B}_{4} \mathrm{C}\right) n-n t t n t s$ is NOUN (passive participle) and it may well be that $p w$ was not employed in such cases after the pronoun. The feminine nts does occur early in direct juxtaposition to a noun, $C T$ ini, 33 ib; vi, 163q, 166c. All of these occurrences are in the same coffin ( $\mathrm{B}_{4} \mathrm{C}$ ) and it is highly probable that they are merely automatic substitutions for an original first person pronoun ink. It is particularly clear in $C T$ inI, $33 \mathrm{I} b$ in comparison with coffin BiBo. For one peculiarity of that coffin and its grammatical reliability see further below in this article.
    ${ }^{45}$ E.g., Gardiner, Egn. Gr. ${ }^{3}$ §§391; 227, 3; 373; Schenkel, Grundformen, §§81-2; Polotsky, Etudes de Syntaxe Copte, §21 ff. = Collected Papers, 162.

[^91]:    ${ }^{46} \mathrm{Ntf}$ is perhaps the predicate also when preceding an adjective as in Urk. iv, $86 \mathrm{r}, 8, n t f m n h$; Cf. Edel, Altäg. Gr. §943; Schenkel, Grundformen, 82. If this is not a case of a Participial Statement, then it is possible that it represents rare occurrences of a prominal predicate with an adjectival subject. Ntf is the predicate also when followed by an adverb (a prepositional phrase), e.g. Sin. B 255, hity-inntf $m \underline{h} t \cdot i$. Cf. Schenkel, op. cit. §55, 2, p. 23. I deal with this in another article.
    ${ }^{47}$ See, e.g., Gardiner, op. cit. §r32, p. 105 n. 4.
    ${ }^{48}$ Polotsky, 'Nominalsatz und Cleft Sentence im Koptischen', Orientalia 31 (1962), $426=$ Collected Papers, 431. See Till, Koptische Gr. §§197-8, 245.
    ${ }^{49}$ Polotsky, loc. cit.; Till, op. cit. §243.
    ${ }_{50}$ Till, loc. cit., quotes one exception 2 Cor. 10: 7. The whole passage is петreєчe epoq xe al̄̃
     self "I belong to Christ", let him think again of this in himself, that in the same manner that he belongs to Christ we belong to him too.' Polotsky has remarked to me that the Bohairic version has the same construction
    
    ${ }_{51}$ Till, §244.
     the writing añ before $\boldsymbol{\pi} \boldsymbol{\epsilon}$ is nevertheless a mistake. In Classical Sahidic sentences with a pronoun and a personal name are always ternary with the fully accented pronoun. The correct sentence according to Polotsky (in private conversation) is апок п п табринд, Lc. у 19.
    ${ }^{53}$ For this construction in Late Egyptian see Sarah Israelit Groll, Non-Verbal Sentence Patterns in Late Egyptian, 33 .
    ${ }^{54}$ In Coptic $\boldsymbol{T E}$ is used for a 3 rd person feminine subject while ne is used for the 3 rd person plural. Since Old Egyptian $p w$ was used also for the feminine and plural although there are indications that $t w$ and $n w$ had once been employed. See, e.g., Edel, op. cit. §959; Sethe, Nominalsatz, §89.
    ${ }^{55}$ When a verbal action was concerned the Egyptians used the Cleft Sentence for that purpose; cf. Gardiner, op. cit. §39r.

[^92]:    ${ }^{56}$ Ntk and $t w t$ are used in almost the same context in the same coffin ( Br BO ) with no apparent difference, $C T$ vi, $288 c$ (compare b) and $C T$ vi, $313 k$ (compare $314 h-l$ ).
    57 Gardiner, op. cit. §ı25. Edel, op. cit. §947. Sethe, Nominalsatz, §23ff.

[^93]:    ${ }^{58}$ E.g., Sethe, op. cit. §25. Edel, op. cit. §948. Sentences with bwt, 'abomination', tend to be in that construction, e.g., $C T$ iII, $146 e$. In many cases what appears to be a binary nominal sentence $\left(\mathrm{N}_{1}-\mathrm{N}_{2}\right)$ is probably a sentence of the type $N O U N, N O U N \phi$, i.e. a noun in extra-position followed by a one membral nominal sentence. Such appear to me to be most of the examples in W. Westendorf, Gr. der Medizinischen Texte, $\S 40 \mathrm{I}$, pp. 280-1. For a NOUN $\phi$ type of sentence see Gardiner, op. cit. §§506(3), 89, 306, 390. In Late Egyptian see S. Israelit Groll, op. cit., ch. I and passim.

[^94]:    59 Haiim B. Rosen, Strukturalgrammatische Beiträge zum Verständis Homers (North-Holland Publishing Company, Amsterdam, 1967), 12-4I; esp. p. 16 with n. 7. 60 Ibid.
    ${ }^{61}$ Gardiner, op. cit. §125, §126, p. 102. There is evidence that in Pyr. the position of the subject and the predicate was free. See Pyr. $483 b$ in Edel, Altäg. Gr. §947, pp. 48ı-2.
    ${ }^{62}$ See for example $P y r$. 1870a-b.
    ${ }^{63}$ E.g., $C T$ iv, $194 b, d ; C T$ viI, $508 h$.
    ${ }^{64}$ E.g., $C T$ III, $382 e$; $C T$ viI, $286 d-287 a ; 5 \circ 3 h$.

[^95]:    66 This is the version quoted by Sethe, Nominalsatz, 97 n . I. It is not to be confused with examples ro-12 below, particularly not with example 13. They are perhaps of a different pattern and resemble this sentence only superficially. The supposed construction $i n k p w i n k$ (R. Pietschmann, 'Nuk pw Nuk', ZÄS 17 (1879), $67-70$; also Sethe, Nominalsatz, $\S_{112}$ ) is a misreading. The true sentence is ink pwink $X$. See Pietschmann, ibid.; Sethe, ibid. and above p. 162 under (c).
    ${ }^{67}$ There are versions with $\underline{t} s p \underline{h} r . N u$ (long version) $n t f p w i n k t s p h r$. So also Turin (Lepsius). Nebseni, ntf pw ink pw ts phr.
    68 So possibly Sethe, Komm. This is the only example of $\underline{t w t}$ not in initial position.

[^96]:    69 The numerical inferiority should not be taken here against N version.
    ${ }^{70}$ Cf. Sethe, Nominalsatz, §145.
    ${ }^{71}$ Faulkner's translation is 'for such indeed is the king'. See Sander-Hansen, op. cit. §5; Edel, op. cit. §971.
    ${ }^{72}$ For another possibility of reading this sentence see Gunn, Studies, 59 n. 2.
    ${ }^{73}$ See Stern, Koptische Gr. §598; Till, Koptische Gr. §364. See also Polotsky, Orientalia 30 (1961), 294-313 $=$ Collected Papers, 398-417.
    74 This is the only example of $n t f$ in the Pyramid Texts, and it is in N version. It cannot be ascertained whether it is original or not.
     петстнрон єтена $\Upsilon$, Sethe, Nominalsatz, §ı45, p. 97. It appears that, pace Sethe, anok in the first phrase is the subject since arrok in the second phrase must be the predicate. See also §i23.

[^97]:    1 The determinative will just fill the lacuna after swr.
    ${ }_{2}$ The insertion of $N$ after shdhd is superfluous; the verb-form is old perfective.
    ${ }^{3}$ Fischer, $\mathcal{J} E A 59$ (1973), 224-6.
    4 See op. cit. 224, n. 8; also Faulkner, Dict. 257; Blumenthal, Untersuchungen zum ägyptischen Königtum des Mittleren Reiches, I. Die Phraseologie, 240.
    ${ }^{5}$ Fischer, loc. cit.
    ${ }^{6}$ It is interesting to note that Gardiner, Egn. Gr. 36 r , seems to have had similar misgivings about the accepted reading.

    7 Op. cit. 225, fig. 1 ; see also the very good photograph published in Erman, Die Welt am Nil, pl. 20.
    ${ }^{8}$ Cf. Griffith, Hieroglyphs, 17.
    9 See again the photograph in Erman, loc. cit.

[^98]:    I Janssen, $\mathcal{F} N E S 12$ (1953), 55. In this context, it should be noted that Janssen's earlier statement (op. cit. 54) that 'Semna shows $m$ alone' (line 9), where the equivalent Uronarti line has the full reading $s d m$, is mistaken. The supposedly missing 'ear' sign is, in fact, partially visible in Erman's photograph, loc. cit.; and its occurrence in the text has been conclusively confirmed by a rubbing of the relevant portion of the inscription which was kindly sent to me by Dr. Steffan Wenig. This rubbing clearly shows the 'ear' sign to be present. Sethe's reading (Les. 84, 5) is, thus, totally vindicated.
    ${ }^{2}$ Pyr. 249, 308, 319, 491, 500, 954, 1184; for a rare variant of this sign without the indentation in the upper side, see Pyr. 2163; also CT, v, 107b.
    ${ }^{3}$ B.M. 10477 (Papyrus of Nu), Sheet 24, line 26.
    4 Übersetzung und Kommentar zu den Altägyptischen Pyramidentexten, v, 77 ( 184 b).
    ${ }^{5}$ See Wb. v, 493, 9-11; Barta, Die altägyptische Opferliste, 72 with n. 104 for bibliography, to which may now be added Spiegel, Das Auferstehungsritual der Unas-Pyramide, 85-7 and 218-19; Altenmüller, Die Texte zum Begräbnisritual, 98-9.
    ${ }^{6}$ See Piankoff, The Pyramid of Unas, pl. 37 (249ab).
    ${ }^{7}$ According to Spiegel, loc. cit., the two different types of jar depicted in the group read as $d \xi r t$ were broken at different stages in the ritual, the larger one prior to the two smaller.

[^99]:    ${ }^{1}$ K. Mendelssohn, $\mathscr{f} E A 59$ (1973), 60.
    ${ }^{2}$ K. Mendelssohn, The Riddle of the Pyramids (London, 1974).
    ${ }^{3}$ K. Mendelssohn, Bibl. Orient. 30 (1973), 349, fig. 2.
    ${ }^{4}$ H. Rössler, Kraftwesen der Pyramiden, Technische Rundschau (Bern, 1952).

[^100]:    ${ }^{1}$ I. E. S. Edwards, The Pyramids of Egypt (London, 1972).
    ${ }^{2}$ H. Vyse and J. S. Perring, Operations carried out at the Pyramids of Gizeh (London, 1840/42).
    ${ }^{3}$ R. Lepsius, Denkmäler aus Aegypten und Aethopien, Text II (Berlin, 1849).
    ${ }^{4}$ L. Borchardt, Die Entstehung der Pyramide an der Baugeschichte der Pyramide bei Mejdum nachgewiesen (Berlin, 1928).

    5 V. Maragioglio and R. Rinaldi, L'Architettura delle Piramidi Menfite, vol. 3 (Berlin, 1964).
    ${ }^{6}$ I. E. S. Edwards, $\mathcal{f} E A 60$ (1974), $251-2$.
    ${ }^{7}$ Electromagnetic sounder experiments at the Pyramids of Giza, by N. Barakat, T. El Dessouki, H. El Hennawi, A. H. Moussa, M. F. Tolba, S. Abdel-Wahab, G. Mokhtar, A. Hassan, L. T. Dolphin Jr., R. L. Bollen, D. A. Johnson, G. N. Oetzel, J. D. Tanzi and S. O. Buckingham, Office of International Programs, National Science Foundation, Washington (1975).

[^101]:    ${ }^{1}$ fEA 23 (1937), 196-203.
    ${ }^{2}$ J. A. Knudtzon, Die El-Amarna-Tafeln (Leipzig, 1915), I, no. 147, 70-1. Most recent translation, A. L. Oppenheim, Letters from Mesopotamia (Chicago, 1967), 123-5. The same construction, but with lumdata instead of ite, is apparently to be found in the damaged context, no. 98, 25-6. Akkadian frequently uses the parallel bēl̄̃ lu idi in similar contexts; see $C A D \mathrm{I} / \mathrm{J}, 21-7$, id $\hat{u} \mathrm{I}$, entries noted 'without object'.
    ${ }^{3}$ A. M. Bakir, Egyptian Epistolography (Cairo, 1970), 17-18 and 67-8.
    ${ }^{4}$ Examples from different dates; $T C S$ 1, 370, 7; VAS 16, 127, 7; 12; Jankowska, KTK 17, 20; ARMT 11, 72, 8-9. (Abbreviations as the Chicago Assyrian Dictionary.)
    ${ }^{5}$ A. Goetze, Sumer, 14 (1958), 28-9, no. 10, 21-24.
    ${ }^{6} C A D$ I/J, 16r, a 2.
    ${ }^{7}$ Knudtzon, op. cit. II, 1426-7; also the references, A. F. Rainey, El Amarna Tablets 359-379 (AOAT 8, Neukirchen-Vluyn, 1970), 66, inṻma.
    ${ }^{8}$ For references, T. G. H. James, The Hekanakhte Papers and other Early Middle Kingdom Documents (New York, 1962), $127 . \quad 9$ Bakir, op. cit. 65.
    ${ }^{10} \mathrm{H}$. Grapow, Wie die Alten Ägypter sich anredeten, wie sie sich grüssten und wie sie miteinander sprachen, iII (Berlin, 1941), 79 and second edition (Berlin, 1960), 104-5.
    ${ }^{11}$ Bakir, op. cit. $68 . \quad 12$ Bakir, op. cit. 81, r.
    ${ }^{13}$ For $i d \hat{u}$ in hendiadys with šemû cf. CAD I/J 26a.
    ${ }^{14}$ Egn. Gr., § $137 . \quad{ }^{15}$ Egn. Gr., § 188, 3.
    ${ }^{16}$ H. J. Polotsky, Etudes de Syntaxe Copte (Cairo, 1944), 2ème Étude, §§ 19, 24, 28 end, and 30.
    ${ }_{17}$ Above n. 7, comparing the Arabic usage discussed by Polotsky, op. cit. § 24, and see A. F. L. Beeston, The Arabic Language Today (London, 1970), 56-7. For the Egyptian see Gardiner, Egn. Gr., § 184.

