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THE EGYPT EXPLORATION SOCIETY
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& \text { B. J. Kemp, Amarna Reports, I (London, } 1983 \text { ), } 57 .
\end{aligned}
$$

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## EDITORIAL FOREWORD

Recent years have seen a number of changes in the way the Society publishes the results of its excavations. In 1984, Barry Kemp initiated a series of 'Amarna Reports', utilizing computer technology and camera-ready copy to produce annually a much more detailed account of each season's work than was possible within the confines of the $\mathcal{F}$ ournal. David Jeffreys has started a similar, although occasional, Survey of Memphis series, to supplement reports appearing here. The new director of our Qaṣr Ibrîm excavations, Dr Mark Horton, is to follow suit, with the first volume of Qaṣr Ibrîm Studies projected for 1989. Final reports will, of course, appear in all cases. Coverage in the fournal will continue in a somewhat modified form. In the past, because the fournal had already gone to press when the excavation season ended, it has been the practice to include a very brief account in this Editorial and a fuller version the following year, some 18 months to 2 years after the work in question. This is obviously less than ideal. Happily, modern technology now makes it possible to produce the fuller reports immediately following a season's work. This volume contains a double report on Memphis and Saqqâra, to be followed in future years by single reports on the most recent season. This renders superfluous any notice in the Editorial.

Apart from Saqqâra and Memphis, the Society has continued its work at Qaṣr Ibrîm, Amarna, and Abydos in 1988, and the Directors report as follows:

Qaṣr Ibrîm: Work this year concentrated on archaeological survey and the study of artefacts from previous seasons; no excavation was undertaken. Field-work took place between 2 January and 27 February 1988. The members of the project were: Dr M. C. Horton (field director), Mr P. French, Dr P. Rowley-Conwy, Dr R. Bradley Thelwell, Miss P. Rose, Mrs C. M. Clark, Mrs N. K. Adams, Mr M. Vernon-Smith, Mr P. Drury, Mr M. Jones, and Mr Abdulhakin Karrar (inspector). The Society is especially grateful to the Egyptian Antiquities Organization for their continued enthusiastic and active help which enabled this season to be such a success.

Excavation on the hilltop at Ibrîm has been undertaken since 1963 and a very large amount of material and information has been amassed, but often not comprehensively recorded. The exceptionally low lake levels have now exposed structures that were not studied before the waters rose in the 1960 . The principal aim of the 1988 season was therefore to compile a detailed record of architecture, archaeology, and epigraphy. Within the town, a map of all visible remains was drawn up at a uniform scale of $1: 100$, on a newly established grid. It will now be possible to disentangle the numerous intersecting walls and features, and thus to compile phase plans that cover the whole site at given periods. As a direct result of this survey, several new conclusions were suggested.

There are at least six temples on the hilltop, of which only four were previously known; the two new discoveries were made from already excavated but misunderstood walls and stratigraphy. They span in date from the Twenty-fifth Dynasty to the X-group horizon of around ad 400 . Definitive dating will rest on future excavation. It appears that, during the

Meroitic period, the hilltop was a sacred rather than urban complex; occupation was concentrated on the periphery and terraces of the site.

Work in the Cathedral has revealed two principal building periods, with subsequent modification. In the first, the building was 2.85 m long, with its west wall parallel to the east wall. As the east wall is skewed to the axis of the building, the outer walls formed a parallelogram. The remains of an apse, smaller than the extant one and under its lower courses, belong to this earlier phase. The stairs leading into the north and south crypts partly occupy what were originally the vaulted chambers forming part of the crypts themselves. The second period involved the extension of the Cathedral westwards and the construction of two symmetrical towers. The walls of the earlier church were taken down to a height of 1.4 m and reconstructed. The present apse and screen walls forming the sacristry and baptistry belong to this reconstruction, as do the arcades.

The skewed alignment of the west wall served to connect with an important secular building to the north (which may well have been the Bishop's Residence as a large number of early Christian documents have been found there). Evidence for an ambitious architectural scheme is provided by the position of west wall of Church 2 , which is aligned with that of the primary Cathedral and the building beyond. The reconstruction of the Cathedral marked the abandonment of this scheme, since its west wall and twin towers project beyond the earlier common alignment and are set at right angles to the north and south walls of the Cathedral. As a late Christian date has been suggested for Church 2, on the basis of stratified ceramics, a date later than the twelfth century can also be inferred for the rebuilding of the Cathedral in its present form.

Epigraphic work included the planning and photography of the rock-cut footprints and graffiti in the temples and Podium floors, showing that they were mostly of Meroitic date. The well-known door-jamb of Amenhotep II was recorded and it was recognized that the cartouche had been erased and recarved during antiquity. A previously unknown rock-cut hieroglyphic dated inscription and Taharka cartouche was recorded on the mainland, outside the town.

A ground survey was also undertaken to study the numerous dry stone structures in the desert hinterland. Hitherto these had been considered as part of a 'Roman garrison village', but superficial examination showed no trace of domestic occupation, and that most of the structures were funerary. Surface pottery suggested a date spanning the Meroitic to Islamic period, but the majority of the 800 structures mapped belonged to a single period. Associated ceramics were of exceptional interest as they largely belonged to the first century $\mathrm{BC} / \mathrm{AD}$. The very high proportion of hand-made wares, bottles, and burnished jars, sometimes decorated, suggests that this material comes from a Meroitic rather than Roman context. A very early date is suggested by the presence of Roman amphorae and the absence of classic Meroitic fine wares. No direct parallels can be suggested for this assemblage, although occasional pieces are known from the cemeteries of Faras and Amir Abdullah. The Ibrîm Meroitic cemetery must be classed as unique evidence for the early Meroitic population (or repopulation) of Lower Nubia and its contacts with the Roman world.

One structure on the mainland is of particular interest because of its continual reuse in the pre-Christian and Christian periods. There are at least seven constructional phases to the building which, in origin, was a simple two-celled structure, entered from one corner, with a small wall niche in the centre of the north-east wall. This temple or shrine lacks any sense of the axial symmetry present in all Meroitic as well as Egyptian temples. It may well be a local Nubian design, perhaps an indigenous temple plan which, as far as we know, has not hitherto been recorded. But it is also interesting that the plan is similar to cult buildings found north of the Alps, since both textile and documentary evidence show that the Roman detachment stationed at Ibrîm in 23-21 bc contained men from northern Europe. If its
origin is as a Roman cult centre, built by auxiliaries, its very complex building history shows clearly that it was taken over and used by the local Nubian population.

El-'Amarna: Excavation began on 22 February and ended on 7 April. The team consisted of B. Kemp (director), Christopher Kirby, Susan Cole and Anthony Thomas (site supervisors), Ian Mathieson (resistivity survey). Michael Mallinson and Kate Spence (Small Aten Temple architects), Salvatore Garfi (Amarna Survey), Pamela Rose and Paul Nicholson (pottery), Imogen Grundon (registrar), Andrew Boyce (artist), Frances Weatherhead (painted plaster), Delwen Samuel (archaeobotany), Richard Hughes (mud brick conservation), Ann Cornwell (magazine inventory/organics registrar), Gwilym Owen (photographer), and Mahmoud el-Said Mahdi (EAO inspector and site supervisor). To Mahmoud el-Said and his colleagues at el-Minia and el-Till, and to members of the Permanent Committee in Cairo an expression of gratitude is due for much assistance, and for permission to carry out the work. A special note of appreciation is also due to Dr Ali el-Khouli for his strenuous efforts to protect the site of Kom el-Nana.

Towards the end of last season a tract of land adjacent to the site of Kom el-Nana was put under cultivation. As a precaution, the site was added to the expedition's concession. This year it was found that the land bore a crop of young wheat, and that encroachment on to the site itself was beginning. Kom el-Nana has, therefore, for the moment become the expedition's main task. Kom el-Nana is an almost square site, measuring about $250 \times 210 \mathrm{~m}$. Although for a long time identified as a Roman camp, the Society's survey expedition in 1977 (see $\mathcal{F E A} 64$ (1978), 26-33) showed it to be a large royal building of Akhenaten's time. Much later, the north-west corner area had been covered by a separate layer of debris. This was subsequently dated by pottery to the late Roman period. As the last unexcavated royal building with major stonework at Amarna, its importance cannot be stressed too much. Although much of the ground appears to be flat and featureless, in each of the locations examined this year something of significance was found, justifying an attempt at complete clearance. Unlike the other known religious buildings at Amarna, this one seems to have been filled with service buildings, thus offering a rare opportunity to study through archaeology the activities carried on within an Egyptian temple compound.

The season's work was concentrated along the threatened eastern side. One task was to expose as much as possible of the eastern enclosure wall in order to emphasize its presence as a boundary. By the end of the season about two-thirds of this length had been exposed and planned. Much of the spoil was dumped to form an embankment just outside the line of the enclosure wall, to separate the site from the new fields. The enclosure wall was provided with regularly spaced large buttresses, and on the eastern side had been interrupted by a long narrow brick pylon, set on the central axis of the whole enclosure. Along a stretch of the southern wall some of the original mud plastering of the exterior survived. This eastern portion of the site seems to have been divided into three. The central section was a large open space floored with desert gravel, its surface apparently raised slightly above the adjacent ground on north and south. A test excavation of an area measuring $5 \times 15 \mathrm{~m}$ running north-south revealed a number of small pits filled with earth for shrubs or small trees. Other tree pits were located immediately inside the line of the enclosure wall. On the north, this part of the site was bounded by a wall running westwards from the enclosure wall. In the corner so formed, on the south side, a garden of small square plots of soil was laid out.

The southern section contains several low mounds indicating the presence of groups of buildings. The easternmost, lying against the southern enclosure wall, was almost completely excavated. It runs up to the edge of a wadi which has cut away the south-east corner of Kom el-Nana. The mound conceals a group of Amarna Period buildings, with thick, well-constructed walls, brick floors, limestone column bases, and thresholds. They
have the appearance of a row of similarly designed 'houses' (with narrow front hall, columned main room, and two adjacent chambers at the rear) opening from a common corridor, which itself opens westwards to an open, mud-floored area. The term 'house' may, however, be a misnomer, for evidence suggested that the most southerly, of somewhat larger size, had been used as a workshop for making painted and gilded wooden objects. This whole block was an addition to the original construction, built on a low platform covering an earlier mud floor.

In the northern section the ground is flat and featureless, but probably, none the less, covers an extensive area of Amarna Period walls. This year's excavations have sampled the north-west, north-east, and south-east corners. In the first, a sample row of 5 -metre squares have located the enclosure wall, and a block of service buildings lying inside, apparently of a type found previously in the Central City: a series of long parallel chambers with ovens and/or kilns set along the rear wall. In contrast to the Central City bakeries (as determined by last year's pottery survey) bread-moulds form only part of a more varied pottery repertoire which includes, for example, many meat jars, suggesting the production of a range of commodities.

The north-east corner of the enclosure, although denuded to its foundations, was identified, revealing the arrangement of the towers or buttresses at the corner. The south-east sample arose from the excavation of part of the east-west dividing wall which runs out from the eastern enclosure wall. On its north side the ground contains single foundation courses of walls which seem to have been destroyed during the lifetime of the building.

In the centre of this northern section lies a large circular depression, of the kind which often signifies the presence of a large well. A cutting made across its western side revealed that, following the collapse (after the abandonment of the site) of the revetment which must have been built to hold back the'soft substrata, the hole was filled first with wind-blown sand and erosion debris, and then by dark earth containing a mixture of Eighteenth Dynasty and Roman pottery. The slope of the natural substrata suggests that the aperture of the well was smaller than in most of the two-stage Amarna wells, but in view of the soft nature of the sediments and of the relatively high water-table it will probably not be possible to find out much more about it. The top stratum had been formed by digging into the ground and spreading the soil, perhaps in an attempt to fill the well depression in Roman times.

Throughout the excavations, and from all sectors, Old Kingdom sherds formed a small but regular element amongst the excavated pottery. Kom el-Nana lies across the line of the ancient road to the Hatnub alabaster quarries, and it is likely that the sherds derive from one of the groups of huts which were erected beside the road at intervals.

In the small Aten temple, the programme of reclearance and replanning begun last year was continued. The ground around the base of the northern pylon was entirely cleared, and a study of the pylon completed. Particular attention was paid to the method of construction, which extensively used wooden tie beams in the lower courses. The front wall south of the south pylon was also examined. A surprise discovery was a substantial brick wall running westwards from the south-west corner of the temple enclosure, thus out across the Royal Road. It is still not known how far it extended, but it may represent an outer court which, at one time, actually blocked or terminated the Royal Road. At the very end of the season traces were found in front of the northern pylon suggestive of small altars or bases. A fresh plan was made of the so-called 'Priests' House' in front of the southern tower of the second pylon. This includes possible locations for column bases within the main front room and outer walls hitherto not suspected. The removal of Pendlebury's dumps, which occupy much of the interior, was begun, to allow a better appreciation by visitors of the layout. The dumps are yielding a steady supply of small carved stone architectural fragments.

To make the temple more stable, and also more intelligible to visitors, some limited consolidation and restoration was undertaken. The base of the Great Altar in the forecourt was rebuilt with new mud bricks, faced with plaster and white gypsum, and the same was done to a sample of the adjacent small altars. The interior of the Great Altar was then filled with crushed alabaster. Some experimental repair was also carried out on the northern pylon, replacing the lost timber ties with new ones, and building up with new mud bricks the pylon base.

Abydos: The Society's Abydos expedition spent a month in March-April 1988 working in the Hall of Barques in the temple of Sethos I. The team consisted of John Baines (director and epigraphy), Christopher Eyre (epigraphy and photography), and Richard Jaeschke (conservator). The Egyptian Antiquities Organization was represented by Hamdy Ahmed Abdel-Gelil. We are most grateful to him and to other officials of the Antiquities Organization for assistance of every kind, especially to Mutawwa Balboush in Cairo, Yahya el-Masri in Sohag, and Ahmed el-Khatib in el-Balyana. We should also like to thank George Drennan and Lilley Misr for the generous loan of scaffolding, and Amanda Pike for much help in Cairo. Once again, we are indebted to the Pennsylvania-Yale expedition to Abydos for accommodating us, and especially to David O'Connor and Janet Richards.

The expedition completed the record of the painted areas of the Hall of Barques and conserved and re-recorded a badly stained wall. The four columns of inscription and four scenes on each of the six columns were copied and the decoration of the architraves recorded together with samples of the base and top patterns. Although this decoration is almost invisible to the naked eye and cannot be conventionally photographed, it was possible to recover the essential of its content. The conservation work led to a very great improvement in the visibility of an important painting and vindicated the assumption that much would be preserved beneath the layers of dirt from medieval habitation. The most important results come from close examination of decaying paintings and reliefs that were being executed on the basis of the paintings when work stopped in antiquity. Many traces of preparatory compositional grids have been recovered, as has evidence for the stages of painting and their order, including corrections and adjustments to drafts. The completed paintings were of the finest quality. There are few opportunities for studying how paintings in temples were created, and the material in the Hall of Barques is almost unique in this respect.

Elsewhere in the southern extension of the temple, existing copies were checked and records made of problematic details, and parts of the photographic archive from earlier field-work were compared with the reliefs. The recording for Volume V of The Temple of Sethos I at Abydos is now finished except for final checking.

We have, as so often, to lament the passing of a number of colleagues. John Callender, Professor at the University of California at Los Angeles, was prominent among those seeking to relate ancient Egyptian to modern linguistic theory, and will be remembered for his Middle Egyptian (1975) and Studies in the Nominal Sentence in Egyptian and Coptic (1984). Robert Hari, Professor at Geneva, contributed significantly to our knowledge of the late Eighteenth Dynasty, in works from Horemheb et la reine Moutnedjemet (1964) to New Kingdom Amarna Period (1985). Winifred Needler was for many years Curator at the Royal Ontario Museum, Toronto, and recently produced a valuable addition to studies of early Egyptian civilization, Predynastic and Archaic Egypt in the Brooklyn Museum (i984). Dr Caroline Peck was formerly a Teaching Associate at Brown University, where she
produced a dissertation entitled 'Some Decorated Tombs of the First Intermediate Period at Naga el-Dêr' (1958), which was unfortunately never properly published. The work of these scholars is a reminder of the tremendous scope of Egyptologists' interests, and all will be sadly missed.

It is no discourtesy to the foregoing to assert that the greatest loss of the year has been that of Professor Georges Posener, one of the most distinguished Egyptologists of this century, who died in Paris on 16 May at the age of 81. His name will always evoke Deir el-Medina, hieratic, and literary texts. He made an immense contribution to our understanding of all of these, but his first major publication, La première domination perse en Egypte (1936), was on a quite different subject, and gave promise of the catholicity of interest which was to characterize his research. Among the most influential of his books, Princes et pays d'Asie et de Nubie (1940), Littérature et politique dans l'Egypte de la XIIe dynastie (1956), and De la divinité du pharaon (1960) are all physically slight, but endlessly stimulating works, which have stood the test of time. It was entirely appropriate that Georges Posener's academic swan-song should have been a fascinatingly fragmentary literary text, Le papyrus Vandier (1985). He was uniquely equipped for its challenges, which he addressed with a light yet irreplaceably magisterial hand.

It is a pleasure to conclude this editorial on a happier note in congratulating Mr T. G. H. James, a distinguished former editor of this fournal (1960-70), on his retirement in May 1988 from the Keepership of Egyptian Antiquities at the British Museum. Ever since he joined the Museum in i95i, his connection with the Egypt Exploration Society has been a close one. He recorded and published for the Society's Archaeological Survey The Mastaba of Khentika called Ikhekhi (i953, with M. R. Apted) and Gebel es-Silsilah I (i963, with R. A. Caminos). The epigraphic skills thus acquired were put to use in the British Museum's service in Hieroglyphic Textsfrom Egyptian Stelae . . I I (1961) and IX (i970). His scholarly reputation rests above all on the remarkable The Hekanakhte Papers (i962), but he has somehow found the time to produce numerous works for a wider audience, of which Ancient Egypt: The Land and Its Legacy (1988) is only the most recent.

His appointment as Keeper in 1974 was followed by the recruitment of a younger generation of able scholars and under his benign aegis the publication of the museum's collection has proceeded apace. Harry James has ever had the needs of both the general and the scholarly public at heart. Egyptologists from all over the world have appreciated the warm personal welcome accorded them on visits to the British Museum, and younger scholars have always experienced particular encouragement. The most visible achievement of his tenure has undoubtedly been the opening of the most effectively redesigned Egyptian Sculpture Gallery in 1981. This was followed by the appearance of a new, informative, and superbly illustrated series of introductions to aspects of Egyptology, based on the museum collection, to which he has himself contributed Egyptian Painting (1985) and, with W. V. Davies, Egyptian Sculpture (1983). We wish him many happy years of fruitful and rewarding retirement. It is good to be able to report that Mr James, who has given sterling
service to the Egypt Exploration Society over many years, will continue as the Society's Chairman.

The British Museum occupies a crucial position in Egyptology in this country, especially in the light of the uncertainty presently surrounding small departments in our universities. It is therefore gratifying to record that a new Keeper has been appointed without delay. He is Mr W. V. Davies, formerly Deputy Keeper, whose scholarship and commitment to the collection now in his charge is exemplified in $A$ Royal Statue Reattributed (1981), The Statuette of Queen Tetisheri (1984), and volume VII in the Museum's Catalogue of Egyptian Antiquities, Tools and Weapons I: Axes (1987). His energy, vision, and diplomacy augur well for the future and we wish him well in the tasks ahead.

# THE TOMB OF MAYA AND MERYT: PRELIMINARY REPORT ON THE SAQQÂRA EXCAVATIONS, 1987-8 

By GEOFFREY T. MARTIN, MAARTEN J. RAVEN, BARBARA GREENE ASTON, and JACOBUS VAN DIJK


#### Abstract

During two seasons of work the EES-Leiden expedition excavated the tomb of Maya and Meryt. It is similar to the neighbouring tomb of Horemheb, except that the outer court is not furnished with a complete peristyle. The reveals of the pylon are decorated with reliefs to a height of 3.33 m , including scenes with Maya adoring Osiris, offering bearers, and an autobiographical text. The main courtyard appears to be unfinished. More reliefs were found in the inner court and on the reveals of the entrances to the cult chapel and flanking chapels. Some of these were recorded by Lepsius during his 1843 expedition, but some have since disappeared.

The substructure is on two levels. The upper was reused for late burials, but the lower is exclusively the burial complex of Maya and his wife. Three finely decorated rooms survive here, though much was pulled down or smashed by ancient plunderers. New light is thrown on the mortuary cult of the tomb owners, and among the surviving textual material is a new hymn to Osiris. Many objects and enormous quantities of closely contexted pottery, some with hieratic dockets, were recovered. The skeletal remains will be examined in a forthcoming season.


The following report covers two seasons of excavations. In 1987 the joint EES-Leiden mission concentrated its efforts on the superstructure of the tomb of Maya, which was cleared, apart from the extreme eastern end of the outer court, the pylon entrance, and the forecourt. These latter architectural elements received our attention in 1988, when the entire substructure, which is on two levels, was also fully excavated, revealing many unique features.

The 1987 season lasted from 6 January to 19 March, and the staff consisted of G. T. Martin (Field Director and Epigraphist), K. J. Frazer (Surveyor), R. S. Walker (Physical Anthropologist), B. A. Greene (Pottery Recorder), and J. C. Harvey (Field Assistant). The Leiden team comprised M. J. Raven (Site Supervisor and Objects Recorder), J. van Dijk (Philologist), P-J. Bomhof (Photographer), and I. Blom (Field Assistant). The Egyptian Antiquities Organization representative was Amal Samwel. In 1988 the field-work lasted from 6 January to 23 March. Messrs Martin, Frazer, Raven, van Dijk, and Bomhof participated, as well as Miss Greene (Mrs B. G. Aston) and Miss Harvey. In addition, D. A. Aston (Pottery Recorder) joined us for the first part of the season. The Antiquities Organization on this occasion was represented by Fawzy Abdel-Halim Omer, assisted by Ahmed Mohammed Abdel-Al. As always we worked in close collaboration with our Egyptian colleagues, and particularly wish to thank Dr Holeil Ghaly and Dr Abdel-Fatah Sabbahy, as well as our ever-understanding and helpful friends in the Abbasiya offices of the Egyptian Antiquities Organization.

Fig. i. Plan of superstructure, Tomb of Maya and Meryt

The excavations, 1987 (M. J. Raven)

In February 1986 the mission finally succeeded in locating the tomb of Maya, and thereby attained the objective that initiated the present Anglo-Dutch collaboration in the Saqqâra necropolis twelve years earlier. ${ }^{1}$ While clearing the substructure of the tomb of Ramose, a robbers' breakthrough from the tomb-chamber of a subsidiary shaft quite unexpectedly allowed access to the underground parts of Maya's tomb. This was identifiable as such by the presence of a limestone revetment with remarkably well-preserved relief scenes and inscriptions. The proper entrance to this subterranean complex, a large vertical shaft, could be observed from below. On io January 1987, work was started on the surface of the desert immediately above the spot where we expected to find the aperture of Maya's shaft. By the beginning of March the major part of the superstructure of the monument had been exposed.

The tomb proved to be located to the north of, and adjacent to, the monuments of Tia and Ramose. It consists of an outer courtyard, a statue chamber flanked by chapels, and a second court terminating in three cult chapels (fig. i, pl. I, i), a plan already familiar from the tomb of Horemheb. ${ }^{2}$ Pavement level of the second court, in which the shaft is situated, proved to be about 1 m below that of the neighbouring monument of Tia and Tia, though slightly (about 15 cm ) above Horemheb's pavements. This makes sense when one considers the contemporaneity of the monuments of Horemheb and Maya.

In the centre of the court the limestone paving was found to be interrupted by the covering slabs of a large shaft, the one seen from below in 1986. The walls surrounding the courtyard, built in mud brick with a revetment of limestone, are the structures seen by Lepsius in $1843 .^{3}$ This became apparent (though we had already anticipated it) when we exposed the double statue of Maya and Meryt found by the Prussian expedition but discarded because of its damaged condition. After Lepsius' drawing was made, ${ }^{4}$ it had been pushed over from its base against the south wall of the courtyard, doubtless in order to dismantle the reliefs of this wall which were partly taken to Berlin. ${ }^{5}$ The statue still lay as it had fallen, with several broken fragments scattered around, including the head of the figure of Meryt. The discovery of several reliefs already recorded by Lepsius' draughtsman, and others not seen (or at least not drawn) by him, corroborated the identification of the structures found.

During the next stage work was extended westwards, where three chapels were uncovered, and eastwards in order to clear the proper entrance to the inner court. The gateway proved to be much damaged since Lepsius last saw it, yet enough was left to attempt a partial restoration of the doorway and jambs. Further to the east we came to those parts of the tomb not seen by Lepsius, since they were in his day still covered by sand and debris: in the first place a much ruined hall, obviously a statue

[^0]chamber much like Horemheb's in view of the remains of statue bases in the western corners. The walls, and perhaps the now disappeared barrel vault as well, were once covered with designs painted on mud plaster. This statue chamber is flanked by two long narrow rooms with rammed mud floors, with stela emplacements, as if they had the function of cult chapels. Only the southern stela was found, completely undecorated and uninscribed.

In front of these rooms the expedition discovered the denuded remains of the outer courtyard, some 4 m wider than the rest of the tomb, as a result of an outward extension of both the north and south exterior walls. The limestone paving was restricted to a narrow terrace along the west side, supporting a portico of six columns, of which nothing remains in situ except five of the bases. However, the entablature of this feature is perhaps represented by some architectural blocks found at pavement level, namely a number of cornice elements, and a roofing slab inscribed on its narrow frontal edge with part of a king-list. The latter, though, is not certainly from the tomb of Maya. The entrance to the statue chamber was once flanked by two statues, of which one base survives, and two stelae (one base, and fragments of the second stela, were found). Otherwise, the outer court was open to the sky and floored in hard mud, with a low central ramp leading to the entrance of the statue chamber. The walls of the court once had a limestone revetment, of which only some loose blocks were found. It is possible that the decoration of this outer courtyard was never carried out.

## History of the tomb

The pavement was found buried under an accumulation of debris to a height of over 3 m . The much disturbed stratigraphy of the latter testified to the eventful history of the monument, which had obviously been partly cleared several times, only to be reburied under dumps. More evidence on the various stages of exploration and exploitation is derived from the state of the tomb itself, the objects found in the strata covering it, and the additional data from museums and documents. The following notes furnish some preliminary conclusions on the history of Maya's monument.

The expedition has found evidence that building material for the tomb was procured on the spot. The double statue of the tomb owner and his wife in the inner court was carved from an Old Kingdom block still showing an offering scene in relief on its under-surface. Several pavement slabs in the statue chamber and first court likewise have Old Kingdom relief scenes on their lateral edges and saw-marks on the under surfaces. Other materials, however, were manufactured specifically for the occasion, as is testified by mud-bricks stamped with Maya's name and titles, found in the north wall of the south chapel flanking the statue room.

Several details, such as the mud floor and the lack of a peristyle in the first court, and the unworked stela mentioned above, suggest either that the tomb was unfinished at Maya's death or that the architect modified the plan while work was in progress. Apparently Maya had no male offspring to provide for his funeral; the
tomb reliefs show his brothers officiating as funerary priests, and the only scene found in 1987 possibly involving children of the deceased ${ }^{6}$ concerns two girls, one of them named Mayamenti.

An inspection of the subterranean parts of the tomb in 1986 made it clear that the tomb had been plundered. This is also demonstrated by the fact that part of the covering slabs of the main shaft are now missing. On the other hand, the resultant gap had been closed again by fitting in an architrave and a cavetto cornice. This suggested that the shaft had been reused for later burials at a point when the superstructure of the tomb was already in ruin. Remains of such secondary burials were in fact noted underground during the 1986 season, but only in the upper level of the substructure.

As far as the superstructure is concerned, a graffito mentioning a scribe, Djedptahefankh, incised on the south wall of the entrance to the second court, proves that part of the tomb remained accessible for a considerable span of time. This is also suggested by the design of human feet or footprints, incised on the north statue base in the outer court, indicating too that the statue itself had already been removed by the Christian period. In the chapel on the south side of the statue room the expedition found the much decayed remains of painted wooden coffins and cartonnages, as well as several disturbed skeletons. It is hard to tell if these remains represent more intrusive burials or a robbers' dump. The few objects from this context are difficult to date precisely, but include some New Kingdom material, notably a shabti of a scribe, Hapyaa.

During the Late Period the monument was apparently covered by sand and forgotten. Additional tomb shafts were sunk in various places in the superstructure, their apertures usually at a level of 1.5 to 3 m above paving level. A stela found during the work and belonging to a certain Petosiris, son of Padineith, datable to the end of the sixth century Bc, ${ }^{7}$ may have been connected with one of these shafts. A demotic papyrus and several dockets in the same script likewise indicate Late Period activity in the tomb, though the papyrus could have blown in from elsewhere.

Later, part of the tomb was cleared again, mainly to serve as a quarry for the extraction of building stone. This stage is clearly dated between the fifth and ninth centuries ad by the recovery of several relief blocks inscribed for Maya in the nearby monastery of Apa Jeremias, during the excavations of Quibell between 1908 and 1910, and now in the Cairo Museum. ${ }^{8}$ Coptic monks probably inhabited the tomb as well, as is suggested by the remains of mud-brick walls partly blocking the entrance to the chapels flanking the statue chamber. The south chapel had a well-finished doorway, with a Maya relief block serving as the sill, founded on clean sand about 70 cm above pavement level. The north chapel flanking the statue chamber had a

[^1]similar cross-wall, as well as an entrance with a stairway and a niche cut in the north wall. No rubbish dumps were connected with these domestic areas, as was the case in the tomb of Horemheb, though isolated finds, such as a bronze cross and an ostracon, betray a Coptic date.

After the Christian period the tomb was again forgotten until its rediscovery by antiquities hunters a millennium later. The first episode seems to have been the removal of the three statues now in Leiden. ${ }^{9}$ These may have stood on the bases inside and in front of the statue chamber, though this point needs further study. About fifteen years later, in 1843, the Lepsius' expedition arrived on the spot. Evidence of their activity, so well documented by the Denkmäler, may be seen in the prostrate position of the dyad mentioned above. A semicircular drystone wall built across the entrance to this court was no doubt intended to keep out the sand during sketching and dismantling, the rough construction representing the eastern edge of the area surveyed by Lepsius.

Though Lepsius himself did not take more than a few relief blocks from the inner court, he signals in his report ${ }^{10}$ that others did much harm to the tomb even before the departure of the Prussian expedition. This accords with the present state of the monument. Thus, the sole remaining column had been toppled over, and the upper part of the south wall of the inner court, not taken to Berlin, is now missing. Considerable parts of other walls have also gone, some fragments now being in museum collections. ${ }^{11}$ Other blocks were dismantled but never carted away. These were restored by the present expedition to their original position. The end of this period of vandalism cannot be dated precisely, but before the end of the nineteenth century the tomb must once more have disappeared under the sand.

## The excavations, 1988 (G. T. Martin)

The expedition had two main objectives in 1988: to complete the excavation of the superstructure by exposing the pylon and forecourt, and to investigate the substructure. Both have yielded information and material of considerable historical, artistic, and architectural interest.

The forecourt (55.81 ASL) is of hard mud. A number of later tomb shafts is located here, and these will have to be dealt with in a future season. The pylon itself is of mud brick, but unlike the similar feature in the tomb of Horemheb it was not cased with limestone externally. The entrance, between the two wings of the pylon, survives to its true height of 3.33 m . The reveals of the entrance, superbly decorated, are preserved to this height, though some blocks are lacking. The eastern side of the great courtyard was also exposed this season. Among a number of finds here was an intact burial, probably of Twenty-first Dynasty date, lying at pavement level, parallel to, and against, the south wing of the pylon. The shabtis associated with this

[^2]

Fig. 2. Plan of substructure, upper level
burial are illustrated in pl. III, 3, and it will be noted that their inscriptions are garbled. The length of the main court as now revealed is 14.85 m , east to west.

Much interesting light was thrown on the funerary cult of the deceased this season. A round-topped niche cut into the south wall of the superstructure of the tomb was found to contain a stela of a lector priest of Maya, in perfect condition. In front of it was a libation table, on which was a small wooden statuette of a man. Some


Fig. 3. Plan of substructure, lower level
plant remains found in the same area may represent the last bouquet laid on the altar before the final abandonment of the mortuary cult of Maya and Meryt. Opposite, in the north wall of the tomb of Ramose, was found a similar niche and stela, relating to the mortuary cult of that officer. The likelihood is, therefore, that such emplacements and stelae were a regular external architectural feature of the tombs of great officials of the late Eighteenth Dynasty in the Memphite necropolis.

The underground rooms (figs. 2 and 3) are on two levels: the upper at 10 m below pavement level. In the lower level Room H is 21.40 m and Room R 21.92 m below the pavement. In addition to the usual debris, the upper level contained numerous scattered bones from intrusive burials of the Late Period, some in loculi. In the lower level, the burial complex of the tomb owners, there is one large undecorated room ( R ) and three with relief decoration ( $\mathrm{H}, \mathrm{K}$, and $\mathrm{O}, \mathrm{pl} . \mathrm{I}, 2$ ), as well as associated store-rooms for funerary equipment. Numerous fragments of the latter were found, aside from the pottery, which will be dealt with below. The burials were very rich, as might be expected from the status of the owners, but everything had been wrecked by the plunderers. It must be assumed that the coffins were of wood,
now utterly decayed in the prevailing humidity; no stone fragments from sarcophagi were located. Pieces of gold chain, gold leaf, inlays in various materials, including ivory and faience, elements perhaps from pieces of furniture (pl. III, 4), alabaster jars, and a shabti fragment attest to the original contents. Much of this has been recorded and studied, though more can be done in the future, particularly with the tantalizing fragments of inlays.

Fragments of skeletons, doubtless those of Maya and his wife, were found in the debris of certain rooms. These were carefully collected and set aside for detailed study in 1989. The skeletal material comes from Room G (a minute piece) and Rooms H to K, M, N, Q, and R. The bones in the latter could possibly represent a third individual (a relative of Maya?).

The pottery, 1987-8 (Barbara G. Aston)
The pottery recovered from the fill of the courts and chapels demonstrates clearly the extent to which this surface fill has been turned over. Coptic, Late Period, New Kingdom, and a small amount of Old Kingdom pottery was intermixed throughout, with Coptic sherds occurring down to pavement level. A sherd from the surface debris over the western chapels was found to joint one from the surface debris of the tomb of Ramose, excavated in 1986. Nevertheless three concentrations of New Kingdom pottery were recorded in 1987: from the floor of the outer court, in a deposit over the central chapel, and in the adjacent south chapel.

The New Kingdom pottery on the floor of the outer court consisted primarily of funnel-necked jars, 'beer jars', and plates of Nile silt, an assemblage associated with the presentation of offerings for the funerary cult. ${ }^{12}$ The deposit over the central chapel, however, comprised a dark layer of bones, pottery, and rubble, indicating that it had been thrown out from one of the tomb shafts and thus represented a burial assemblage. The pottery included a higher proportion of marl clay amphorae, and a type of large, silt storage jar not present in the courtyard group. The pottery from the south chapel (C) was not a closed deposit of uniform date, but the New Kingdom pottery included both presentation and storage vessels.

From the surface debris over 100 new shapes and wares were added to the pottery corpus for the New Kingdom necropolis, including the first example of burnished, blue-painted on pink ware. Other interesting finds of New Kingdom date were five fragments of Mycenaean stirrup jars, a juglet base of Cypriote Base Ring Ware, and a hieratic docket on the shoulder of a marl clay amphora identifying the contents as $i r p$ $n d m$, 'sweet wine'. Of Late Period date were sherds of two Chiote amphorae, a body sherd of Attic Black Figure Ware, and a hieratic docket reading ts phrt wty, 'the material of embalming', ${ }^{13}$ from a rim sherd of a red-slipped, burnished bowl. A particularly interesting find comprised body and rim sherds of a 'streaked' ware

[^3]found on Greek 'SOS' amphorae, used for exporting oil, and manufactured in Athens from the late eighth to the first half of the sixth century BC. ${ }^{14}$ Although the Saqqâra find was from surface debris and has no dated context, Petrie found pieces of two 'SOS' amphorae at Tell Defenneh ${ }^{15}$ which could be dated to Dynasty XXVI. Finally, from the Coptic Period, were found four bowl rims of Cypriote Red Slip Ware, and fourteen dockets in cursive Greek from ribbed, marl-clay amphorae of the Abu Mena type. ${ }^{16}$

In i988 a large quantity of contemporary pottery was recovered from the tomb of Maya, from both above and below ground. Although the underground chambers of the upper level of the main shaft had been reused for Late Period burials, with the introduction of associated pottery, the chambers in the lower level contained exclusively New Kingdom pottery, undoubtedly part of the original burial equipment of Maya and Meryt. This pottery remains to be studied in detail. However, among the outstanding blue-painted vessels may be mentioned two fluted goblets, a set of four spouted $n m s t$-vases, and a set of four $h s$-vases (the vessels in each set have nearly identical decoration), two delicate thin-walled bowls with lotus designs painted on the interiors, and three lids painted blue on the convex exterior surfaces. Also present amongst the pottery of the lower level of rooms was a large number of hieratic dockets from the shoulders of small marl-clay vessels indicating the contents (see the report on the inscriptions below). Particularly worthy of note, because of their occurrence in this closely dated context, were fragments of two Mycenaean stirrup jars.

The contents of these underground chambers (lower level) had been disturbed to the extent that sherds from a single vessel were found in seven different rooms. However, in side room L eleven large storage jars remained in situ. The tops of the jars had been broken off, but the bases still contained part of the original contents-a light brown powder, still to be analysed but possibly flour.

During the clearing of the superstructure of the tomb, four concentrations of New Kingdom pottery were discovered: in a deposit over the rear of Chapel D, inside Chapel C, on the floor of the outer court, and just east of the pylon. The latter two constitute a large mass preserved underneath the collapsed pylon. The portion of the courtyard pottery studied in 1987 consisted primarily of funnel-necked jars, 'beer jars', and plates of Nile silt, as has been noted above. This was an assemblage associated with the presentation of offerings for the funerary cult. A join between sherds from a location east of the pylon and from Chapel E emphasizes that these deposits represent pottery accumulated within the superstructure of the tomb for cult purposes. The deposit over Chapel D (see above) was a burial assemblage.

[^4]During the 1988 season joins were found between this surface deposit and pottery from Chamber A below ground, thus establishing that it had been thrown out from the main shaft of Maya's tomb.

Between the tomb of Maya and that of Tia and Tia to the south, a New Kingdom embalmers' cache was uncovered, consisting primarily of marl clay amphorae and large storage jars, filled with natron and sealed with plaster. Since the top of the cache was over 1 m higher than pavement level in Maya's tomb, but just below the level of the base of the Tia pylon, the cache is probably to be associated with the tomb of 'Tia rather than with Maya. Four other embalmers' caches came to light around the periphery of the tomb, all dating to the Late Period. The largest cache contained 155 vessels surrounded by chaff and natron and covered with matting, while the other three caches consisted of 17,9 , and 8 vessels respectively.

## Inscriptions, 1987 -8 (J. van Dijk)

During the 1987 season work was concentrated in the area which was at least partly seen by Lepsius in the 1840 , and few additional texts beyond those already recorded by him were discovered. Apart from some excerpts from the Book of the Dead on the south wall of the inner courtyard the most important find was a number of fragments, both large and small, of the lower part of a large limestone stela, doubtless originally set up against the west wall of the outer courtyard, between the Statue Room and the South Chapel (A) adjacent. The fragments constitute at least six incomplete lines of a Litany to the nocturnal Sun-god, otherwise known only from Ramesside and later sources. ${ }^{17}$

Inscribed material was particularly plentiful in the 1988 season. Work above ground revealed a collapsed but nearly complete pylon gateway decorated for the most part in raised relief. On the south reveal, Maya is greeted by his wife Meryt and his stepmother Henutiunu. Maya's neck and shoulders are loaded with an unusually large number of gold collars, and in his right hand he holds the fan (partly destroyed) belonging to one of his offices, 'fanbearer on the right of the King'. Behind Maya, but depicted on a very much smaller scale, stands his brother Nahuher. In front of each of the two ladies, who adore Maya with both their hands raised, are short texts recording their speeches. The one in front of Meryt reads: 'Welcome, you who are adorned with the favours of Ptah South-of-his-Wall! How well you deserve them, O praised one who comes forth in front of the praised ones, for you remain Leader of the Festival of the Lord of the Gods! So says his beloved wife, the lady Meryt, justified.' Henutiunu's speech was similar in style, but here the text is much destroyed. Above the three main figures in this relief, and continuing behind the figure of Maya, is an inscription originally consisting of thirty-one columns. At least one large block containing about one-third of the text is now missing, although there is some hope that it will turn up when the area in front of the pylon is further

[^5]excavated. In addition to this, a number of smaller lacunae occur both in the first part and near the end of the text. The inscription starts with an enumeration of Maya's principal titles, and then continues with an autobiographical account of his career, addressed 'to the people who come and wish to divert themselves in the West and to have a walk in the District of Eternity' (cols. 5-6). After a lacuna the text mentions ' $[. .$.$] the governance which came into being through me, as something that$ was ordained for me by my God since my youth, the presence of the King having been granted to me since I was a child. I happily reached the end (sc. of my career) enjoying countless favours of the Lord of the Two Lands' (cols. 14-18). Nowhere in the preserved parts of the text is any royal name mentioned, but since it is well known that Maya was already in office under Tutankhamun, it is tempting to assume that these perhaps deliberately vague lines refer to the beginning of his career under Akhenaten ${ }^{18}$ or perhaps even under Amenhotep III. The end of the inscription is concerned with Maya's religious duties, doubtless in connection with the restoration of the traditional cults after the fall of Amarna: '[. . .] In the beginning I was good, in the end I was brilliant, one who was revered in peace in the temple of Ptah. I carried out the plans of the King of my time without neglecting anything he had commanded. [. . . I made splendid(?)] the temples, fashioning the images of the gods ${ }^{19}$ for whom I was responsible. I entered face to face to the August Image; it was the Eldest Son who [. . .].' ${ }^{20}$

Below the scene just described is a sub-register showing a procession of nine shaven-headed men holding small portable tables. Most of these support various types of gold collars, but on two of them several pairs of gloves are depicted. Doubtless this sub-register is to be associated with the main scene showing Maya wearing similar collars, and these, as well as the gloves, represent gifts bestowed on him by the King. ${ }^{21}$ The procession is accompanied by 'the scribe 'Iny', who is already known from one of the reused blocks found by Quibell in the nearby Monastery of Apa Jeremias. ${ }^{22}$

The opposite north reveal of the pylon entrance shows Maya and Meryt adoring Osiris (pl. III, i), who is seated under a baldachin. Before the god the Four Sons of Horus are depicted on a lotus. A short text enumerates names and epithets of Osiris, taken from traditional Osiris hymns: 'Osiris Onnophris, the great god, ruler of

[^6]eternity, lord of splendour in the womb of Nut, high of plumes, sharp of horns, the beloved one who comes forth from the henw-barque, lord of eternity, ruler of the Silent Land, whose son Horus is established upon his throne, being united with joy, beautiful Osiris of gold.' Among a large deposit of contemporary pottery in front of the south wing of the pylon, the expedition found fragments of a pot inscribed on its exterior in black ink with an exact duplicate of this text. The pot originally contained yellow paint, and the inscription written on it was almost certainly the master-copy used by the artist who carved the text on the wall. In the sub-register a heap of offerings and nine offering-bearers are depicted, bringing in various kinds of fruits, vegetables, and animals. ${ }^{23}$ Ceiling blocks, a lintel, and several blocks from the doorjambs (pl. II, r-2) complete the pylon gateway. The jambs are inscribed with funerary wishes and short hymns to Osiris and Re-Atum, as well as titles of Maya, the most interesting of which is 'Overseer of the Secret of the House of Gold in the Temples of all the Gods'.

The underground part of the tomb contains a number of rooms, three of which have a limestone revetment decorated in sunk relief. Texts and figures have been painted yellow, with a few details picked out in black and blue. Each of these three rooms has a small undecorated annexe. It is noticeable that all of the doorways in this part of the substructure, those between the rooms and corridors connecting them, as well as those between the decorated rooms and their undecorated side-chambers, were originally closed off by limestone slabs. The latter sometimes carried a decoration continuing from the adjacent walls, as if to disguise the entrance behind it. More often they were supplied with scenes of their own, usually on a somewhat smaller scale than the scenes on the surrounding walls. Although the decoration of the undergound chambers is virtually complete, robbers in antiquity pulled down or smashed many of the reliefs in the search for further doorways, and scattered them all over the rooms and corridors. It has been possible to re-assign all these fragments, at least on paper, to their original position, and to make hand-copies of most of the texts. A proper restoration and detailed study of the scenes and texts is postponed until 1989, and we will therefore confine ourselves to a few preliminary remarks here.

Most of the decoration consists of scenes showing Maya and Meryt adoring Osiris and several other deities related to him (Geb, Nut, Isis, Nephthys, Wepwawet, Anubis, Sokar). In fact it is remarkable that there is no depiction of, and hardly any reference to, the Sun-god, despite the yellow (= golden) solar colour of all the figures, the only exception being a short hymn to 'Osiris-Atum-Re-HarakhtyOnnophris', inscribed in front of a seated figure of Osiris on one of the doorway slabs. Another interesting feature is that the two innermost decorated rooms are virtually duplicates of one another. The only vignette from the Book of the Dead occurring on these walls is even depicted twice, occupying exactly the same location in each of these two rooms. This vignette ( $\mathrm{BD}_{\mathrm{I}_{5}} \mathrm{~A}$ ) shows the Four Sons of Horus

[^7]and the mummy of the deceased resting on a funerary bed, being attended by Anubis. In both cases the mummy is identified as 'the Osiris, the royal scribe and overseer of the treasury Maya'. In the second decorated room one of the walls is entirely occupied by a long text in thirteen columns, containing a hymn to Osiris which appears to be unknown from other sources, and which mentions among many other interesting things, the 'brazier of Horus imy-šnwt', ${ }^{24}$ upon which the enemies of Osiris are destroyed.

Finally, a considerable amount of textual material has been found on objects from the underground parts of the tomb, notably in the form of hieratic dockets on pottery. ${ }^{25}$ About forty dockets have been found so far, many of them incomplete, but further fragments will undoubtedly come to light when the enormous quantities of pottery from the tomb are studied in detail next season. Most of the texts are very similar in content, and it is often easy to supply from one docket what is missing from another. A typical example reads: 'Honey for the funeral procession ( $\check{s} m s-w \underline{d}\}$ ) of the Osiris, ${ }^{26}$ the royal scribe and overseer of the Treasury Maya'. Apart from honey, dockets mention 'fresh $n \underset{h}{h} h$-oil' ( $n h \underset{h}{h}$ w $\boldsymbol{d} \underline{d}$, perhaps sesame oil ${ }^{27}$ ), 'sweet moringa oil' (b;q $n \underline{d} m$ ), mrht-oil, ${ }^{28}$ fat ( ${ }^{( } \underline{d}$ ), and gum ( $q m y t$ ). An interesting group of dockets, unfortunately all very fragmentary, mentions 'water' ( $m w$ ), apparently brought from different localities in Egypt. ${ }^{29}$ On the other hand, not a single wine label was found in the substructure. Only one docket gives a year-date, namely Year 9 of an unnamed king who, in view of what is known about Maya's career, can hardly be anyone else than Horemheb. This precious piece of information may give us a clue to the date of Maya's death, the highest date so far attested for him being Horemheb's Year $8 .{ }^{30}$

[^8]
I. Tomb of Maya and Meryt, looking west (p. 3)

2. View from Room $K$ into Room $O$, substructure of tomb, showing blocking of corridor (p. 8)


1. Block from north reveal of pylon

2. Part of cornice of pylon entrance

THE TOMB OF MAYA AND MERYT (p. 13 )


1. Outer doorjamb of pylon, north side (p. 12)

2. Djed-symbol (p. 14 n. 25)

3. Shabtis from Dynasty XXI burial (pp. 6-7)

4. Ivory fragments (p. 9)

# MEMPHIS 1986, 1987 

By D. G. JEFFREYS and J. MALEK


#### Abstract

The Archaeological Section of the Survey of Memphis continued with its excavation at Kôm Rabî‘a, intended to shed light on the movement of the River Nile and the development of the 'early' town. It also continued with resistivity-meter survey, and with the project of drill core sampling designed to investigate the underlying geological composition. The Epigraphic Section in 1987 began a complete survey of the neglected West Gate of the great Ptah Enclosure, with a view to copying and recording the mass of inscribed material there. In an effort to bring these interim reports more up to date, the work of two successive seasons is here presented in the one report.


The Society's sixth and seventh field seasons at Memphis ran from i September to ıo December 1986 and from 3 October to 3ı December i987. As always the work was conducted with the permission and co-operation of the Egyptian Antiquities Organization and our thanks go to the Head of the Organization, Dr Ahmed Kadry, and to his staff at Abbâssîya, particularly Dr Nassif Hassan, Dr Aly al-Khouly, Mr Ahmed Moussa, and Mr Fouad Yáqoub. For help with administrative matters we are indebted to the local Inspectorate, especially Dr Mohammed Ibrahim Aly and Dr Huleil Ghaly, successively Directors of Antiquities for Memphis and Saqqâra; to Mr Mohammed Rashid, Chief Inspector for Mît Rahîna, and his colleague Mr Ahmed Farghaly Qandil, who again represented the Organization and gave every possible assistance; and to all our friends and colleagues at Saqqâra. Staff members, who gave unstintingly of their time and energy, were: (in i986) Dr David Aston, Signe Biddle, Dr Heather Bleaney, Janine Bourriau, Sarah Buckingham, Ellis Douek, Nicole Douek, Peter French, Helen Ganiaris, Dr Lisa Giddy, Julia Harvey, Dr Howard Hecker, David Jeffreys, Dr Jaromir Malek, Ian and Padi Mathieson, Helen McKeown, Margaret Nutt Moore, Dr Paul Nicholson, J. D. Ray, Professor H. S. Smith, Mrs H. F. Smith, Dr W. J. Tait, and David Tunnicliffe; and (in i987) Janine Bourriau, Andy Boyce, Sarah Buckingham, Christian Décobert, Peter French, Dr Giddy, David Jeffreys, Fiona Macalister, Dr Malek, Ian and Padi Mathieson, Helen McKeown, Margaret Moore, Dr Nicholson, Fiona Richards, Professor and Mrs Smith, Ana Tavares, and David Tunnicliffe; Dr Barbara Greene joined the team briefly to identify lithic artefacts and samples from the two seasons' excavation. We are very grateful to the University of Sydney for providing Dr Giddy's fare from Australia, and for the generous contribution towards a generator for the Mît Rahîna workroom; to Memphis State University, Tennessee for Margaret Moore's fare and for their contribution to the expedition budget; to the American Research Center, Cairo, for the loan of drilling equipment in 1986; and to the Ashmolean Museum for giving Fiona Macalister leave of absence to join the expedition as Conservator. We are also extremely grateful to Amanda Pike, Organizer of the Friends of the EES, for distributing the EES Newsletter and arranging site tours and events in Cairo, and to


Fig. I. Memphis: location of sites discussed in this report. Hatched areas indicate sites recently surveyed or excavated, with Survey of Memphis (SoM) codes.
the staff of the British Council, notably Mr Brian Vale, the Representative, and his successor Mr Gordon Tindale; Mr Peter Mackenzie Smith, Deputy Representative, and his successor Mr Patrick Early; and Mrs Hayam Mazen, Administrative Officer. Thanks also to Costain International Ltd. for the donation in 1986 of an ample supply of damp-proof coursing, to be used in covering the site between seasons; and in particular to Mr Ellis Douek (Guy's Hospital, London) for a personal donation specifically for the costs of a scientific staff member.

## Archaeological Section: excavation at Kôm Rabîca (RAT)

Excavation proceeded with the removal of the deep sand blanket (Level V, fig. 3) which covered the north-west corner of the exposed area, ${ }^{1}$ and with the dense rubble layers beneath, which represent the demolition and/or destruction debris of the preceding phase. In 1987 the earliest of these was finally removed to reveal the late Middle Kingdom/Second Intermediate Period architecture (Level VI), which gives us our first tangible evidence of the expected slope down to the east. In the north-west corner walls are actually terraced down this slope, although as yet only a late sub-phase of occupation has been identified (pl. IV, i): the material poverty that is apparent from the small number of artefacts is in contrast with the comparative pretentiousness of the architecture. This consists of a single large brick-built complex stepping down to meet the west side of a wide ( 2.7 m ) enclosure or precinct wall (fig. 3), probably of casemate or rubble-fill construction, lying due south of the feature (Survey code FAM) found by resistivity-meter survey in 1983. ${ }^{2}$ The orientation of these structures is markedly different from that of the New Kingdom, ${ }^{3}$ and much more similar to that of the First Intermediate Period cemetery to the north-west on Kom Fakhry (fig. 2). It is noticeable that the floors immediately west of (inside?) this wall are more even in level, as if they had accumulated against the precinct wall over a period of time. To the east the ground again falls away sharply around and through a large circular brick feature (perhaps a municipal silo) found in the north-east corner at the end of 1986 . Here a series of fine sandy washes and ash spills covers the east side of the precinct wall, sealing the packed rubble fill of its core. We speculate that these washes might even be the deposition from a series of inundations following the collapse of the precinct wall and the effective abandonment of this phase of occupation, at a time when the Nile valley was being subjected to a series of exceptionally high floods. ${ }^{4}$

The low-lying structures in the south-west corner of the exposure were found to be laid in a cutting through the Level V sand, apparently from an early Eighteenth Dynasty horizon, to create an artificial low terrace or basement: floors in this area were still yielding Ramesside scarabs and named ring bezels at the end of $1986 .^{5}$ No

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work was done here in 1987; we do, however, hope to continue here in the future, in order to establish the true date of this terracing, and to recover additional New Kingdom pottery for random sampling. Small finds in 1987 were almost exclusively domestic in character, and consisted largely of flint or chert tools (knife and sickle blades, points, scrapers), in contrast with the relative wealth of variety of materials found in the New Kingdom levels. Of note for their intrinsic interest are a small faience figurine of a recumbent female (O-RAT-2508), and a clay seal impression from a residual context bearing the Horus name of Niuserre, found beneath the south wall of the complex (O-RAT-2523). The large body of ceramic wares and shapes has proved particularly valuable, with well-contexted examples of Yahûdîya ware, and Cypriote, Minoan, and other imported fabrics. ${ }^{6}$

On the second terrace we found the intact skeleton of a very small equid (RAT-913: pl. IV, 2; fig. 3), missing the head and part of the left front fetlock, which is one of the few contexted examples of the period in Egypt. The animal is almost certainly not a deliberate burial, since no grave pit or goods were identified; in view of the general evidence for cooking and other food preparation and storage in the vicinity (see fig. 3), it may have been butchered on the spot.

## Drill cores and resistivity-meter survey

A total of thirty-six cores has now been collected, from depths of up to 13 m . Apart from abortive attempts (for example, where impenetrable stone was met close beneath the ground surface), the rate of progress was, as expected, one core per day. Each full drill head, measuring $8 \times 20 \mathrm{~cm}$, takes on average 4 minutes to retrieve, but efficiency decreases at greater depths, and in very stiff clays more than 6 m down, the recovery time may increase to $6-7$ minutes. Experience of this method has also taught that each core must be taken at one attempt. This is because, if left for longer than an hour, waterlogged deposits (especially coarse sands) tend to subside into the drill cavity and contaminate the sample. Consequently, it is not profitable to begin drilling if there is a likelihood of long or repeated interruptions during the working day. Generally, however, a reasonable rate of work has been maintained, allowing for two to three weeks of washing and grading of samples and detailed descriptions, with recording of particle size, Munsell colour numbers, etc.

Most cores extracted this season were taken from the agricultural land west of Kôm Rabî́a, and from the western fringes of the ruin field (fig. 4). Soils retrieved include recent plough-soil, which is usually easily distinguished from the sherd-rich occupation soils beneath, enabling a profile to be plotted of the buried top surface of the mound area. These buried artificial soils consist largely of heavy clay silts, coarse and fine (silty) sands, and occasional lenses of ash and charcoal; beneath them lies a distinctive bank or ridge (figs. 5, 6) of very dark grey (Munsell roYR 3/r) alluvial clay (Arabic ibl $\hat{\imath} z$ ), high in organic content but archaeologically sterile except near the eastern edges and in the upper zones, where there may have been some admixture

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FIG. 3. Excavation site RAT: late Middle Kingdom level VI at the end of i987 (axonometric). Levels in metres above Site Datum (SD $=77.73 \mathrm{~m}$ ASL).

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Fig. 5. Axonometric reconstruction of $i b l \hat{\imath} z$ bank, with modern ruin field shown for comparison. Stippling indicates sherd-bearing sands on east slope of bank.
(trample?) from the first occupation deposits. Deep cores which passed through the $i b l \hat{\imath} z$ layer produced a very dark grey to black coarse sand at a maximum depth of i I m ( 8.7 m above sea-level), similarly devoid of artefacts, which we take to be the uppermost of the alluvial gravels.

It is of particular interest that some of the deepest recorded sherd-bearing sand layers on the east side of the clay bank (fig. 5) contain Archaic sherds: it is even conceivable that we have here part-perhaps an outlying part-of the very earliest occupation of Memphis. To the south of the survey concession the contours appear to become softer and to curve gently to the east, giving the picture of a natural river harbour; to the north the ridge becomes narrower and higher, reaching 16 m above sea-level, and we suggest at this stage that the main area of occupation might be looked for in this direction, perhaps to the west or north-west of Kôm Tumân, at the foot of the escarpment where the greatest concentration of Archaic tombs is located.

The apparent orientation of the black clay feature also suggests a line for the later dyke which was maintained as the city's main flood defence at least until the Ptolemaic period. The high ridge to the north in fact corresponds reasonably well with the location of the 'Quay of Hephaistos', according to a recent understanding of PSI $488 .{ }^{7}$ A possible model for the sequence of events in this area would then be as follows:

1. The initial natural (or artificial?) earthwork is abandoned as an occupation site as the settlement moves eastward with the receding river;
2. The relatively high ground is appreciated as a defence against high Niles, and maintained at public expense throughout the life of the city, at least until the third century BC, with a subsidiary harbour incorporated in the west side, on the east-west axis of the Ptah temple enclosure;
3. At some time after the effective abandonment of the site in the fifth or sixth century AD, the dyke falls into disrepair and is breached by a series of inundations. The eroding earthwork disappears beneath the field level which has risen in relation to it, but a fossil remnant remains in the field pattern surrounding the ruin field, which respected it: the west side of Hôd Wissâda (fig. 4) may well represent the line of the former dyke.
Resistivity-meter work in 1987 began in this area in order to correlate the evidence of the drill cores, but results were so disappointing that our efforts were soon transferred back to Kôm Rabîa. Here the original $50-\mathrm{m}$ spacing of traverse lines, laid out in $1985^{-6}$, was reduced to 10 m , with dramatic results: the main discovery in 1987 was a very large anomaly (RCF, fig. 6) in the northern part of Rabî'a, lying between the Ramesside temple of Hathor (RAG) and the 'oratory' of Sethos I (RAD, fig. i). This anomaly, we feel, is most likely to indicate a stone structure, possibly another small Ramesside temple or chapel flanking the postulated subsidiary road through the south wall of the Ptah enclosure, ${ }^{8}$ and it is hoped to test this idea by making limited exposures in the near future.

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Fig. 6. Detail (axonometric) of resistivity feature RCF 1987 (cf. fig. i): extent of anomaly at 2-m vertical intervals of depth below ground level, with (hatched) area of high-resistivity readings.



Fig. 8. Detail of northern geographical procession (SCHISM 3746). The personification is that of Hwt-wert (Avaris) in the north-eastern delta.

## Epigraphic section: survey of the great Ptah temple

During a short stay at Mît Rahîna in November 1986, we completed and checked our documentation of the shrines near the southern approach to the Ptah enclosure, ${ }^{9}$ the small temple built by Ramesses II at the south-western corner of the enclosure, ${ }^{10}$ and the limestone colossus of Ramesses II. ${ }^{11}$ In the 1987 season we spent four weeks studying and recording the remains of the large temple at the western end of the Ptah enclosure (fig. 7). The temple ${ }^{12}$ was discovered in the early i870s by A. Mariette. Parts of it were later explored by J. de Morgan and G. Daressy, and important contributions to our knowledge of the structure were made by W. M. F. Petrie in

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FIG. 9. Inscription on the back of pair-statue SCHISM 3783.

1908 and 1913. None the less, shortly after the beginning of our work it became clear that our predecessors had ignored many blocks with the remains of relief decoration or inscriptions, which lie scattered over the site ${ }^{13}$ (pl. IV, 3). The main reason for this was probably the water and deep mud, in which parts of the temple stand even now for much of the year; in the past the situation was worse. The temple was exploited as a quarry in the Middle Ages, and perhaps as late as 1830 , and its limestone blocks were almost all removed to Cairo for re-use. Only hard materials (granite, basalt, quartzite, alabaster), and items of inconvenient shape (columns and statues) were left behind. The thoroughness of the operation is truly astonishing.

We made facsimile copies of the reliefs with two long geographical processions in

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Fig. io. Quartzite jamb fragment of Ramesses V (SCHISM 38i8).
situ on the basalt bases of the northern and southern walls (pl. IV, 4, fig. 8), and recorded another 130 items. These included remains of inscriptions in situ and blocks and fragments of columns and colossi, as well as four over-life-size pair-statues of Ramesses $I I^{14}$ (pls. V, 1 -2, fig. 9) and several other pieces of sculpture. It seems that the temple was built as part of a massive building programme inaugurated at Memphis in the reign of Ramesses II, though perhaps not in the early years. The retreat of the course of the river ${ }^{15}$ made available for development a large area to the east of the earlier temple of Ptah, and this was now used for the siting of a whole complex of temples. These included a new temple for Ptah and probably, to the south of it, a temple for his companion, the goddess


[^14]middle of the last century). The moving spirit behind this plan must have been Khaemwese, the High Priest of Memphis and son of Ramesses II. He is almost certainly to be identified with the 'King's son and inmutef-priest' represented on the base/pedestal of the pink granite colossus of Ramesses II by the southern side-entrance in the pylon ( $\mathrm{pl} . \mathrm{V}, 3$ ). ${ }^{16} \mathrm{We}$ found an adjoining fragment of the pedestal, ${ }^{17}$ and also identified three new fragments of the body. ${ }^{18}$

Some of the unusual features of the temple (e.g. the orientation of the pylon, which differs from that of the hypostyle beyond) may be explained by the relationship to the earlier temple of Ptah; others (e.g. the side-entrances in the pylon leading into corridors running along the sides of the hypostyle) may be due to the presence of other, as yet undiscovered, buildings further to the east (and probably approached from the river on that side). It is possible that the ramp and quay-like structure, flanked by pedestals, at some distance to the west of the pylon represent a Ramesside (Ramesses II, Sethos II, and Ramesses V, see fig. io) approach to the original temple of Ptah under Kôm Fakhry (and the village mound of Mît Rahîna?). In any case, their orientation precludes our regarding them as integral parts of the new temple of Ptah built by Ramesses II.
${ }^{16}$ SCHISM 370r; Petrie, Memphis, i, 5, 9-ro, pl. xxiii (top right and middle right).
${ }_{17}$ There is some similarity between the new pedestal fragment and the limestone block of Khaemwese found by Petrie, Memphis, vi, 33 (22), pl. lvi = Cambridge, Fitzwilliam Mus. E.59.1914. The latter may also come from the pedestal of a statue.
${ }_{18}$ To be added to the fragment of leg already seen by Petrie.


1. RAT 1987, looking south: excavation in progress in north-west corner (p. 17)

2. Granite block SCHISM 3753 with 'Souls of Nekhen' on the left and part of a 'Soul of Pe ' on the right (p. 27)

3. View of equid RAT-913 in situ on Terrace 2. S $5 \times 10 \mathrm{~cm}$ (p. 19)

4. Basalt block SCHISM 3746, detached from the nor ern geographical procession. The personification is $t$ of $N \underline{t} r$ (Baḥbît al-Higâra) (pp. 27-8)


1-2. Headless granite seated pair-statue of Ramesses II and Ki-nht (SCHISM 3783) (p. 28)

3. Pylon of temple (SCHISM $701=$ BAA ), seen from the south-west before the beginning of work in October 1987. The pedestal with the feet of a colossal statue of Ramesses II (SCHISM 3701) is visible in the middle distance (p. 29)

# CHRONOLOGY, SEDIMENTS, AND SUBSISTENCE AT MERIMDA BENI SALAMA 

By ZAHI HAWASS, FEKRI A. HASSAN, AND ACHILLES GAUTIER


#### Abstract

Test excavation at Merimda Beni Salama indicates initial occupation of the site during the early part of the fifth millennium bс. Subsistence was based on the exploitation of cattle, sheep/goats, pigs, fish, hippopotamus, and on the cultivation of wheat and barley. Both flake and bifacial tools were utilized; the bifacial tools include foliate 'knives', sickles, and a concave-based triangular point. The assemblage shows close affinity to the Fayum Neolithic, which dates to the same period. Both the Fayum and Merimda Neolithic antedate the predynastic sites in the Nagada region. The initial occupation at Merimda followed a wet period with increased run off, but conditions during the occupation were, in general, arid.


Merimda Beni Salama is an extensive Neolithic settlement on the south-western fringe of the Nile Delta, 2 km south of the village of Beni Salama, and 60 km north of Cairo. The site, which covers about 200,000 square metres, was first excavated from 1928 to 1939 by Hermann Junker. ${ }^{1}$ The Neolithic landscape and the geological setting of the site were discussed by Butzer. ${ }^{2}$ In 1976 Hawass undertook excavations on behalf of the Egyptian Department of Antiquities and Hassan studied the sediments and obtained additional radiocarbon age determination (WSU-I846 and $\mathrm{W}-4355$ ). The small sample of faunal remains was analysed by Gautier. In the present report, we present the total list of radiocarbon age measurements, with treering corrections and the results of sediment and faunal analyses. The results of a preliminary analysis of lithic artefacts and ceramics are also included here. The excavations consisted of two $5 \times 5 \mathrm{~m}$ pits ( 100 m north of the excavations by Junker) and several test pits and trenches. Work began on 20 October 1976 and ended on 17 November i976. The participants included Atef Hassan (assistant archaeologist), Ismail Sadek (draftsman), el-Disuky Fahmi (draftsman), Mohammed Yassen (restorer), Abdala Afendi (photographer), Abu el-Ela Sharawy (photographer), and Abdu el-Wahab Hamid (crew chief). Fathi Afifi Badawi, El Azhar University, visited the site once a week to familiarize himself with new techniques. ${ }^{3}$

## Chronology

Ten radiocarbon age determinations on archaeological materials from Merimda Beni Salama were published in $1959 .{ }^{4}$ The dates (Table i) were on charred grain,

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# Table i. Radiocarbon Chronology of Merimda Beni Salama 

|  | Provenance | Lab. no. | Radiocarbon age ( BP ) 5,568 half life | Corrected (age BC) |  | Material |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Damon et al. | Klein et al. |  |
| Merimda Neolithic | Merimda Beni |  |  |  |  |  |
|  | Salama |  |  |  |  |  |
|  | T $4,60 \mathrm{~cm}$ | U-ioA | $5430 \pm 120$ | $4295 \pm 125$ | 4520-3910 | Gr |
|  | T $4,60 \mathrm{~cm}$ | U-10B | $5550 \pm 100$ | $4425 \pm 205$ | 4560-4110 | Gr |
|  | T $4,60 \mathrm{~cm}$ | U-73 | $5640 \pm 100$ | $4515 \pm 205$ | 4715-4363 | Gr |
|  | TT 2, 75 cm | WSU-1846 | $5260 \pm 90$ | 4115士155 | 4395-3800 | Gr |
|  | -, 180 cm | U-6 | $6130 \pm 110$ | $5005 \pm 125$ | 5305-4895 | Ch |
|  | $\mathrm{R}_{\mathrm{I}}, \mathrm{I} 80 \mathrm{~cm}$ | U-7 | $5710 \pm 700$ (R) |  |  | Ch |
|  | T $4,180 \mathrm{~cm}$ | U-31 | $3630 \pm 100$ (R) |  |  | Ba |
|  | T 4, 180 cm | U-32 | $4560 \pm 140$ (R) |  |  | Bc |
|  | TT 2 2, 102 cm | W-4355 | $5750 \pm 100$ | $4630 \pm 130$ | 4925-4420 | Ch |
|  | A 18 | U-8 | $5580 \pm 230$ | $4455 \pm 290$ | 4900-3925 | Ch |
|  | - | U-9A | $5970 \pm 120$ | $4850 \pm 135$ | 5220-4570 | Ch |
|  | - | U-9B | $5940 \pm 100$ | $4820 \pm 115$ | 5205-4560 | Ch |

Grain, Gr; Charcoal, Ch; Apatite, Ba; Collagen, Bc.
bone apatite, bone collagen, and charcoal. There are three dates from a level 60 cm below the surface, four from a basal level at 180 cm , and three from unknown depth. The dates on bone apatite ( $\mathrm{U}-31$ ) and collagen $(\mathrm{U}-32)$ are anomalous and are here rejected. One of the dates $(\mathrm{U}-7)$ has a sigma of 700 years and is therefore useless. This leaves one date ( $\mathrm{U}-6$ ) from the 180 cm level, calibrated to $5005 \pm 125 \mathrm{BC}$ or a range of 5255-4755 BC (using two standard deviations) on the basis of the tables by Damon et al. ${ }^{5}$ and a range of 5305-4895 from the tables of Klein et al. ${ }^{6}$ The three dates from the 60 cm level are similar and provide a weighted, corrected average of $4420 \pm 190$ BC or a range of $4800-4040$ bс (from the tables of Damon et al.). Two dates were obtained on materials from the present investigations, one from a level at 102 cm below surface ( $\mathrm{W}-4355$ ) and another from a level 75 cm below surface. The date from the lower level calibrates to $4630 \pm 130 \mathrm{BC}$ (from Damon et al. tables), and a range of 4925-4420 BC (from Klein et al. tables). That from the higher level is calibrated to $4115 \pm 155$ BC (from Damon et al.) and a range of 4395-3800 BC (from Klein et al.). Calibration of the radiocarbon measurements mentioned here, using the highprecision calibration curve following the procedures outlined by Hassan and Robinson, ${ }^{7}$ provides an estimate of $4376 \pm 52 \mathrm{BC}$, for the average of the three measurements from the 60 cm level (compared with $4420 \pm 190$ from the Damon et al. tables). The dates from the lower level are beyond the range of calibration, but indicate initial occupation during the beginning of the fifth millennium $B C$ as previously suggested by Olsson. ${ }^{8}$ The more recent dates from the middle level at 75

[^16]and 60 cm below the surface indicate that the site was inhabited throughout the fifth millennium bc. Thus, Merimda is not only one of the oldest Neolithic sites along the Nile in Egypt, but also shows a very long period of occupation.

## Sediments

Sediments were collected from a test pit (TT 2) which consisted of the following stratigraphic units (fig. i) from base to top:
(ı) Gravel, base unexposed, thickness +10 cm , 10 YR 8/4, very pale brown, with sandy matrix. The gravel shows a mode from 16 to 32 mm (coarse pebbles to cobbles) with a secondary mode of medium sand ( $0.25^{-0.5} \mathrm{~mm}$ ).
(2) Gravel, 15 cm , 10 YR 6/6, brownish yellow with a sandy matrix showing a higher content of silt than the underlying gravel. The colour and the enrichment in silt seems to indicate soil development.
(3) Sand, medium, 26 cm , dark greyish brown, 10 YR 4/2, with horizontal lamination. The dark colouration is due to admixture with ash and charcoal specks.
(4) A thin layer of medium sand with a high content of charcoal and charred seeds and plant remains, 4 cm , dark grey, 10 YR 4/i.
(5) Medium sand, 15 cm , similar to (3).
(6) Medium sand, 5 cm , dark greyish brown, 10 YR 4/i.5.
(7) Medium sand, 80 cm , massive unit with dispersed archaeological remains; potsherds, flint artefacts, charcoal, and occasional pebbles, Io YR 5/3, grey.
$(8,9,10$, II $)$ A storage pit dug into the previous unit to a depth of 82 cm . The pit is lined with straw matting. It consists of a stratified fill:
(8) Major fill unit of dark greyish-brown sand (Io YR 4/2) with pieces of matting and dark lenses rich in charcoal, 60 cm .
(9) A layer of sterile drift sand, very pale brown (io YR 7/4).
(ı) Drift sand mixed with cultural debris, pale brown (io YR 6/3), 15 cm .
(in) Sand and lag gravel, 5 cm , pale brown (io YR 6/3).
Grain size analysis of samples from units $1,2,3,4,7$ (fig. 2) reveals that the gravels at the base of the section are bimodal and very poorly sorted. The sediments associated with the archaeological materials (units $3-7$ ) consist of very poorly to poorly sorted medium sand with a gradual decrease in gravel and coarse sand toward the top. Comparison with drift sand covering an adjacent Pleistocene terrace overlooking the site shows that the sands are similar in the distribution of their grain size, with the exception of an enrichment of gravel and silt in the Merimda deposits. Both types of sediments are similar to the fluvial sands of the Lower and Middle Pleistocene in the western Delta. It is clear that these old fluvial deposits supplied the material carried by wind. The gravel content in the Merimda deposits results from downslope gravity movement of dislocated pebbles and cobbles from the slopes of the old terrace. The silt content in the Merimda sands appears to be of cultural

Merimda Beni Salama TT 2


FIG. I. Microstratigraphy of TT 2
origin, related to the debris of mud-bricks used in the building, hearth silt, and other kinds of dirt introduced by human activities.

The basal gravels of Merimda seem to represent an event predating the Neolithic occupation. Although excavations did not penetrate the gravel, it is likely that there are no cultural layers beneath it. This, however, should be confirmed. It appears that the gravels were laid during a period of greater slope-wash activity. They and the weak soil development on the gravel most probably date to the early Holocene moist phase dated in the Egyptian Sahara between 10,300 and 7,100 uncorrected radiocarbon years Bp. ${ }^{9}$ The environmental conditions during and after the Merimda Neolithic occupation were arid, as indicated by the prevalence of wind-drift sand and the presence of a desert lag layer at the top.


FIG. 2. Results of grain size analysis of sediments from TT 2

## Bioarchaeological remains

Faunal remains associated with the sediments collected from the geological exposure consisted of: sheep/goat (fragment of jaw, shaft fragment of radius); cattle (fragment of femural shaft, fragment of tibia, molariform tooth, astralagus, second phalanx); pig (long bone shaft, skull fragment, fragment of metapodial of a juvenile individual); hippopotamus (enamel fragment of tooth); rat-size rodent (incomplete jaw and small fragment); fish (four fragments); and landsnail shells.

Plant remains in the sediments from layer (4) provided evidence of domestic barley and wheat, and a weed, Rumex dentatus, which grows today on soils poor in lime and slightly salinized ${ }^{\mathbf{1 0}}$ (plant identification by Martin Steen, Seed Lab, Washington State University).

This evidence suggests a subsistence base of mixed farming and herding. Barley,

[^17]reported here, had not previously been identified. The identification of the weed Rumex, the seeds of which are abundant, may indicate that the fields were not efficiently weeded, and that salinization problems might have been encountered in this early phase of agriculture along the Nile Delta. Vicia sativa (Gilban) might have been grown for fodder ${ }^{11}$ though its association with cereal grains probably indicates that it was a common weed.

## Artefacts

The lithic artefact assemblage examined consists of the following:
Cores: 2 Levallois-like cores, 2 multiple platform cores, 1 discoidal core, and I unidentifiable core.
Debitage: 6 primary flakes, i primary blade, 36 flakes, 3 blades, and 4 Levalloisoid flakes,
Tools: I denticulate, I notched and backed piece, 2 perforators, I retouched flake, 7 bifacial sickles, and i9 bifacial tools.

The cores are flake cores. The presence of Levalloisoid flakes in the debitage indicates that the Levallois-like cores are not intrusive. The debitage consists predominantly of flakes ( 92.3 per cent of all blanks). This is consistent with the absence of blade cores and suggests that the manufacture of blades was incidental to the production of flakes. Primary decortication pieces at the site indicate that both core preparation and blank manufacture were practised in the Merimda settlement.

The tools are dominated by bifacial tools which vary considerably in morphology. They are mostly prepared by direct percussion rather than by pressure flaking. Lanceolate, triangular, and ovate forms are represented. They are generally thin (foliate), though some are quite thick ( $4: 10$, thickness to width ratio), and lensshaped in cross-section. Although some may qualify as 'knives', others were probably used for shredding or scraping. A few are pointed and may have served as spear heads. Bifacial sickles are characterized by bifacial preparation with deep percussion scars and a finely serrated edge. Some of the bifacial tools resemble those described by Caton-Thompson and Gardner ${ }^{12}$ as chipped flint axes. One of the tools is crescent in shape and calls to mind the 'crescentic-drills' of the Old Kingdom. The tip of one of the pointed bifacial pieces shows a pseudo-burin break, which could have resulted from impact. The artefacts also include a pressure flaked, triangular bifacial projectile point with a concave base. A similar point (arrowhead) has been described from the Fayum Neolithic. ${ }^{13}$ The tools do not include any burins, though perforators, denticulated pieces, and notches are represented. These could have been used in processing plants and wood or bone working. Grinding stones (rubbers or manos and querns) are similar to those recovered from Kom W. Fayum. ${ }^{14}$

[^18]

Fig. 3. Ceramics

Ceramics include three complete vases, one bowl ( $5,11,12,13$ ), and numerous sherds. Reconstruction of vessel shapes from rim sherds provides evidence for the forms illustrated in fig. 3. Many rim sherds seem to belong to pots with straight or slightly incurvate walls. A preliminary investigation of a sample indicates a predominance of polished and burnished redware ( 66 per cent), followed in abundance by polished or burnished blackware ( 20 per cent). Rough redware forms 12 per cent and rough blackware is the least represented ( 2 per cent). This distribution is analogous to that described by Larsen. ${ }^{15}$ The pottery is almost invariably fibre-tempered, well-fired, and hand made. Only one fragment showed an incised herringbone design.

## Summary and discussion

The excavations of 1976 provided material for dating and bioarchaeological remains which help to clarify the chronology and subsistence of this important site. Two dates were added to the ten obtained by Olsson. ${ }^{16}$ Evaluation and correction of the twelve dates indicates that the initial occupation of the site occurred during the beginning of the fifth millennium BC . It also suggests a rate of about 20 mm a year for the accumulation of site material, and a duration of about 900 years of occupation. The average date of Nagada I in the Nagada region is $c .3750$ bc, and that of Nagada II is $c .3500$ bc. ${ }^{17}$ The beginning of the Neolithic occupation at Merimda thus antedates Nagada I by about a millennium. Baumgartel's ${ }^{18}$ contention that Merimda dates from the Nagada II period to the Early Dynastic period is unfounded. The chronology presented here supports the view of the majority of prehistorians who regard Merimda as an earlier settlement than Nagada I-II. The early dates on the Fayum Neolithic of $c .5200-4500$ Bc $^{19}$ are congruent with the view that Merimda, in its early stages, was closely associated with the Fayum Neolithic. ${ }^{20}$

The subsistence activity of the Merimda Neolithic people consisted of mixed farming and herding. The plants cultivated were predominantly wheat and barley. Herd animals included sheep/goats, cattle, and pig. This subsistence base is similar to that associated with the Predynastic of Upper Egypt at Nagada and Hierakonpolis. ${ }^{21}$ It is interesting to note that in all these sites the frequency of wild animal game, except aquatic resources and occasionally birds, is minimal.

The sediment analysis of the deposits at Merimda indicates that the site rests on a palaeosol overlying colluvial gravel representing slope wash from the adjacent Pleistocene terrace during the main Holocene wetter period. The drift sand overlying the Pleistocene terrace contains Middle Palaeolithic artefacts. The deposits of the site consist of medium-grained sand, mostly of aeolian origin, admixed with about 10 per cent of silt, most likely derived from cultural debris. The settlement at the time of occupation thus stood above the effective level of Nile floods. Merimda Beni Salama is one of the earliest agricultural settlements along the Nile in Egypt. The ongoing research by the German Archaeological Institute will be of great importance in understanding the early stages of agricultural developments in Egypt.

[^19]
# A QUANTITATIVE ANALYSIS OF THE PREDYNASTIC BURIALS IN ARMANT CEMETERY <br> 1400-1500 

By KATHRYN BARD


#### Abstract

Cemetery 1400-1500 at Armant, excavated by Mond and Myers in the 1930s, is the best-recorded Predynastic cemetery in Egypt. With burials dating to Nagada I, II, and III, the cemetery provides data for a crucial period of social evolution in Egypt. Quantitative methods of analysis show that both mean grave size and mean number of grave goods increase through time. Although clusters of graves show differentiation into two basic hierarchies of grave types, there is a lack of overall complexity in the Armant burials, probably indicative of a society which was not very stratified.


The Predynastic cemeteries of Armant are located about 9 km south-west of Luxor, on the west bank of the Nile. Of the numerous Predynastic cemeteries excavated in Upper Egypt during the first half of this century, these are the best documented. In addition, Kaiser has developed a seriation system for Predynastic pottery based on the sequence of graves at Armant. For these reasons, these were chosen for quantitative analyses. The initial goals were to develop generalizations concerning patterns in cemetery evolution for the Egyptian Predynastic, and to determine the level of social organization at Armant and changes in this through time.

The cemeteries of Armant were excavated by Mond and Myers in the early 1930 s. According to them, there were graves from the early Predynastic through the Old and Middle Kingdoms, with a few Coptic burials. ${ }^{1}$ The main Predynastic cemetery was in area 1400-1500, but some Predynastic graves were also located in area 1300 , and around two Middle Kingdom tombs. The cemeteries lie beyond the present edge of cultivation on the low desert fringe, but the excavators suggested that the climate was wetter in Predynastic times than today. ${ }^{2}$ They found remains of large trees throughout the site (acacia and Ficus sycomorus), and sometimes roots had been cut out for Predynastic burials. ${ }^{3}$ It was therefore assumed that these tree remains were of Predynastic date. They were 20 feet or more above the present cultivation level, and would have required rainfall or a higher Nile flood level to grow. According to Butzer, there were two major episodes of higher Nile floods and accelerated alluviation: 'high ca. $5000-3700 \mathrm{Bc}$, then temporarily lower, with another major episode of high floods and accelerated alluviation culminating about $3000 \mathrm{BC}^{\prime}{ }^{4}{ }^{4}$

Mond and Myers excavated a Predynastic village in area rooo, at the edge of

[^20]present-day cultivation. ${ }^{5}$ The settlement pottery differed from that in Cemetery 1400-1500. Distributed throughout all levels in this settlement was a ware with 'point-burnished' decoration on the inside, 'similar to, but coarser than that found on the Badarian'. ${ }^{6}$ Area 1000 is 2 km from Cemetery $1400-1500$, however, and the cemetery next to it had been destroyed by later graves. A Predynastic settlement slightly below Cemetery 1400-1500, south-east by south, was not excavated. ${ }^{7}$

Several general observations about Predynastic Cemetery 1400-1500 were made by the excavators. The earlier graves were rough ovals, while the later ones were rectangular. The earlier part of the cemetery was lower down the spur, closer to the edge of cultivation. The Predynastic graves seem to have been oriented to the river: burials were aligned north-south where the river is straight, but were erratic where it bends. Most of the Predynastic burials were facing west or south. There was a recognizable decline in the use of matting with bodies after (Petrie's) SD $56 .{ }^{8}$

Although much specific information about the graves in Cemetery 1400-1500 is given in Mond and Myer's publication, there are omissions. Grave dimensions are sometimes missing. Only 48 per cent of the listed graves had the age/sex of the human remains determined, and of these, the only categories given are for child, male, or female, without closer ranges of age. In addition, 53.9 per cent of all listed graves were 'quite disturbed'. Only 13 per cent were completely undisturbed, while 20 per cent were partially disturbed, and for 12 per cent, no information concerning disturbance is given. We know little more about the geological setting of Cemetery $1400-1500$ than that the present nature of the soil is 'crumbly', so that graves could only have been roughly shaped, and were difficult to measure. ${ }^{9}$

## Dating

Cemetery 1400-1500 at Armant was chosen for my analysis because it is the best-recorded Predynastic cemetery, but also because its relative dating sequence was very carefully evaluated by Kaiser. ${ }^{10}$ Although the excavators give ranges of (Petrie's) Sequence Dates to graves with groups of pottery, Kaiser's sequence is a much more finely graded seriation upon which a new relative chronology for the Predynastic has been based. More recently Kemp has done a multi-dimensional scaling of the pottery from two Predynastic cemeteries, using a computer program developed at the University of Cambridge. His preliminary results complement Petrie's Sequence Dating system, with the difference between his seriations and Petrie's explained by the element of stylistic judgement in the latter. ${ }^{11}$

As the Armant Predynastic settlement sites were not excavated with careful stratigraphic controls, it is impossible to place the sequence of pottery from graves into a vertical sequence. According to Kaiser's evaluation of the sequence of pottery and grave goods in Cemetery 1400-1500, three main groups of graves are discernible:

[^21]I. A southern group with predominantly B-ware (Black-topped red ware).
2. A middle group with predominantly R -ware (Rough ware).
3. A northern group with predominantly L-ware (Late ware). ${ }^{12}$

These groupings are based not only on location in the cemetery and distribution of wares, but also on clusters of certain types of grave goods, shape and size of graves, and body treatment. Through the distribution of the remaining ceramic types, particularly D-ware (Decorated ware) and W -ware (Wavy-handled ware), and the evolution of vessel forms, Kaiser distinguished finer gradations within the three main groups (Table r). ${ }^{13}$

## Table 1. Kaiser's Seriation of Predynastic Wares

| $\left.\begin{array}{l} \mathrm{Ia} \\ \mathrm{Ib} \\ \mathrm{Ic} \end{array}\right\}$ | B-ware above 70 per cent of all pottery in graves of this period |
| :---: | :---: |
|  | P -ware at 25 per cent |
|  | C-ware less than 5 per cent |
| IIa | C-ware disappears |
|  | R -ware first appears $\quad$ B-ware drops from 60 to |
|  | N-ware (Nubian ware) seen Io per cent <br> mainly in this phase R -ware increases from |
| IIb | D-ware and L-ware first appear 25 to 55 per cent |
| IIc | W-ware first appears |
| IIdi | B-ware drops to 5 per cent |
| IId2 | R-ware at 50 per cent |
|  | B-ware ends in IIdz |
| IIIaI | Great increase in L-ware to 70 per cent |
| IIIa2 | Decrease in R-ware to less than 20 per cent |
| IIIb | Predominantly L-ware. W-ware degenerates into cylindrical jars |

Vessel forms also evolve through Kaiser's sequence. In Period I pots are mostly open beakers and bowls. Forms are more closed in Period II: there are jars and a few bottles, and the wavy-handle first appears at this time. In Period III large storage jars of predominantly L-ware are seen, and the final metamorphosis of the wavy-handled jar into a cylindrical form occurs. Kaiser's sequence was further tested in the pottery from graves at Nagada and Ballas, Mahasna, Diospolis Parva, Qau el-Kebir and Matmar, Harageh, Abusir El-Meleq, Gerza, and A-group cemeteries in Nubia. ${ }^{14}$ What Kaiser seems to demonstrate is that Petrie misplaced the position of W-ware at a number of sites, putting it too early in the sequence. ${ }^{15}$ This significantly affected the middle range of Petrie's Sequence Dates (SD 38-63). Where Kaiser's seriation system differs from Petrie's, then, is in his Period II. Contra Petrie, L-ware appears

[^22]before W-ware in Kaiser's sequence. The latter also excludes Petrie's F-ware (Fancy ware) as a special class. It does not evolve in a logical sequence, but appears sporadically in Predynastic graves. At Hemamieh, excavated by Caton-Thompson, B - and P -wares were found in all levels ( $180-0 \mathrm{~cm}$ below the surface), while W -ware was found only in levels $90-45 \mathrm{~cm}$ below the surface, ${ }^{16}$ i.e. in three of the middle to upper levels, but not in the seven lower levels or the upper two. This seems to indicate a later range for W -ware, contra Petrie, but in accordance with Kaiser.

Seriation systems are not equivalent to absolute dating, but Kaiser's system seems to be competent in formulating a relative sequence through which social evolution occurred. It is unfortunate that so few radiocarbon dates are available for the Predynastic, and at present the evolutionary scheme of development for Armant remains relative, without a definite time frame except in reference to Nagada radiocarbon dates. According to Hassan, radiocarbon samples from three early Nagada sites 'provide a midpoint estimate of $3760 \pm 40 \mathrm{BC}$ with a range of $3840-3680$ BC, at a $95 \%$ confidence interval'. Dates from the Nagada II occupation in South Town, the main Predynastic occupation site at Nagada, 'provide a midpoint estimate of $3400 \pm 70 \mathrm{BC}$ with a range of $3600-3300 \mathrm{BC}$, at a $95 \%$ confidence interval'. ${ }^{17}$

## Cemetery size and spatial patterns

Armant was not a major Predynastic centre like Nagada and Ballas, where an estimated 3,000 graves were excavated. Graves in areas i200, 1300, and 1400-1500 at Armant number 235 individuals at the most, if unrecorded graves in the numbering system are also included. It is possible that a few Predynastic graves were missed by the excavators, which might bring the total to 250 burials in the known Predynastic cemeteries. This could be doubled if the missing cemetery for the excavated occupation site in area 1000 is included. A total of 500 Predynastic burials for Armant is a generous estimate, but still small in comparison to the Nagada and Ballas cemeteries. The main Predynastic cemetery at Nagada had over 2,000 known graves and is $870 \times 200 \mathrm{~m}$, whereas Armant Cemetery $1400-1500$ numbered around 200 graves and is $170 \times 75 \mathrm{~m}$.

In its internal spatial arrangement, Cemetery $1400-1500$ seems to have a recognizable pattern. Graves of Ic and IIa are small ovals clustered closely together in the southern part of the cemetery. This pattern changes in IIb, when larger rectangular graves are distributed further to the north, in less dense concentrations, while smaller IIb oval graves tend to be more closely spaced among those of Ic and IIa. With a shift in grave size to proportionately larger ones in IIc (Table 2), there is a northward movement in the cemetery, and graves are widely spaced. In IIdi and IId 2 the graves are further north still, and very widely scattered. Finally, in IIIai and IIIaz graves are clustered exclusively in an area at the far north of the cemetery.

[^23]Table 2. Mean Grave Size (sq. m) of Dated Graves<br>(with standard deviations)

| Phase | No. of graves | Size (st. d.) |
| :--- | :--- | :---: |
| Ic | 18 | 0.77 |
|  |  | $(0.38)$ |
| IIa | 17 | 0.95 |
|  |  | $(0.6 \mathrm{I})$ |
| IIb | 23 | 1.20 |
|  |  | $(0.45)$ |
| IIc | 27 | 1.84 |
|  |  | $(0.90)$ |
| IId | 24 | 1.94 |
|  |  | $(0.7 \mathrm{I})$ |
| IIIa | II | 1.96 |
|  |  | $(0.5 \mathrm{I})$ |

## Description of graves

Although there are several instances of multiple burials in single graves in Cemetery 1400-1500 at Armant, no intrusive burials are suggested in the recorded evidence. Perhaps the burials were once marked on the surface, for the horizontal spread of graves through time seems to be purposeful. Cemetery 1400-1500 was probably a village cemetery physically set apart, and accorded respect through Predynastic times. Apart from grave robbing, no other disturbances are evident, perhaps because occupation of the unexcavated village near this cemetery ceased in dynastic times.

The 'earlier tombs lower down the spur' are described by the excavators as 'rough ovals, generally'. ${ }^{18}$ For the above table, grave size was calculated by rectangular floor size, i.e. length times width. For the earlier graves (Kaiser's Ic-IIa), which were assumed to be mostly ovals, io per cent was subtracted from the grave size to account for the slightly smaller area of ovals than rectangles. Cubic dimensions of grave pits have not been calculated, as surface changes from the Predynastic to the present were not noted by the excavators.

The great majority of graves were simple pits for flexed burials. Information on grave linings is given for only 3 I per cent of the graves, and it must be assumed that the rest had no trace of linings. Matting was sometimes found over and/or under the skeleton, or around the sides of the grave pits. In a few instances linen covered burials instead of matting. Several graves had traces of wood, either as a grave lining or a coffin, and two graves (i466, i5II) contained a wooden bed. Five graves had loculi cut next to the burial pit, presumably for additional space for grave goods. ${ }^{19}$

Only 4 I per cent of the body attitudes are given for the burials, and many of these incompletely. Body attitudes were coded by Mond and Myers using Brunton's system developed for Qau and Badari. ${ }^{20}$ All Predynastic burials at Armant in which

[^24]the body attitudes are listed were flexed. The excavators were more careful in recording orientations of the burials, in terms of azimuth angles, and 82 per cent of the burials have listed orientations. Of the burials with given orientations, 62.8 per cent had the head to the south-west ( $180^{\circ}-270^{\circ}$ to due north), 23.I per cent were oriented to the north-west, II.5 per cent to the south-east, and the remaining 2.4 per cent to the north-east. Body orientation with head pointing to the south to south-west was thus by far the most common.

## Description of grave goods

Pottery was the most common type of grave goods found in the Predynastic burials at Armant. Even the poorest burials which contained no other artefact, usually included one or two pots. Presumably these once contained foodstuffs or other organic goods as offerings for the deceased, but no trace of these was noted by the excavators. At Nagada an R-ware bowl from a grave excavated by Hassan was found to contain barley seeds, and Needler suggests that B-ware beakers were probably originally used in the household for serving drink and perhaps food. ${ }^{21}$ Vessels with small mouths were probably for food storage, and some jars may have been for water.

Palettes were found in graves from all of Kaiser's periods and in two Terminal Predynastic graves, as well. The earliest palettes at Armant from Ic are shaped as either half-circles or rhombs, with two amorphous animal heads or horns at the top. Fish- and turtle-shaped palettes appear in Kaiser's Period II. Circular and rectangular examples were found in a Terminal Predynastic grave at Armant (1312), corresponding to Kaiser's IIIb. Palettes were more common at Armant in Periods Ic and IIa, but this could be due to the fact that the earlier graves were much less disturbed than the later ones.

Rubbing stones were sometimes found with the palettes in the Predynastic graves at Armant, and pigments for cosmetics, such as galena, malachite, and red ochre, were placed in some of the graves. Chipped stone tools, such as points, flakes, and blades, and cores from tool manufacture, were found in some of the Predynastic graves. Fish-tail projectile points were found in two graves (1457, 1523 ) dating to Kaiser's Periods Ic and IIc. A ripple-flaked knife was in grave 1573, from Period IId2. Other stone artefacts in graves included polishing- and grinding-stones, and a hammer-stone. ${ }^{22}$ A few stone vessels were excavated in the cemeteries at Armant, but these were not found in any great quantities until the Terminal Predynastic. A footed lug-handled vessel was in grave 1466 , dated by Kaiser to IIa, while a more squat lug-handled jar with a flat bottom was in a grave of IIc (i550).

Next to pottery, beads were the most common grave goods. Other jewelry included bracelets or armlets, and a ring in grave $1554 .{ }^{23} \mathrm{~A}$ number of other craft goods were found, including carved combs, tag-like objects, and points. A carved 'gaming set' with two stone balls was found in grave 1572 . Two stone hippopotami

[^25]were in grave 1451, and three clay 'hands' were found in grave 1542 . Baskets occurred in several graves, and sheets of linen were found in five graves, over or under the body. ${ }^{24} \mathrm{Craft}$ goods were made in a wide variety of materials. Palettes were carved from slate, and ivory was used for a carved vessel, ring, combs, points, the tag-like objects, and a gaming set.

Shell was made into bracelets, and whole shells, both riverine and marine (Red Sea), were found in a number of burials. Ostrich egg shell was used for beads. Materials for beads varied, from one bead of lapis lazuli in grave 1567 to fired clay. Steatite beads were the most common, but carnelian was also frequent. Stones from the Eastern and Western Deserts, such as chalcedony, quartz, and garnet, were also used for beads, as were faience and imported materials, such as malachite, amber, bitumen, resin, and Red Sea coral. ${ }^{25}$

Various organic remains were recorded. Animal bones of several species, from gazelle to jerboa, were listed by the excavators, and animal skins were sometimes found over the human remains. Feathers were found in one grave (1492), and resin or gum was sometimes noted.

On the whole, the burials in Cemetery $1400-1500$ were relatively poor in craft goods, apart from pottery and beads. Copper occurred in only one grave (i547), in two bracelets. ${ }^{26}$ Whether this paucity of craft goods is a result of grave robbing is impossible to determine.

## Analyses of the Predynastic graves

Although a high percentage of burials at Armant had been disturbed, very few were completely devoid of grave goods. As pottery was the most common type of grave goods, analysis of the dated graves began with it. The intent of the Armant analyses was to determine grave differentiation and changes in this through time. Although total quantity of grave goods would be the first logical choice for analysis, this could not be used as a criterion because of the substantial grave robbing at Armant.

Instead of using Kaiser's more finely divided time periods, four basic periods were created (Ic; IIa and b; IIc, IIdi, and IId2; IIIar and IIIaz), in order to distinguish broader changes through time. Tables 3 and 4 summarize the pottery analyses.

The major trend for pottery throughout Kaiser's Predynastic periods is towards an increasing mean number of pots per grave. The major change in wares throughout the Predynastic sequence is from predominantly B-ware in Ic to L-ware as the most common ware in IIIa.

In addition to the increasing number of pots per grave, another measure of differentiation would be by other grave goods. If all burials were undisturbed, the number of goods and their values (in precious to common materials) could be analysed. The presence or absence of rare materials in graves might be a valid basis for differentiation.

The first step in the analysis of grave goods other than pottery was to study the

Table 3. Mean Number of Pots in Dated Graves

| Phase | No. of graves | No. of pots per grave | Mean (st. d.) |
| :---: | :---: | :---: | :---: |
| Ic | 28 | 0-4 | I. 38 |
|  |  |  | (1.20) |
| $\mathrm{II} a-\mathrm{b}$ | 56 | 1-16 | 3.60 |
|  |  |  | (2.47) |
| IIc-d | 53 | I-20 | 5.27 |
|  |  |  | (3.55) |
| IIIa | 12 | I-17 | 8.18 |
|  |  |  | (5.17) |

Table 4. Ware Percentages for Dated Graves

| Phase | No. of pots | C (\%) | B (\%) | P (\%) | R (\%) | D (\%) | W (\%) | L (\%) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ic | 36 | 2.70 | 70.27 | 24.32 | 0.00 | 0.00 | 0.00 | 0.00 |
| IIa-b | 193 | 0.00 | 41.79 | 13.06 | 40.30 | 2.61 | 0.00 | 1.50 |
| IIc-d | 270 | 0.00 | 8.36 | 20.04 | 57.11 | 4.27 | 7.77 | 1.62 |
| III | 110 | 0.00 | 0.00 | 15.19 | 25.82 | 2.37 | $5 \cdot 3 \mathrm{I}$ | 50.92 |

quantities of materials in individual graves, but this approach was not successful given that graves at Armant were often disturbed. The graves were next analysed in terms of characterization of types of materials present, because grave robbers were rarely successful in clearing graves of all goods. Frequencies were run on sixty-five different materials present in Predynastic graves (both dated and undated) at Armant, and five groups (here called 'New Material') were established. Table 5 lists the results.

In establishing the list of New Materials, the fourteen remaining materials from Armant burials were given a value of $o$, as these were either too indefinitely labelled by the excavators (such as skin, tooth), or were common local materials (fired clay, goat bones).

Cross-tabulations were then calculated on the New Material groups by grave number. The results showed that most of the graves with New Material 1 also contained grave goods of several other New Material groups. The distribution of rare materials in all Predynastic graves was sporadic, however, and did not necessarily correspond with what could be considered the richest graves. This phenomenon can be accounted for by the random and widespread occurrence of grave robbing. Percentages of dated graves with New Materials i-5 by time period were also calculated (Table 6).

If anything, this table demonstrates higher percentages for all New Materials in Period Ic, and not a trend to richer graves in the later periods, as might be expected.

Table 5. Frequencies of Materials of Grave Goods by New Material Group

Group I Materials which occurred one to two times: amber, black resin, breccia, brecciated marble, chalcedony, galena, lapis lazuli, Mutela dubia (Nilotic shell), porcelainte, quartz, quartzite, red ochre, rose quartz, sard (dark carnelian), Spatha rubens (Nilotic shell).
Group 2 Materials which occurred three to five times: basalt, calcite, Clanculus pharaonis (Red Sea shell), crystal quartz, diorite, gesso, Natica mamilla (Red Sea shell), ostrich egg shell, resin, veined marble, volcanic ash, wood opal.
Group 3 Materials which occurred six to ten times: agate, beetle femora (Sterapis squamosa), bitumin, copper, fluorspar, garnet, gypsum, ivory, linen, malachite, Nerita polita (Red Sea shell).
Group 4 Materials which occurred eleven to twenty times: flint, limestone, Pythnia (Red Sea shell), serpentine, slate, steatite.
Group 5 Materials which occurred twenty-one plus times: alabaster, carnelian, coral (Tubipora musica), faience, fossil shell, shell.

Table 6. Percentages of Dated Graves with New Materials

| Phase |  | No. of graves | NM I (\%) | NM 2 (\%) | NM 3 (\%) | NM 4 (\%) | NM 5 (\%) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ic | Total | 28 | 10.71 | 14.28 | 10.71 | 21.42 | 35.71 |
|  |  |  | 6 | 6 | 3 | 9 | 14 |
| IIa-b |  | 56 | 10.71 | 14.29 | 8.93 | 14.29 | 10.71 |
|  | Total |  | 8 | 15 | 7 | 17 | 6 |
| IIc-d |  | 53 | 9.62 | 7.69 | 11.54 | 9.62 | 23.08 |
|  | Total |  | 5 | 4 | I | 7 | 18 |
| IIIa |  | 12 | 8.33 | 8.33 | 8.33 | 8.33 | 8.33 |
|  | Total |  | I | 3 | I | 1 | 1 |

Again, these percentages might be affected by grave robbing, as the excavators recorded a proportionately higher number of undisturbed burials among the earliest graves. Means of New Materials in dated graves were also calculated (Table 7), but seem distorted as well.

As neither an analysis of pots per grave, nor New Material percentages and means, clearly determined patterns of grave differentiation in the dated Predynastic graves, the data were submitted to cluster analysis. Cluster analyses fall into two broad categories. Agglomerative methods begin by forming individual cases into clusters and then adding the most closely related groups or cases until all cases form one large cluster. Divisive methods, on the other hand, begin with one large cluster and subsequently divide cases into smaller and smaller clusters. The latter method was deemed most appropriate for the dated Predynastic graves in Cemetery 1400-1500 because it could be run a number of times until the optimum number of clusters was reached (with characteristically different groupings, but not infinitely large or small
divisions). Specifically, the BMDP K-means clustering technique appeared to offer an excellent means of testing the hypothesis of grave differentiation at Armant and changes in this through time.

## Table 7. Means of New Materials $1-5$ by Period

| Phase | No. of graves | NM I <br> (st. d.) | NM 2 <br> (st. d.) | NM 3 <br> (st. d.) | NM 4 <br> (st. d.) | NM 5 <br> (st. d.) |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Ia | 28 | 0.2 I | 0.21 | 0.10 | 0.32 | 0.50 |
| IIa-b | 56 | $(0.67)$ | $(0.67)$ | $(0.10)$ | $(0.66)$ | $(0.87)$ |
| IIc-d | 53 | 0.14 | 0.27 | 0.13 | 0.30 | 0.1 I |
|  |  | $(0.44)$ | $(0.83)$ | $(0.43)$ | $(1.05)$ | $(0.3 \mathrm{I})$ |
| IIIa | I2 | 0.09 | 0.07 | 0.20 | 0.13 | 0.34 |
|  |  | $(0.29)$ | $(0.83)$ | $(0.43)$ | $(0.44)$ | $(0.78)$ |
|  |  | 0.08 | 0.25 | 0.08 | 0.08 | 0.08 |
|  |  | $(0.28)$ | $(0.83)$ | $(0.28)$ | $(0.28)$ | $(0.28)$ |

The BMDP K-means cluster analysis with Euclidian distance ${ }^{27}$ was chosen for several reasons. Unlike most cluster analyses, the BMDP K-means can be used on cases with missing values in the variables, which is a problem with the Armant graves, although they are fairly well recorded. In addition, the divisive method seemed better than the agglomerative one:

Divisive methods are free from the following difficulty that may often arise with agglomerative methods: in the latter the combining process is begun with the smallest units (the quadrants themselves) and these are the ones in which chance anomalies are most likely to obscure the true affinities. The result is that bad combinations may be made at an early stage in the agglomerative process and they will affect all subsequent combinations. ${ }^{28}$

Selection of variables was an important consideration, as too many variables or the wrong ones could affect the type of cluster formation. Those chosen were:
I. Total number of undecorated pots (B-, P-, R-, and L-wares).
2. Total number of decorated pots (C- and D-wares).
3. Total number of W -ware.
4. Grave size.
5. New Materials (for Period Ic only).

New Materials were recalculated for those appearing only in Period Ic, where the Armant graves were the least disturbed and rare materials of grave goods would be found (Table 8). For graves of all other periods, which were highly disturbed, New Materials were not included in the cluster analysis.

As both the means of pots and the means of grave size increased through the time

[^26]periods, these changes were thought to be significant variables for grave differentiation. Pots were also chosen for variables in the cluster analysis because they were grave goods which had not been stolen. For the cluster analysis, pots were divided into three categories, as decorated pots were rarer (and therefore probably more valued) than undecorated pots, and W -ware, with its origins as an import, was likely to have been considered of high status. A more specific itemization of wares was not used in the cluster analysis because these variables had already been used to form the groups of relative time periods. Palettes were not chosen as a variable because their mean number drops significantly through time ( 0.38 in Period Ic, to 0.06 in Period IIIa). This suggests that palettes were stolen with other valued goods in the highly disturbed later graves. Palettes as a variable in graves of Period Ic, which were least disturbed, are included as a New Material (3) variable.

## Table 8. New Materials for Period Ic Graves

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Group i Materials which occurred one to two times: agate, amber, carnelian, crystal quartz, faience, ivory, ostrich egg shell, sard.
Group 2 Materials which occurred three times: malachite, steatite.
Group 3 Materials which occurred seven times: slate.
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Cluster analysis was done using the time periods from the previous analyses: Ic, IIa-b, IIc-d, and IIIa. Using this method on four period groups offered an opportunity to view changes in grave differentiation through time. Data for the BMDP K-means cluster analysis on the Armant graves underwent $\log _{10}$ transformation prior to analysis. This transformation gave less weight to actual numbers and emphasized differences in the relationship among goods between graves. Without the $\log _{10}$ transformation, the data would be swamped by wide ranges of values, giving a large weight to cases with the highest numbers. The $\log _{10}$ transformation keeps relative distances between the values, but reduces the values to a scale of comparable ranges. K-means clustering begins with all the graves in one cluster. It then divides it into two clusters, and so on, until the predetermined number of clusters is reached. In each iteration of this procedure, a statistical centre is created and graves are allocated to the cluster whose centre is closest.

For each time period, two and four clusters were allotted to the data. With the exception of Period IIc-d, four proved to be too many, as some clusters formed with only one grave. For Periods Ic, IIa-b, and IIIa, cluster formation showed that two were the appropriate allotment for the data. For Period IIc-d, where the data are more complex, four were the appropriate allotment. Clusters formed for the dated Armant graves are listed with the variable means in Tables 9 and ı.

In Periods Ic and IIa-b there is a clear division in the clusters between a smaller number of graves with larger grave pits and higher means of undecorated wares, and a larger number of graves with lower means of these variables. The variation in

Table 9. Means of Grave Size (sq. m) and Wares in Clusters

| Date | CL | No. of graves | (st. d.) | Undec. wares (st. d.) | Dec. <br> wares <br> (st. d.) | $\begin{aligned} & \text { W-ware } \\ & \text { (st. d.) } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ic | I | 8 | $\begin{gathered} 1.15 \\ (1.67) \end{gathered}$ | $\begin{gathered} 2.87 \\ (0.78) \end{gathered}$ | $\begin{aligned} & 0.00 \\ & (-) \end{aligned}$ | $\begin{gathered} 0.00 \\ (-) \end{gathered}$ |
| Ic | 2 | 19 | $\begin{gathered} 0.80 \\ (0.26) \end{gathered}$ | $\begin{gathered} 0.65 \\ (0.48) \end{gathered}$ | $\begin{gathered} 0.06 \\ (0.22) \end{gathered}$ | $\begin{gathered} 0.00 \\ (-) \end{gathered}$ |
| IIa-b | I | 20 | $\begin{gathered} 1.27 \\ (0.60) \end{gathered}$ | $\begin{gathered} 6.25 \\ (2.38) \end{gathered}$ | $\begin{gathered} 0.20 \\ (0.40) \end{gathered}$ | $\begin{aligned} & 0.00 \\ & (-) \end{aligned}$ |
| IIa-b | 2 | 36 | $\begin{gathered} 1.10 \\ (0.53) \end{gathered}$ | $\begin{gathered} 1.89 \\ (0.75) \end{gathered}$ | $\begin{gathered} 0.09 \\ (0.28) \end{gathered}$ | $\begin{gathered} 0.00 \\ (-) \end{gathered}$ |
| IIc-d | I | 5 | $\begin{gathered} 2.93 \\ (\mathrm{I} .00) \end{gathered}$ | $\begin{aligned} & 12.00 \\ & (2.68) \end{aligned}$ | $\begin{gathered} 0.60 \\ (0.80) \end{gathered}$ | $\begin{gathered} 1.20 \\ (1.66) \end{gathered}$ |
| IIc-d | 2 | 15 | $\begin{gathered} 1.30 \\ (0.44) \end{gathered}$ | $\begin{gathered} 4.20 \\ (1.72) \end{gathered}$ | $\begin{gathered} 0.20 \\ (0.40) \end{gathered}$ | $\begin{gathered} 0.27 \\ (0.57) \end{gathered}$ |
| IIc-d | 3 | 16 | $\begin{gathered} 1.70 \\ (0.65) \end{gathered}$ | $\begin{gathered} 1.38 \\ (0.60) \end{gathered}$ | $\begin{gathered} 0.19 \\ (0.39) \end{gathered}$ | $\begin{gathered} 0.13 \\ (0.33) \end{gathered}$ |
| IIc-d | 4 | 17 | $\begin{gathered} 2.27 \\ (0.56) \end{gathered}$ | $\begin{gathered} 5.88 \\ (\mathrm{I} .37) \end{gathered}$ | $\begin{gathered} 0.18 \\ (0.38) \end{gathered}$ | $\begin{gathered} 0.59 \\ (0.84) \end{gathered}$ |
| IIIa | I | 8 | $\begin{gathered} 2.00 \\ (0.39) \end{gathered}$ | $\begin{aligned} & 10.50 \\ & (3.94) \end{aligned}$ | $\begin{gathered} 0.25 \\ (0.43) \end{gathered}$ | $\begin{gathered} 0.50 \\ (0.71) \end{gathered}$ |
| IIIa | 2 | 4 | $\begin{gathered} \text { I. } 44 \\ (0.35) \end{gathered}$ | $\begin{gathered} 2.70 \\ (1.90) \end{gathered}$ | $\begin{aligned} & 0.00 \\ & (-) \end{aligned}$ | $\begin{aligned} & 0.00 \\ & (-) \end{aligned}$ |

Table io. Means of New Materials I-3 for Clusters of Period Ic

| CL | No. of <br> graves | NM I <br> (st. d.) | NM 2 <br> (st. d.) | NM 3 <br> (st. d.) |
| :--- | :---: | :---: | :---: | :---: |
| I | 8 | 0.50 | 0.25 | 0.25 |
| 2 | 19 | $(1.32)$ | $(0.66)$ <br> $(0.40$ <br> $(1.11)$ | 0.20 <br> $(0.51)$ |
|  |  |  | 0.30 |  |
| $(0.46)$ |  |  |  |  |

means of grave size is slight, however, with the means being close to i sq. m. The close size of grave pits is probably due to the relatively small number of grave goods found in early graves and the fact that 1 sq. $m$ in an oval dimension is close to the minimum size for a flexed burial of an adult. Means of undecorated wares are higher in Cluster I of both Periods Ic and IIa-b, with a considerable increase in the mean number of undecorated ware (6.25) in Cluster i for Period IIa-b. W-ware is not found in these two periods, and C-ware (the decorated ware for Period Ic) is only found in very low proportions (in Cluster 2). In Period IIa-b, when D-ware is introduced, Cluster I has a higher mean number of decorated pottery than Cluster 2.

In terms of higher means (grave size, undecorated wares), Clusters i for Periods Ic and IIa-b, with significantly smaller numbers of graves than in Clusters 2, are dimensionally richer.

Means of New Materials $\mathbf{I}-2$ in the mostly undisturbed graves of Period Ic are also slightly higher for Cluster i. Cluster means of New Material 3 (slate, i.e. palettes) are close, but demonstrate that graves in Cluster 2 have a few more palettes than graves in Cluster I .

In Period IIc-d, when grave size shifts to proportionately larger ones, the clustering of graves is more complex. One cluster was formed with five graves which have significantly higher means of undecorated pots (i2.0) and W-ware (i.2), and a somewhat higher mean for decorated ware as well as the largest mean grave size ( 2.93 sq. m). The other three clusters, which are larger in number ( $15,16,17$ ) have considerably lower means of all wares. Cluster 4 , with the second highest means of undecorated wares and W -ware, also has the second largest mean grave size (2.27 sq. m). Basically in Period IIc-d, grave clusters are differentiated between a small number of graves with large grave pits, a high mean number of undecorated wares, and the highest mean for W -ware (Cluster I ); graves with smaller grave pits and gradually decreasing means of all wares (Clusters 2 and 3); and a third group (Cluster 4) intermediate between these two.

Like the earlier graves, graves in Period IIIa formed two clusters. Cluster i has much higher means of grave size and undecorated wares. Decorated ware and W-ware are found only in Cluster 1 . Unlike the earlier groups, a larger number of graves (eight) is in the richer Cluster 1 , than in Cluster 2 (four graves). This division of graves where there are more rich ones than poorer ones, in terms of grave size and numbers of grave goods, is perhaps due to the small size of the sample (twelve). The small number of late graves in Cemetery 1400-1500 suggests that by Period III poorer graves were located elsewhere, as use of this cemetery area ceased. Possibly late burials continued in the nearby area 1300 , where several Terminal Predynastic graves were excavated close to the present-day edge of cultivation.

To summarize, quantitative analyses for the Predynastic graves at Armant show a trend to greater numbers of pots and larger grave pits in the Period IIc-d graves. With the possible exception of graves from Period IIc-d, cluster analysis of grave goods does not show a great deal of differentiation except into two basic hierarchies (of poorer and richer graves, based on numbers of wares and relative grave size). Graves in Period IIc-d are differentiated into a greater hierarchy of clusters, the richest (and smallest) cluster showing high means of undecorated wares and W-ware, and a large grave size. While cluster analysis is basically a descriptive technique which can only demonstrate general patterns, factors other than types and quantities of grave goods may also provide criteria for hierarchies, and these factors may also have changed through time. The incomplete nature of the data base, a problem with any archeological sample, no doubt affected the quantitative results, but a lack of any overall, complex hierarchy of grave differentiation in Cemetery 1400-1500 seems to be the predominant implication of these analyses.

## Interpretation of the Armant analyses

Although most of the Predynastic graves in Cemetery 1400-1500 were disturbed to some degree, thereby making variables for a quantitative analysis incomplete, mortuary evidence does suggest a ranked society there, beginning with the earliest graves. The largest recorded grave ( 2.09 sq. m), dating to Kaiser's Period Ic, is that of a child (1461). Though highly disturbed, this is five times the size of the smallest grave of this period, 1459 ( 0.4 sq. m), an undisturbed grave of an (adult) female. In accord with its status, grave 146 I also contained five artefacts in New Material groups 1,2 , and 4. This child's burial is also larger than the largest for an adult male ( 1435 A, 1.2 sq. m), and only one other grave of this period ( 1424 , male) has more artefacts in New Material groups. While evidence is lacking for a pyramid of age and sex types of burials, a child's grave with greater energy expenditure in terms of facility and associated artefacts suggests the existence of a ranked society. According to Brown, 'as the hierarchical aspects of society increase, children will be accorded relatively more elaborate attention in proportion to the decline in the opportunity for replacement of the following generation'. ${ }^{29}$ Brown cautions, however, that grave wealth in child burials must be interpreted with reservations since inherited prestige of ranked lineages can be symbolized by this means as much as inherited authority of more ranked societies. ${ }^{30}$

Two inscribed ivory tags, commonly found at Nagada but in no other graves at Armant, also occurred in grave 1461 , perhaps as a badge of status. The presence of symbols of authority in infant and adult graves alike constitute strong evidence for inherited status. ${ }^{31}$ Evidence, then, from Period Ic suggests status and wealth ascribed from birth and not achieved through life, a characteristic of a nonegalitarian ranked society.

Symbols of rank and office occur when the sphere of authority widens and power gravitates towards individuals, with leadership superseding other statuses and dominating the mortuary symbolism. ${ }^{32}$ Only two burials (both males) in Cemetery 1400-1500 were on beds (i466, I5II), possible symbols of (village) authority. Bed burials are not known for the Nubian A-Group, ${ }^{33}$ contemporary with the Egyptian Predynastic, but a possible parallel for the high status of the Armant bed burials is found much later at Kerma. Three mud-brick tumuli, contemporary with the Egyptian Seventeenth Dynasty, contained the burials of Nubian kings on beds, surrounded by personal effects and pottery. ${ }^{34}$

Undoubtedly, the most sumptuary Predynastic burial at Armant was grave 1466, a partially disturbed burial of a male on a wooden bed, with nine pots, slate palette, gypsum vessel, gazelle skull, and three painted gesso objects (unique to Armant). The term 'sumptuary', as defined by Levy, ${ }^{35}$ refers here to social rules that limit

[^27]access to specialized artefacts to certain members within a society. According to Levy, 'sumptuary goods are those special objects which denote differences of rank, authority, and/or occupation'. ${ }^{36}$ Grave 1466 also contained nineteen artefacts in New Materials $1,2,3$, and 5, and was one of the largest graves of Period IIa-b. The other bed burial in Cemetery 1400-1500, I511, dating to Period IId, was less elaborate in terms of burial goods, but is also of a male. According to the excavators, grave 1511 was only partially disturbed. It measures I .8 sq. m in floor size, slightly below the mean grave size for this period. Perhaps in these two bed burials there is evidence for symbolized authority and power in a society which is ranked.

Another expectation of Brown's confirmed in the Armant Predynastic burials is that 'as authority increases the amount of wealth and effort expended on burial will increase'.${ }^{37}$ As the later graves at Armant were much more disturbed than the earlier ones, craft goods discovered in graves actually decreased through time. There were fewer grave goods of New Materials in the later graves than in the earlier ones. The mean number of pots in graves increased from 1.38 in Period Ic to 9.17 in Period III, however, an indication of greater effort expended on the later burials, given their state of disturbance. Not only does the mean number of pots per grave and the mean grave size (effort expended on burial) increase significantly through time, but differences in these variables within each period become more pronounced. Burials in Period Ic contained o (five burials) to 4 (1402) pots, whereas burials in IIc and IId contained I (six burials) to 20 ( 1511 ) pots, demonstrating a much greater differentiation of goods accompanying the burial. Grave size in IIc and IId varies from 0.66 sq. $m(1469)$ to 3.54 sq. $m(1466)$, whereas grave size variation in Ic has a much smaller range ( 1452 , 0.48 sq. $\mathrm{m} ; 146 \mathrm{I}, 2.09 \mathrm{sq} . \mathrm{m}$ ). With greater effort expended on the later graves at Armant, as evidenced in the pottery and grave size, the inference according to Brown's criterion is that there was a corresponding increase in authority in the Predynastic society at Armant. Through time, grave size increased much more for the high status burials than for the low status ones.

Cluster analysis of the dated burials at Armant was thought to be the best method for differentiating the burials in terms of hierarchies of grave goods. The clusters clearly distinguish two groups of richer and poorer graves in the earlier (Ic, IIa-b) and later (III) periods. In Period IIc-d, there is a greater complexity of clustering of grave types, but basically this clustering is between a small number of graves (Cluster 1 ) with large pits and high means of undecorated and W -ware, and graves (Clusters 2, 3, 4) with smaller pits and decreasing means of all wares. This seems to indicate a two-tiered, or ranked society, throughout the Predynastic periods at Armant, which does not change appreciably.

Social differentiation, in terms of burial goods, does not vary through time because the society represented by Cemetery 1400-1500 was probably no more than a farming village without an increasing number of internal hierarchies. Instead, there seems to be a continuum of relatively richer and poorer groups throughout all the Predynastic periods at Armant. Complex social hierarchies which can be

[^28]demonstrated in burials from societies organized into complex chiefdoms are not evident. Burial goods indicate a limited resource base of a small farming village. Exotic imported materials and elaborate craft goods are not very much in evidence, possibly because there was not a highly differentiated élite (in an increasingly stratified society) requiring high status goods.

It is unlikely that Armant was a major centre of exchange of exotic goods and materials in Predynastic Egypt. Compared to Nagada, its cemetery is small. Centralization forces and accompanying social stratification would not be expected to have occurred significantly at Armant. An élite class of society would have emerged at large centres like Nagada, not in small farming villages such as Armant. Possible symbolic 'badges' of status are scarce (two bed burials, and a child burial with tag-like objects).

Mortuary differentiation by age and sex, which should be discernible in the symbolic treatment of burials of both simple and complex societies, was problematic at Armant. Because of insufficient data, a discriminant analysis of differences in grave goods according to the age/sex of dated burials did not demonstrate any results, and a sociocultural model for grave types based on age/sex is not possible.

The spatial distribution of the graves in Cemetery 1400-1500 shows the later graves in the northern part of the cemetery and the earliest graves in the south closer to the edge of cultivation. In a study based on evidence from thirty societies, Tainter found that 'the presence of formal disposal areas will strongly indicate that the archaeologist has isolated individual corporate groups' practising lineal descent. ${ }^{38}$ The corporate group at Cemetery 1400-1500 was not differentiated spatially, however, except in terms of a general northward movement through time. Brown's criterion, that 'as power increases the attachment of the powerful exclusively to locations indicative of their power base will emerge' in the mortuary ritual, ${ }^{39}$ is not seen in the undifferentiated spatial distribution of graves at Armant.

The biggest change at Armant in terms of the whole complex of variables for social differentiation is seen in the two large brick-lined tombs ( 1207 and 1208 ), i.e. the introduction of an unusual grave facility. Both of these tombs contained large numbers of stone vessels in New Materials, and date to the Terminal Predynastic, Dynasty o (Petrie's SD 79-8i). It is significant, too, that tombs 1207 and 1208 are set spatially apart from Cemetery $1400-1500$. As there is nothing in the development of grave types in the cemetery (1400-1500) which anticipates 1207 and 1208 , a reasonable hypothesis is that these tomb types developed elsewhere and were introduced by forces outside the existing social order at Armant. Possibly the Terminal Predynastic was a relatively short period of time, given that there are so few graves of this period at Armant compared to those of Periods I and II.

Another possibility is that Cemetery 1400-1500 was being abandoned and graves of Period III at Armant were located elsewhere, and are now destroyed. Hassan indicates a settlement shift in Nagada III times at Nagada from the low desert to

[^29]the floodplain, coinciding with the onset of a new period of desiccation and lower Nile floods, and he speculates that Nagada III graves were also to be found on the floodplain, closer to the new settlements (personal communication).

Although tombs 1207 and 1208 at Armant are smaller than Morgan's 'royal' tomb at Nagada or tomb 347 I at Saqqâra, ${ }^{40}$ and without elaborately niched superstructures, they are none the less very different from other graves at Armant. Emery identifies the Nagada 'royal' tomb as that of Neithotep, the mother of Horaha, ${ }^{41}$ the first king of the First Dynasty, and tomb 3471 dates to the reign of Djer, who succeeded Hor-aha. Thus, what tombs 1207 and 1208 at Armant probably reflect is the imposition of royal order by the administrative hierarchy of the kings who unified Egypt at the end of the Predynastic period, and not the development of a local ruling hierarchy.

Social stratification in terms of mortuary ritual cannot be seen at Armant, although the society was differentiated into two levels from the times of the earliest Predynastic burials there, in phase Ic. Mortuary ritual did become increasingly elaborate through time (larger graves, more grave goods), but further stratification is not attested, nor would one expect this within the village society that Cemetery ${ }^{1400}$ - 1500 represents. There were figures of authority, as symbolized in the bed burials of graves 1466 and 1511, but no élite until tombs 1207 and 1208 appeared in the Terminal Predynastic.

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# THE IDENTITY AND POSITIONS OF RELIEF FRAGMENTS IN MUSEUMS AND PRIVATE COLLECTIONS 

Reliefs from Various Tombs at Saqqâra

By GALAL SHARAWI AND YVONNE HARPUR

This continues a series of papers devoted to the identification of Old Kingdom tomb fragments in museum collections. All the reliefs discussed here are shown (by dimensions, stylistic features, and other criteria) to come from Saqqâra: Brooklyn 35.640 (joining Cairo JE 40049) from tomb 920; Cincinnati 1971.28 (joining Cleveland 30.736) from the tomb of Nj- $n h-n s w t$; Cairo T.27.6.16.1-2 and JE 57179 (joining Cairo CG 1554 ) from D 52 , the tomb of Snnw-זnh; Otago E.75-5 (joining Cairo CG 1540 ) from Mrrw-ks.j Mttw; Dresden 750 and Aberdeen 1553 and 1555 from D 49, tomb of $\underline{H} n m w-h t p$.

The purpose of earlier papers in this series was to establish the identity and original positions of relief fragments, and to discuss the techniques that were used to make these discoveries. ${ }^{1}$ This paper continues the theme with a number of reliefs from Memphite tombs dating to the Old Kingdom. ${ }^{2}$
I. Brooklyn Museum 35.640

This well-executed relief shows part of a sailing boat and the corner of a butchery scene in the upper register (fig. i, upper; pl. VI, i). ${ }^{3}$ Previously, it was in the Sambon Collection (Paris), described as a fragment of a scene from the temple of Sahure at Abusir. However, this provenance is not recognized by scholars at the Brooklyn Museum, nor is it accepted by James (see n. 3). The relief is not included in the Topographical Bibliography with other fragments from the temple of Sahure. When an enlarged reproduction of Brooklyn 35.640 was placed next to an unpublished photograph of Cairo JE 40049, from tomb 920 at Saqqâra, and the boat's sail, mast, and ropes were reconstructed to their probable ending, some noticeable

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Fig. i. Brooklyn 35.640 and Cairo JE 40049.
coincidences were revealed. Not only were the reliefs seen to be of similar high quality and execution, but the lines of the sail, mast, and ropes seemed to continue from one block to the other, as if they formed part of the same vessel (fig. i, lower; pl. VI, 2). The most effective way of verifying these similarities was to join a $\quad$ : I line-drawing of Brooklyn 35.640 to the real Cairo JE 40049, and vice versa. ${ }^{4}$ Though the point of contact between the two blocks is slight, the details in fig. i match to such an extent that the fragments probably originate from the same scene in tomb 920. This may be confirmed upon the discovery of a fragment joining to the left of the Brooklyn relief, or to the top of Cairo JE 40049. ${ }^{5}$

## 2. Cincinnati Art Museum 197 I. 28

A familiar scene of daily life shows a worker pushing a plough pulled by a pair of oxen. This scene type dates back to the early Fourth Dynasty, and occurs fairly regularly in large Memphite tombs until the reign of Pepy I. ${ }^{6}$ In posture, the ploughman in Cincinnati i971.28 does not differ substantially from earlier examples (fig. 2, upper left). ${ }^{7}$ But, while most ploughmen have cropped hair and wear a short kilt or three-strip loincloth, this one wears only a short wig, having removed his kilt and tied it round his midriff. Below the plough is the upper half of a register-section showing male figures binding sheaves. The fragment must therefore belong to an agricultural sequence extending over two or more registers and including a grain harvest. The carving of Cincinnati 1971.28 is mediocre with a distinctive flattened surface. It is a style commonly found in Sixth Dynasty Saqqâra tomb-chapels, particularly from the reign of Pepy I onwards. ${ }^{8}$

On the basis of similarities in register sequence, style of execution, and the nudity of the ploughmen, Cincinnati 197 I. 28 can be linked with Cleveland 30.736 , which is known to come from the dismantled tomb-chapel of $N j-\ulcorner n h-n s w t$ at Saqqâra (fig. 2, right). ${ }^{9}$ The upper register of the newly enlarged scene now shows two ploughmen, one behind the other, and both depicted with their kilt tied round their midriff and the kilt-ends dangling over their buttocks. Such figure repetition is not unique in the context of agriculture, for it occurs in the earliest known ploughing scenes, and larger groups are depicted in late Fifth and Sixth Dynasty chapels like that of $M r r w-k ; \cdot j$, a probable elder contemporary of $N j-c n h-n s w t .{ }^{10}$ In cases of multiple repetition in the ploughing scene, the agricultural composition is generally

[^32]


Fig. 3. Cairo T.27.6.i6.I.
on a long wall and the ploughing phase is expanded to match the width of subsequent phases in the sequence. This point may be worth remembering when the reliefs of $N j-\lessdot n h-n s w t$ are reconstructed on the basis of similar and contemporary compositions.
3. Cairo Museum T.27.6.16.1-2

According to the Temporary and Special Registers of the Egyptian Museum in Cairo, these blocks were bought at Abusir and may therefore come from the same tomb. Both are carved in low relief, of a quality and type that suggests a date in the first half of the Fifth Dynasty. T.27.6.r6.i shows the upper half of five female estates, each facing left and carrying a basket of food on her head (fig. 3). The right arm of a sixth estate is visible at the right edge of the fragment, while the upper part of an estate inscription is visible between each figure. Above the group is a wide band of uncarved stone, indicating that the estates were originally in the uppermost register of a composition, but there is no clue as to where they were positioned within this register. T.27.6.i6.2 comes from the extreme right of the uppermost register of a different composition (fig. 4). It shows a large oryx, a gazelle coaxed forward by a herdsman, and an ibex restrained by another herdsman, who pulls on a rope tied round the animal's neck.

The distinctive form of the estate inscriptions was the key to the identity of T.27.6.16.1, for Auguste Mariette had copied a similar inscription during his excavations at Saqqâra. ${ }^{11}$ When his text was compared with fig. 3, the reading of the estate names became obvious: each is compounded with the name of Snnw-‘nh, the owner of tomb D 52 at Saqqâra. The relief fragment is the left section of a procession of fourteen estates once depicted before the deceased on the north corridor wall of his chapel. Owing to Mariette's sketchy description of $D$ 52, the position of

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Fig. 4. Cairo T.27.6.16.2.
T.27.6.16.2 is less clear. However, assuming that the relief belongs to Snnw-¢nh, its width and orientation best correspond with the scenes on the corridor's south wall, opposite but further west of the estates described above.

## 4. Cairo JE 57179

In the upper register the lower half of a seated major male figure dressed in a short pointed kilt is depicted (pl. VII, i). His right hand is extended towards an offering table while his left elbow is bent in a manner which suggests that his hand is probably clenched to his breast. All that remains of the offering table is its left edge, on top of which are two slender loaves of bread, curved towards the right. The lower register shows the left end of a text relating to a butchery scene. Directly under this a man cuts the haunch of an ox, while further right a second figure holds the animal's leg in an upright position. Only the hands, forearms, and a foot of this man are preserved. The butchery scene is depicted above a wide raised baseline, followed by a clear area of equal width and the remains of a second raised baseline. This is rare in private tombs, since the base of the lowest register is normally defined as a single line below which the stone is left bare or painted with coloured bands. ${ }^{12}$

The identity of JE 57179 was established by means of the distinctive break on the right-hand edge of the block, for only one Old Kingdom scene is known showing an offering table with its left edge broken away and with a butcher minus his forearms in the register below. This is Cairo CG 1554 (Special Register 15182), which comes from the north-west wall of the Saqqara chapel of Snnw-rnh (pl. VII, 2). ${ }^{13}$ JE 57179 and CG 1554 therefore belong to the same tomb as T.27.6.i6.i and perhaps

[^34]

Fig. 5. Otago E. 75.5 and Cairo CG 1540.
T.27.6.r6.2, discussed above. The present reliefs come from the offering room of D 52 whereas the latter blocks are probably from the chapel's corridor, and are not necessarily the work of the same craftsman.

Shortly after this discovery the identification of JE 57179 was confirmed through a sketch published by Borchardt. ${ }^{14}$ Evidently, the true position of the block was known when he wrote his catalogue, but CG 1554 was displayed in room 32 of the Egyptian Museum without JE 57179, and no record was kept of the latter's identity. This explains why its scene contents are described in PM III, yet its present location is not stated.

## 5. Otago Museum, Dunedin E.75.5

This is a fragment of a butchery scene, carefully executed in medium raised relief (fig. 5, left; pl. VIII, i). To the left is a man, probably leaning forward to remove the leg from a carcase, while to the right is part of a second butcher with a severed animal's leg slung over his shoulder. The hieroglyphs between these figures are dwarfed by an enclosed band of inscription above, mentioning the Festival of Sokar; no doubt this was part of a text originally extending the full length of the register. The enclosed text and its well-formed signs immediately limits the number of tomb-chapels to which Otago E. 75.5 could belong, for very few butchery scenes are inscribed this way. Furthermore, a festival inscription within an enclosed band occurs on a stylistically similar relief in the Egyptian Museum, CG 1540 (fig. 5, right; pl. VIII, 2), ${ }^{15}$ which shows a butchery scene below a register of bearers. On the

[^35]far left are the left shoulder and back of the head of the butcher depicted with a haunch on his shoulder on Otago E.75.5, and just above him is the join in the text, which concludes with the name, Mrrw-k $3 \cdot j: M t t w$. According to the Topographical Bibliography, this man was the owner of a tomb in the cemetery north of the Step Pyramid at Saqqâra. ${ }^{16}$ Otago E.75.5 can therefore be added to the three reliefs already known to come from his chapel.

## 6. Dresden Albertinum Inv. Aeg. 750

Dresden Inv. Aeg 750 is a painted raised relief carved on good quality limestone and probably dating to the second half of the Fifth Dynasty (fig. 6, upper left). ${ }^{17}$ Four registers are visible, but only two of these are well preserved: a butchery scene in register two, and a grain harvest in register three. A line on the left of the fragment proves that the scenes were depicted at the left end of a wall, but there is no indication of the place of the relief within the composition. In register one there was perhaps a line of bearers, while register four showed one of the later phases of the agricultural sequence. Above the workers in this last register is a line of inscription identifying their activity as a threshing scene. ${ }^{18}$ The outer figures are therefore at the edge of the threshing floor while the figure between them is in the centre, urging the animals on.

Few agricultural sequences include the threshing scene at the end of a wall, and only one of these is in fragmentary condition, namely, that in the Saqqâra chapel of $\underline{H} n m w-h t p$ (D 49). In this scene there is a now headless man facing a group of donkeys and brandishing a stick that appears to be broken off at the top. When this line-drawing was enlarged and matched to a photograph of the lowest register of Dresden Inv. Aeg. 750, the position of the man and his stick and the distance between them were found to correspond (fig. 6, lower left). ${ }^{19}$ Unfortunately, since the present location of this relief is uncertain, the join cannot be confirmed by direct measurements or stylistic comparison with Dresden Inv. Aeg. 750. The Dresden fragment nevertheless bears such a marked resemblance to other reliefs from D 49 that the possibility of a connection is very strong. An interesting postscript to this identification is provided in an article by Malek, ${ }^{20}$ according to whom another fragment (Dresden Inv. Aeg. 749) might also belong to the chapel of $\underline{H} n m w-h t p$, for it is similar to other reliefs in D 49 and depicts a major male figure accompanied by a woman who probably bears the same name as $\underline{H} n m w-h t p$ 's wife, $H n t t-k ; j$. Dresden Inv. Aeg. 749 and 750 were both purchased by Reinhard in 1898 , together with a

[^36]
Fig. 6. Dresden 750 (upper left), Aberdeen 1555 (upper right), Aberdeen 1553 (lower right), Saqqâra D 49 (lower left).
third block, Inv. Aeg. 75 1. ${ }^{21}$ Thus, it seems likely that all three reliefs come from the chapel of $\underline{H} n m w-h ̣ t p$ at Saqqâra.

## 7. Anthropological Museum, University of Aberdeen, 555

This is one of a number of unpublished Old Kingdom reliefs in Aberdeen, formerly in the Grant Bey Collection (pl. IX, r). ${ }^{22}$ The upper register shows the kilt hemlines and legs of three bearers, all facing right, and at least one of them carrying two large chunks of meat. Next to them is part of the leg of a fourth figure, evidently leaning towards the left. The scene content suggests that he is bending over a slaughtered animal from which several offerings of meat have just been cut. In the lower register is a text relating to a grain harvest, and directly below this are the feathery tips of uncut grain, sloping downwards towards the right. The inscription must have continued, because part of a broken hieroglyph is visible at the block's left-hand edge. A few red-brown loops are painted just below this sign, but these have no apparent connection with the text above.

A detail leading to the identification of Aberdeen 1555 was the position of the butchery scene above the grain harvest on Dresden Inv. Aeg. 750, for this order of scene types is rare in Old Kingdom tombs. A photograph of Aberdeen 1555 was matched against the Dresden relief and found to join directly to the butchery scene depicted in its second register (fig. 6, upper right). The bending leg belongs to one of the two butchers cutting a carcase; the damaged hieroglyph is the edge of the $n$-sign of an inscription exactly paralleled in the harvest scene of $R \subset-m-k ; \cdot j ;{ }^{23}$ the distinctive grain heads are the same shape as those cut by the workers in Dresden Inv. Aeg. 750. Directly below the horned viper on Aberdeen 1555 there is a gap indicating the point where grain is being bunched and cut by the first harvester in the Dresden relief. If any further proof were needed to establish this join, it comes in the form of two red-brown marks above the head of this figure. These are the remains of two tiny loops, preserved with greater clarity below the inscription on Aberdeen 1555.

## 8. Anthropological Museum, University of Aberdeen, i 553

Also from the Grant Bey Collection, (pl. IX, 2), ${ }^{24}$ this bears a striking resemblance to the relief just described, but there is no record that they come from the same tomb. The upper register shows the remains of two harvesters cutting a crop which is taller than their stooped bodies. Each head of grain has a bushy top, and those on the left are considerably higher than those on the right. The better-preserved harvester has an elongated torso and a relatively small head. Much of his skin colour is intact, as is the white paint on his kilt and upper garment. The scene depicted may be one of

[^37]grain transportation, here showing two men with a donkey loaded with bundles of sheaves.

Since Aberdeen i 555 had already been matched to the right end of Dresden Inv. Aeg. 750 it seemed logical to compare the present relief with these two fragments. The stylistic similarities were immediately apparent, as were the size and rendering of the grain heads. Furthermore, the transport scene fitted well with the subject in the lowest register of the Dresden fragment, for the men are oriented towards the threshing floor as if bringing sheaves to be trampled. Perhaps the most decisive point, however, was the gradual downward slope of the grain heads depicted on Aberdeen 1553 . This feature is not attested in the intact harvest scenes of Old Kingdom date, yet it occurs on Aberdeen 1555 from one side of the fragment to the other. Collectively, these details suggest that Aberdeen 1553 shows two figures in the same harvest scene as the one depicted in the Dresden relief, and that these workers were just below the sloping grain ears preserved on Aberdeen 555 (fig. 6, lower right). Leaving sufficient space for the stalks being cut by the foremost figure on Dresden Inv. Aeg. 750, the damaged harvester on Aberdeen 1553 should be placed below the third njwt-hieroglyph. At this point the grain heads slope sharply downwards, reappearing in full to the right of the first grain cutter on Aberdeen I 553 .

The significance of the threshing scene in the chapel of $\underline{H} n m w-h \underline{t p}$ at Saqqâra is made abundantly clear by these discoveries. If this scene joins to Dresden Inv. Aeg. 750 , both of the Aberdeen reliefs must belong to the same composition.


1. Brooklyn 35.640 (pp. 57-9) (courtesy of the Brooklyn


I. Otago E. 75.5 (pp. 63-4)

2. Cairo CG 1540 (pp. 63-4)

I. Aberdeen 1555 (pp. 66-7)

3. Aberdeen 1553 (pp. 66-7)

RELIEFS FROM VARIOUS TOMBS AT SAQQÂRA

# ZOOARCHAEOLOGICAL OBSERVATIONS ON THE SLAUGHTERHOUSE OF MEKETRE* 

By ALLAN S. GILBERT


#### Abstract

Among the models recovered by the Metropolitan Museum of Art Egyptian Expedition from the Middle Kingdom tomb of Meketre at Thebes are three that deal with the management and slaughter of cattle. These appear to represent a programmatic illustration of the consecutive stages in beef production. The scenes depicted-inspection, fattening, and butchery-resulted in the provision of meat to nourish the soul of the deceased, but they probably also reflect to some extent aspects of real beef cattle husbandry as it was conducted on the estate during his lifetime. Presuming that the models are constructed to scale and are accurate in detail, further analysis from a zooarchaeological perspective furnishes additional information about their potential meaning. Conclusions based upon study of the models are offered only as hypotheses, however, and must be tested against archaeologically recovered fauna from Egypt.


## Introduction

Onif March 1920 the Metropolitan Museum of Art Egyptian Expedition came upon a most fortunate discovery. While clearing out the corridors of a previously explored but as yet unidentified tomb in western Thebes, preparatory to mapping, an intact deposit of tomb models was uncovered. ${ }^{1}$ The models belonged to the Eleventh Dynasty Theban noble Meketre, an important figure during the reign of Nebhepetre Mentuhotep, who bestowed numerous honours and offices upon the deceased. Meketre died most likely during the reign of the next pharaoh, Sankhkara Mentuhotep, the interment taking place sometime around 2000 BC. A suite of three models from the total of twenty-four recovered depicts scenes involving the care and handling of cattle, provided apparently for the dead man's post-mortem repasts. Presumably, they reflect the passage of similar events during the real life of the noble on his estate. It is with these three models-but especially with the third, which represents a slaughterhouse-that the present paper is concerned.

Reviews of ancient Egyptian slaughter practices ${ }^{2}$ and the role of cattle in the Nile economy ${ }^{3}$ have appeared in print, but no duplication of these studies is intended here. This reconsideration of tomb models thirty years after their original

[^38]publication seeks rather to introduce new comparative data. Since the models graphically illustrate activities that contribute to the formation and deposition of faunal debris within archaeological sites, they should be amenable to further analysis using, in addition to formal and stylistic attributes of the models themselves, other sources of information about ancient animal exploitation practices. Although the kitchen scraps discarded by Meketre's real-life stewards are unavailable for comparison, animal remains from other middens at coeval sites in the Near East as well as an extensive body of zooarchaeological research are well within reach. Several points of congruence between the sculptures and zooarchaeological data are demonstrated in the following paragraphs. They provide further insight into the activities portrayed by the models, supplementing the careful work of Herbert E. Winlock in his classic monograph of 1955 and providing alternative hypotheses for consideration that spring from an expertise in the more technical aspects of husbandry and zoological anatomy.

## The findspot

Plundered in antiquity, Meketre's tomb (Theban tomb 280) comprised two parallel corridors penetrating into the limestone of a valley slope at Deir el Bahari. Opening behind a nine-column portico that formed the tomb façade, the double corridors led some 20 m into the cliff, giving access to double funerary chapels that were joined by a communicating tunnel. Each chapel had its own burial crypt beneath the floor. Although the identities of the tomb's former occupants were unknown to French investigators who surveyed the structure in $1895,{ }^{4}$ the finds of 1920 suggested to Winlock, the American excavator, that Meketre had been laid to rest at the end of the southern corridor, and that eventually he may have been joined in his eternal abode by his son, Inyotef, possibly interred to the north.

The statue chamber, or serdab, containing Meketre's models lay concealed beneath the floor of the southern corridor, about half-way along its length. ${ }^{5}$ Into this chamber, 3 m on a side and I .5 m tall at its highest point, were probably placed the overflow of items that did not fit into the main burial vault. Since the rest of the tomb was picked clean, however, there was no way to reconstruct the complete assemblage of grave goods or to determine how representative the recovered collection was with respect to the original.

## The models

An inventory of the twenty-four models retrieved suggested three functional groupings ${ }^{6}$ to Winlock: (a) scenes from the noble's estate, perhaps representing everyday activities that the dead man would enjoy as in life; ( $b$ ) bearers of offerings to honour the deceased; and $(c)$ boats with full crew for excursions by his soul.

[^39]The three models dealing with cattle belong to the first group and appear to form a continuous narrative describing the process whereby animals are chosen for slaughter, fattened, and finally killed and butchered. Reconstruction of damage caused by roof spalls and age was accomplished by the expedition in Egypt, and of the three cattle-related models, only the first was in need of substantial repair.

Although the first model in the series is in the Cairo Museum and could be studied only from photographs, the writer was able to examine the other two models in the Metropolitan Museum in New York, where they are on gallery display in a humidity-controlled glass case. With supplemental lighting, it was possible to confirm the accuracy of Winlock's descriptions while focusing on the more significant zooarchaeological details. The models are described as follows.

## (a) The cattle review

Model C, the cattle review, is the largest and most elaborately designed (pl. X). ${ }^{7}$ It shows Meketre seated beneath a tented pavilion upon a dais built against a high screening wall that may have enclosed the foreground as a private courtyard or cattle pen. The precise location is unclear, but the scene may have taken place upon the noble's estate. Surrounded by servants and retainers, Meketre inspects his cattle as they are paraded before him in the yard. Winlock interpreted the scene as representing the official counting of head for tax purposes. ${ }^{8}$

The animals are all common domestic cattle, classed as Bos taurus and representing the indigenous domesticated bovine of Eurasia and North Africa (pl. XIII, i-3). Winlock remarked that: 'Food cattle were far smaller than the great, massive bulls which hauled stone on sledges', 9 and this observation, based upon representations in which size can be judged due to reliable scale, would imply that Meketre's animals were beef cattle, quite small in comparison to their human overseers. Eighteen of the nineteen cattle on model C average 13.2 cm in height at the shoulder compared to the average height of 22 cm for the twenty-six men depicted. If the people averaged $165.1 \mathrm{~cm}(5 \mathrm{ft} .5 \mathrm{in}$.) in reality, then withers height on the animals would have been approximately 99 cm or $39 \mathrm{in} .{ }^{10}$

[^40]It is also possible, however, that the parading cattle are young and are thus rendered relatively smaller than mature size. Further, it is clear from the sculptures that they are males. Quite possibly, the animals represent a cohort of weanlings, born during the same calving season and removed as a group from their nursery herd for inspection as eventual candidates for slaughter and beef production. Because only a few males are needed to maintain the fertility of an entire domestic herd, pastoralists tend to keep high ratios of cows to bulls. In East Africa, for example, most young males are castrated, then fattened for slaughter or sale. The practice allows selection of favourable traits in the stud, while it helps to eliminate excess males before they consume expensive amounts of fodder or forage. The herd thus becomes heavily oriented toward potentially breeding and milking females. One bull can service up to fifty to sixty cows, but the ratio varies, and extra bulls are frequently kept as insurance against loss. ${ }^{11}$

Meketre's herds probably were similarly maintained in order to maximize the number of cows for breeding while providing a steady source of meat from the yearly kill-off. Since individuals culled for slaughter would likely have been young males (and, back on the estate, possibly also some of the generally tougher tasting older females that had advanced in age beyond efficient breeding), it follows that they would indeed have appeared substantially smaller in artistic representations than the great and powerful traction beasts that moved building materials.

Weaning time in modern cattle is often a matter of breeder's policy; nine months is recommended, but in practice, ages range through the second half of the first year and even later. ${ }^{12}$ Since weaners must be trained to become independent of the cow and to forage on their own, they are often herded with a mature male or bullock to convey the appropriate behaviour by example. ${ }^{13}$ The presence of a large black bull to Meketre's right, standing well above the average height of the others, would be consistent with this picture. Measuring 17 cm on the model, he would have been about 127.6 cm or 50 in . at the shoulder in real life. Alternatively, one could interpret this animal as a principal stud from Meketre's herd, pulled along under tight control with a cord fastened to his lower jaw. It would not be unexpected to find a sculpture

[^41]of Meketre's prize bull, perhaps the sire for many of his best beef cattle if not the father of the paraded animals, included among his afterlife possessions.

In colouration, the cattle are quite varied. Twelve are piebald and three show a black-on-white speckling that Winlock referred to as 'a pepper-and-salt breed'. ${ }^{14}$ The remaining three animals are either solid black or red. Most of the horns are oddly straight, emerging from the skull at various angles between 45 and 60 degrees to horizontal. Several of the lead animals possess horns with a more typical bovine curve: a lyre-like $U$-shape with tips flaring slightly. ${ }^{15}$

Four scribes seated to Meketre's right on the dais appear to be taking notes on the procession. As Winlock suggested, they may be recording the number of cattle (in multiple copies, apparently) as part of the tax assessment process. ${ }^{16}$ But possibly, they are engaged also in additional accounting tasks that may relate more directly to the following models in the tomb series, tasks such as selection of individuals for slaughter, scheduling of animals for finishing in fattening stables, fodder estimation and allocation over succeeding months, or other operations related to herd maintenance. Similar indications of complex pastoral bookkeeping are known from Mesopotamia. ${ }^{17}$

For the moment, an accurate interpretation of the cattle review is not possible. The scene may represent head counting, inspection of future beef stock, or both, and the animals' small size may relate to breed characteristics or immaturity, the latter possibility suggesting that the group is a cohort of weanlings.

## (b) The fattening stable

Model D is in the form of a stable, ${ }^{18}$ consisting of front and rear compartments ( pl . XI, I-2). The back room has a wall-length manger from which four obese cattle

[^42]stand and feed. They are noticeably heavier than the cattle of the preceding model and were doubtless specially chosen for fattening, which by now is well under way. Finishing may have been a complex multi-stage process, and if so, stall feeding was probably the last component, since it purposefully restricts the animals' movement, limiting muscular exertion and useless expenditure of consumed calories. The final step in this process would appear to be represented by the activities in the front enclosure, possibly a courtyard. Here, two animals are being force-fed by attendants who pull at ropes fixed to their lower jaws to keep up the chewing. One beast is too fat even to stand, and so it continues to gorge itself in a kneeling position. Winlock identified the fodder as a basket containing grain and a pile of straw, corresponding closely to the recommended modern dry season feed preparation of bulk hay for roughage with a protein supplement of cereal. ${ }^{19}$

A doorkeeper with sceptre sits near the wooden door, which swings on wooden pins lodged in projecting parts of the wooden door frame. He may be guarding against unauthorized entry as Winlock suggested, ${ }^{20}$ or he may be there to guarantee that his master's cattle were fattened according to instructions and did not leave for the butcher's shop before reaching peak condition. Such surveillance could have been commonplace on the estate also, but for his afterlife, Meketre may have desired the extra assurance of quality control throughout eternity.

Winlock remarked that only in the stable model were the doorsills painted red to represent wood instead of white to indicate limestone. ${ }^{21}$ Although the stable was probably brick built and plastered to be less heat conductive, the use of wooden thresholds may reflect the need for softness to prevent hoof injury to passing animals. In ancient Egypt, wood was certainly the more expensive commodity, but it would have been a small price to pay to avoid sorefootedness, the pain of which frequently distracts an animal to the point of seriously affecting its eating behaviour and mating performance:

Two of the stable animals are piebald. The others, including the two being fed by hand, are solid in colouration. The horns are distinctly bovine, curving in a simple arc either down, or medially so that the points approach each other. The animals at either end of the manger, a brown and a piebald, appear hornless and thus were probably polled. Modern cattle are frequently dehorned mechanically, usually within the first year. The procedure involves the use of pincers or saw to remove the horny sheath and underlying bony core. If a small circular strip of skin is removed as well from the base of the core, induced hair growth soon covers the wound. ${ }^{22}$ Without horns, animals jostle each other less, especially when watering, competition is reduced, and goring, which can lead to stock injury and blemished hides, is

[^43]prevented. ${ }^{23}$ Animals can also feed closer together at the manger, but since only a few stall feeders are hornless in the model, it appears that Meketre's handlers did not poll specifically for easier stabling. The reason why only some animals should be missing their horns at this stage in the finishing process is unclear. ${ }^{24}$

The apparent absence of organs in the genital region of the stabled cattle suggests that castration may have been performed. ${ }^{25}$ Traditional forms of castration, in which sex organs are rendered dysfunctional for both gamete excretion and hormone secretion, have different effects depending upon the age at which the operation is performed. If the bulls reviewed by Meketre in the cattle yard were weanlings, and if the stable model depicts them at least several months into a finishing programme that began soon after weaning, it would be reasonable to presume that castration, if it was done, came late in the first or early in the second year. In such a case, one might predict the developmental results with reasonable accuracy.

With testosterone secretion halted, the metabolic and somatic effects usually include delayed ossification of the long bones (thinning and attenuating them), elongated and fine-boned cranial construction, relatively weak muscle development, but a more delicately textured and flavoured meat lacking the strong odour and taste characteristic of bulls. In addition, inhibiting functions often predominate over aggressiveness and excitability in the steer's nervous system, creating a temperament more conducive to handling. ${ }^{26}$ Further, lowered oxidation and improved

[^44]carbohydrate assimilation tend to favour fat deposition over muscle, and, although resulting body form modifications can vary from breed to breed, a steer would probably exhibit greater loin development than a bull, which normally grows larger in the forequarters. ${ }^{27}$ In most experiments with modern breeds, steers process rough pasturage better than intact males but generally weigh less than bulls at slaughter time since their food conversion ratio is less efficient during final stall feeding. ${ }^{28}$ Despite their slower weight gain, steers will usually show greater carcass yield under proper management conditions because of their increased fat deposition and reduced skeletal mass. A higher carcass yield, together with the added benefits of better taste and easier handling would logically tend to favour castration as a management option for beef production. ${ }^{29}$

If castration is performed later in the life of a young bull, after secondary sexual characteristics have appeared, the effects will likely have less impact on anatomy, although metabolic and sex-linked behavioural changes will remain throughout the individual's lifetime. Under good management, puberty in cattle begins between twelve to eighteen months after birth, with a low plane of nutrition often delaying its start to as late as twenty months. ${ }^{30}$ Estimating age of castration based on the carved body form of Meketre's stable cattle would be highly speculative, but based on the logic of modern beef production, one might come to the following conclusions: (i) since the animals reviewed by Meketre in the first model are small and still sexually intact, they are presumably young and possibly newly weaned; (2) since the stable animals appear to have been castrated, and since such an operation would yield diminished advantages-from a contemporary cattle breeder's perspective-if performed after puberty, one would expect it to have been done closely following the review but before the onset of secondary sexual development, i.e. between nine and twelve months of age in the ideal. It would be risky to assume that modern standards of beef management are universal, however, and a late castration for reasons of ritual or cultural preference should not be ruled out.

The stabled cattle are large as well as fat. The brown hornless animal at the manger is 15 cm at the shoulder ( 112.6 cm or 44 in . in real life), but the rest average 18 cm (i35.1 cm or 53 in .), larger even than the bull in the cattle procession. Post-weaning growth rate is quite rapid in cattle, and since this trait is highly heritable, it can easily be selected for in breeding programmes. ${ }^{31}$ If this size difference between the cattle of the review and stable models is not to be explained as due to variation in scale, then it should perhaps be taken literally as indicating speedy weight gain during the finishing process. But, there is also the possibility

[^45]Table I

| Age of calves |  |  |  |  |  |
| :--- | :--- | ---: | :--- | :--- | :--- |
|  | Birth | 36 wks. | 1 yr. | 2 yrs. | 3 yrs. |
| Males | 24.5 | 94.0 | 147.9 | 279.0 | 430.9 |
| Females | 21.3 | 108.9 | 147.0 | 247.7 | 336.1 |

Growth of native cattle (Bos taurus) from Mpwapwa, Tanzania, in kilograms. From M. H. French, Veterinary Record 55 (1943), 308.
that the fattened cattle have been slightly exaggerated in size to flatter the dead man's larder.

Hypothesizing that no exaggeration exists and that each of the cattle-related models is based on a standard scale, one might conclude that relative size increase from the moment of review through the final finishing in the stable would be about 36 per cent. Unfortunately, the time interval between review and stabling cannot be known for certain, and thus the observed growth might have occurred over a period of some months to nearly a year, when the next cohort of calves would become available for processing. Cattle held under extensive management systems in East Africa are frequently prepared for slaughter at the age of five, and under such a management option, up to four years of range feeding would separate weaning from yard or stable finishing.

Assessing the extent of growth in Meketre's animals compared to modern cattle is also difficult. Since different breeds can vary greatly in size, the beef industry world-wide tends rather to use weight as a measure of relative increase. During the developmental years, weight increase is largely accounted for by growth in size, such that some correlation between size and weight may be expected. With castration and an elevated feed regimen, however, intensive weight gain results in increased bulk rather than size, making comparison of centimetres to kilograms unwarranted. Field statistics from modern livestock will thus be difficult to interpret in juxtaposition to the size data obtainable from the models.

A rough idea of relative weight gain can nevertheless be obtained from modern East African cattle. Table i compares liveweights for male and female Ankole calves at Mpwapwa, Tanzania. Late-maturing native range cattle, the cows calved at three and a half to four years of age, and steers were finished for slaughter at age five. ${ }^{32}$ It is not unusual for slow maturing range-fed animals to be allowed four or five years of gradual weight gain before fattening. ${ }^{33}$ If Meketre's cattle were kept similarly, one might expect weaning weight to be in the neighbourhood of 100 kg . With the closer supervision, yarding, and supplemental feeding typical of a modern ranch

[^46]Table 2
A. High plane of nutrition

|  | $n$ | Birth <br> weight | Weaning <br> weight | 132 week <br> slaughter <br> weight | Per cent <br> increase | Dressed <br> carcass <br> weight |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Boran zebu <br> Tanganyika <br> shorthorn zebu | 6 | 27.2 | 192.3 | 414.6 | 115.6 | 256.3 |

B. Low plane of nutrition

|  | $n$ | Birth <br> weight | Weaning <br> weight | 132 week <br> slaughter <br> weight | Per cent <br> increase | Dressed <br> carcass <br> weight |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Boran zebu <br> Tanganyika <br> shorthorn zebu | 8 | 27.2 | 183.3 | 348.8 | 90.3 | 190.5 |

Birth, weaning, slaughter, and carcass weights in kilograms of Boran and Tanganyika Shorthorn Zebu steers (large and small Bos indicus, respectively) kept at two different levels of nutrition. From K. Meyn, Beef Production in East Africa (Munich, 1970), 138.
or experimental breeding station, higher weaning weights are likely, perhaps approaching $150-90 \mathrm{~kg}$ as displayed in Table 2 for zebu steers. (Zebu interbreed with all domestic cattle but are often classed separately as Bos indicus.) Here, per cent weight gain from weaning to slaughter varies between 90 and i io per cent; per cent size increase would be less, but by no easily predictable amount.

## (c) The slaughterhouse

Model E is the butchers' shop (pl. XII, r-2). ${ }^{34}$ Its roof, which rested on cross-beams supported by round wooden columns, was removable and revealed a light and airy interior space. The slaughterhouse was the tallest building model. If the men in the model, averaging 22 cm in height, were again 5 ft .5 in . tall in real life, then the dimensions of the original structure would have been:

| Height at rear | $3.4 \mathrm{I} \mathrm{m}(\mathrm{I} \mathrm{ft} .2 \mathrm{in})$. |
| :--- | :--- |
| Height at front | $3.86 \mathrm{~m}(\mathrm{I} 2 \mathrm{ft} .8 \mathrm{in})$. |
| Length | $5.70 \mathrm{~m}(\mathrm{I} 8 \mathrm{ft} .9 \mathrm{in})$. |
| Width | $4.35 \mathrm{~m}(14 \mathrm{ft} .3 \mathrm{in})$. |
| Interior area (approx.) | 20 sq. $\mathrm{m}(225 \mathrm{sq} . \mathrm{ft})$. |

Meketre's facilities might not have corresponded exactly, since there is no guarantee of accurate scale between people and architecture in the model. Whether or not the
${ }^{34}$ MMA 20.3.10; Winlock, Models, 23-5, pls. 18-19, 60-1.
size relationships are to be trusted, the features are clearly functional and thus likely to be authentic in general. The high ceiling, for example, slopes upward toward the front where the uppermost part of the wall is perforated by a large clerestory-like opening. The improved air circulation of this building design apparently aided the cooling and drying of meat, and already butchered cuts are seen hanging from two ropes strung across a rear balcony. ${ }^{35}$

Butchering takes place on the ground level where two overseers with sceptres supervise the slaughter of two obese cattle, one black and white piebald and the other plain red, and the plucking of a duck. Both bovines appear to be castrates, but although the position of the head partially obscures the horn area, animals still possess their horns. The overseer standing beside the stairway leading to the rear balcony, holds in addition a writing palette and white papyrus scroll upon which are possibly written the work orders detailing instructions pertinent to the ongoing activities. Two butchers have already trussed the four legs of the cattle, pushed them over on to their side, twisted their head back exposing the throat, and cut deeply across using long, straight-backed knives with a convex blade.

Blood gushing from the wounds is caught by two assistants holding bowls. Evidently, the blood was transferred to larger bowls set into two large earthenware braziers in the corner. While attendants fan the fires underneath, the blood cooks, eventually thickening into black pudding. ${ }^{36}$

[^47]Although the procedure is not fully illuminated by the model, the following details inform somewhat on the possible nature of the blood-cooking process.

With vertical drainage out of a hanging carcass, about $16-17 \mathrm{~kg}$ of fresh blood can be extracted from a steer. ${ }^{37}$ Animals bled while lying flat as illustrated in the model would drain less efficiently as a result of poor gravity flow, and much blood would remain in the interior vessels. In modern meat packing, proper bleeding is necessary to avoid souring, which is brought on by remnant blood providing a site for bacterial growth. ${ }^{38}$ Egyptian beef, therefore, could have been fairly bloody and on the sour side judging by today's standards.

Because fresh blood spoils very quickly, it must be processed promptly. Furthermore, clotting begins immediately upon exposure of the blood to air, and agitation is necessary to prevent the clots from solidifying. ${ }^{39}$ Nearness of the braziers to the slaughtering floor implies that speedy transfer of the blood from the collecting bowls was desirable in ancient Egypt, perhaps for the above reasons.

Cattle blood is composed of approximately 32 per cent cellular matter suspended in liquid plasma making up the remaining 68 per cent, ${ }^{40}$ and cooking of the whole blood yields a coagulated product having the consistency of fresh liver. ${ }^{41}$ By itself, the cellular matter of cattle blood becomes dry and powdery upon cooking, but if substantial clotting has not occurred, proteins in the plasma will boil down to a thick, pale yellow gelatinous material resembling cooked egg whites, which retains its solidified form even under renewed heating. ${ }^{42}$ There is no indication from Meketre's model that solids were separated from plasma, and therefore the anticipated product would be a jelly-like mixture, dark reddish-brown in colour, that may have been seasoned after the initial cooking.

The overseer standing near the door to the shop has dipped his sceptre curiously to touch the shoulder of the assistant who catches the blood of the piebald animal. Winlock suspected that the assistant might be receiving a scolding for some wrongdoing but concluded that the arrangement was mere chance. ${ }^{43}$ Since the roof of the model had protected it from damage and rearrangement of the figures by accident, and the act seems quite deliberate, one can only wonder whether the overseer's gesture has some significance, either as a supervisory command, or a ritual posture related to the death stroke or to the gathering of the animal's blood. That slaughtering had sacred implications to Egyptians is clear from the presence in some tomb representations of the wrb, or 'pure one', who occasionally supervised sacrificial killings and tested the blood for purity. ${ }^{44}$

On the balcony above the workers hang the cuts of meat from previous butchering. Since the original cords had fallen apart, the small wooden pieces were

[^48]

Fig. I


Fig. 2

Tomb of Ukhhotep. Drawn from A. M. Blackman, The Rock Tombs of Meir (London, 1915), pls. II, VI.
restrung in the order in which they were found on two parallel lines of equal height. The cuts are painted reddish-brown after the colour of muscle tissue and are represented by three different shapes.

Two large flat pieces with pronounced curvature are doubtless sides of ribs. Thin lines painted in white indicate the positions of the bones.

Four circular cuts with what appear to be bone ends protruding at opposite sides are probably whole rounds and shoulders with both epiphyses of the underlying bone exposed. It is also possible that this shape represents an unusual cut of sirloin incorporating half of the pelvic girdle as was suggested by Winlock. ${ }^{45}$ Since the two rib sections reflect the yield from one individual, however, it seems more reasonable to associate the four 'round' cuts with the four limbs of a single animal. They probably do not represent the whole limb as is usually offered at funeral banquets but rather the upper part only. It is the upper limbs that carry the heavy musculature; below the elbow and hock joints, legs are leaner and sinewy. The circular cuts may be compared to those in offering scenes from other Twelfth Dynasty tombs. In the tomb of Ukhhotep I ( $\mathrm{B}_{2}$ ) at Meir, for example, similar oblong hunks of meat are shown with the long bone drawn alongside (fig. i) or superimposed on top (fig. 2), the two conventions probably suggesting the presence of a bone still attached to or embedded within the flesh. ${ }^{46}$ In Meketre's sculptured cuts, the bone shaft is indicated by a surface ridge running diametrically across from epiphysis to epiphysis.

The third and most numerous cut is in the shape of an elongated isosceles triangle

[^49]

Fig. 3. Tomb of Antefoker. Drawn from N. de Garis Davies, The Tomb of Antefoker (London, 1920), pl. IX.
suspended from the cords with the point down. Winlock identified these seventeen cuts as tenderloins and remarked that there were far too many to have come from the same animals that provided the ribs and quarters. ${ }^{47} \mathrm{He}$ further speculated that they might represent other parts of the animal sliced up into triangular bits, and that the practice of doing so would probably have been familiar to the dead Meketre or any dynastic Egyptian notwithstanding our puzzlement. The rendering is not unique. On the north wall of the Twelfth Dynasty tomb of Antefoker (tomb 60 at Sheikh Abd el Qurna), a parallel scene was painted showing the butchery of a slaughtered bovine and the hanging of previously butchered cuts on a line to dry (fig. 3). Again, the predominant cut is the isosceles triangle, but with the point up.
The apparent inconsistency noted by Winlock can perhaps be resolved with additional information about the nature of ancient butchering techniques and muscular anatomy. Such cuts probably represent intact muscles removed as boneless strips, but for documentation, one must consider the evidence from faunal remains themselves.

## Comparative zooarchaeological data

Animal remains are commonly recovered from archaeological sites, especially when ancient refuse is encountered in soil that is not hostile to bone preservation. The remains are usually those of animals killed for food, and aside from special cases, they almost always consist of fully disarticulated and fragmentary elements of the

[^50]skeleton. In spite of the incompleteness and breakage, it is possible to learn from such bones not only the kinds and quantities of animals represented, but also aspects of the culture that deposited them. ${ }^{48}$ Information about ancient butchery practices is often obtainable based upon the study of cut marks and the presence or absence within the assemblage of the different body parts. ${ }^{49}$

The writer's studies on the fauna from Godin Tepe in central western Iran furnish the osteological evidence for comparison with Meketre's slaughterhouse model. ${ }^{50}$ Although interest in such cultural matters as butchering technique is presently increasing among zooarchaeologists, especially as they relate to the identification of sites used by early prehistoric humans, the data have not frequently been published in faunal reports of later, historic cultures. Thus, bones collected far from Egypt may serve better than geographically nearer assemblages because they afford the opportunity for detailed observation of the specific features in question. The Iranian material spans the periods of Godin III, IV, and V, and the middle phases of Godin III ( $2600-\mathrm{I} 500 \mathrm{BC}$ ) parallel the Egyptian Middle Kingdom in date. Some aspects of butchering procedure might have differed between Egypt and Iran, but judging from the artistic and osteological evidence, the overall pattern of slaughter and meat removal appears quite similar.

## (a) The death blow

Eggebrecht noted the close relationship between Egyptian methods and the ancient Hebrew form of ritual slaughter that involved cutting through the windpipe and gullet. ${ }^{51}$ Genesis 9: 4 relates the postdiluvian authorization given to Noah to consume living creatures without their blood: 'Only you shall not eat flesh with its life, that is, its blood.' Later, this law is elaborated: 'For the life of the flesh is in the blood; and I have given it for you upon the altar to make atonement for your souls; for it is the blood that makes atonement, by reason of the life' (Leviticus 17: in). Ancient Egyptians obviously did not adhere to later Israelite practice regarding the consumption of blood, although they certainly held the fluid in the same high regard and might for that very reason have thought to ingest it. The Israelite shohet and Meketre's butchers both cut the throat in order to drain the blood from the carcass. The former, however, retrieved the blood for sacrificial use at a sacred altar, whereas the latter collected the substance for food.

Anatomically, the throat provides a rare spot on the mammalian corpus where

[^51]

Fig. $4 a$
Fig. $4 b$
Simplified cross-sections of the (a) upper and (b) lower throat of a bovine showing locations of major vessels. Taken from Indian Council of Agricultural Research, Anatomy of the Ox (New Delhi, 1964); and Sisson, S., The Anatomy of the Domestic Animals, 4th ed. rev. by J. D. Grossman (Philadelphia, 1953).
major blood vessels pass just under the skin, unprotected by bone or layers of muscle or gut. In cattle, the common carotid artery; which carries oxygenated blood to the head, runs alongside the internal jugular vein, and both lie slightly deeper in the neck than the external jugular vein, which carries the bulk of the venous return flow. Both left and right branches of these vessels wind obliquely around the windpipe, or trachea, while the gullet, or esophagus, parallels the left carotid artery for much of its length. At the base of the neck, the vessels lie in front of, or ventral to, the trachea (fig. 4b), but moving up toward the cranium, they swing around to either side and finally pass behind, or dorsal to, the trachea (fig. $4 a$ ) before subdividing at the base of the head. ${ }^{52}$

Reckoning from the controlled and regular flow of blood from throat wounds in many Egyptian depictions of cattle slaughter, Klebs declared that Egyptians must have cut the jugulars without damaging the adjacent windpipe in order to keep escaping air from spattering the liquid beyond the collecting bowls. ${ }^{53}$ This claim was

[^52]

FIG. 5. Drawing of principal directions of knife penetrations: $1=$ decapitation; $\mathbf{2}=$ slaughter.
rejected by Eggebrecht on the grounds that the vessels were too deeply seated in the throat to be severed alone. ${ }^{54}$ The vascular anatomy of the bovine neck would, however, permit Klebs's form of bloodletting if only shallow incisions were made quite low on the throat.

Meketre's slaughterhouse model and zooarchaeological evidence sustain Eggebrecht's assessment. The Egyptian butchers of the model guide their knives along a line just behind the ears. In this way, their blades would have missed the angle of the lower jaw, or mandible, and penetrated in the direction of the atlas or axis, the first and second vertebrae. It is here, in fact, near the junction of spine and skull, and not further along on the subsequent cervical vertebrae, that most neck butchering marks are encountered in archaeological faunal collections. If throats were slit mainly at the very top of the vertebral column, then deeper penetration through the more superficial trachea and esophagus would have been necessary to reach and open the blood vessels.

Such cuts are especially clear on the atlases of small ungulates such as the caprines (sheep and goats). Examples from Godin Tepe are illustrated in fig. 5 and pl. XIV, 1-4. Cuts crossing the anterior articular surface (fig. 5: i and pl XIV, i) may have been made during decapitation, since the knife could only have left its mark here if the joint between the atlas and articular process of the occipital bone had first been loosened or pulled apart. The majority of the marks encountered on the atlas, however, cross its lower (ventral) surface generally from side to side and probably represent deep penetration of the knife against the bone after cutting through the intervening throat tissue (fig. 5:2 and pl. XIV, 2-4).

In the Godin assemblage, the atlas was the most heavily cut part of the caprine skeleton: thirty-two of eighty-one pieces recovered, or 40 per cent, revealed the presence of butchering marks, and no other sheep or goat bone had a higher percentage of cut specimens. ${ }^{55}$ Compared to the atlas, only six of 102 recovered

[^53]specimens of the axis showed any cut marks, and no incisions were found on the remaining cervical vertebrae. Thus, the pattern demonstrates the anticipated fall-off in knife penetrations further down the neck. ${ }^{56}$

Though an animal can be slaughtered without touching knife to bone, the relatively narrow clearance between blood vessels and vertebrae makes butchering marks likely at this location. Judging from the thirty-two cut specimens so far analysed from Godin Tepe, 72 per cent of the cuts occur on the ventral face and appear to be the result of the death blow, is per cent appear on the anterior articular surface and may have come from attempts at decapitation, and 8 per cent occur on the back (dorsal) surface possibly created by skinning or meat stripping. ${ }^{57}$

On cattle atlases, butchering marks are less numerous. The thicker and fleshier neck of the larger ungulates increases the spacing between blood vessels and spine, making cuts on the latter less likely. Butchering marks nevertheless appear occasionally, although not always as a consequence of the act of slaughtering (pl. XIII, 4). Egyptian tomb representations do show decapitated crania as food offerings (figs. $\mathbf{r}-2$ ), and thus cut marks across the articular surface of bovine atlases might be found on occasion in faunal collections from the Nile Valley.

## (b) The triangular cuts of meat

Winlock identified the seventeen triangular cuts hanging in Meketre's butcher shop as tenderloins based upon their shape. In anatomical terms, the tenderloin, or filet mignon, is the ilio-psoas muscle group. Nestled below the spine in the lower back, its member muscles originate on the spine near the thoracic-lumbar boundary and insert at the pelvis and upper femur. The muscles, which flex the hip joint, are among the least active in the body, and thus they are among the most tender from a culinary standpoint. Every individual possesses two ilio-psoas bundles, running right and left of the body midline, and thus if all the triangles were in fact tenderloins, then at least eight and one-half animals would have been needed to produce them. The rib and quarter pieces hanging in the butcher shop come from only one animal, however.

Faunal analysis provides a plausible solution to this inconsistency. Except when it is cut transversely during the production of steaks, the tenderloin is left intact by today's meat cutters, but in antiquity most muscles were apparently left intact. Even in the context of the modern, pre-industrial village, it is more common for butchers without power saws to cut around bones than through them. The preparation of steaks and chops is, by contrast, at variance with anatomy, and a far simpler means of dividing a carcass is to follow the natural paths of muscles and cut them only where they need cutting, at their skeletal attachments. More likely, the triangular cuts of the model were meant to suggest the generally fan-shaped to fusiform shape of most limb muscles as well as many on the torso. Muscle origins are often broad for anchoring at several biomechanically necessary localities, while their insertions on the bone to be mobilized are often restricted in size. Severed at both ends, these

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Fig. 6. Butchering marks on the lower forelegs of caprines from Godin Tepe.
muscles would appear roughly triangular, and they would become long and narrow when relaxed or drawn out. If the bovine carcasses in Meketre's slaughterhouse were stripped by removing muscles individually, then the abundance of triangles is explained. The number of previously butchered animals yielding the hanging triangles can probably be reckoned safely as one, a figure corresponding with that of the ribs and quarters. ${ }^{58}$

The evidence supporting this reconstruction comes from the configuration of butchering marks on limb elements. Cuts on the elbow joint of sheep and goats from Godin Tepe furnish the clearest picture, but the shoulder, hip, and hock joints reveal similar albeit incomplete patterns. Recovered parts of the elbow suggest three distinct latitudes of attack. Figure 6 illustrates the position of each level. ${ }^{59}$ Cuts placed highest on the joint were made around the lower part of the upper arm bone, or humerus. The next focus was at or close to the articulation between the humerus and radius, and always on the sides or anterior face. The lowest level included the front and sides of the upper radius, just below the rim of the articular surface.

Only the cuts made near the humero-radial articulation, i.e. the middle level, were intended to split the joint, separating the bones. Both medial and lateral ligaments, which hold the bones together on either side, were apparently severed against the humeral epicondyles where they originate, or against the medial and lateral tuberosities of the radius where they insert. With the limb extended, a knife probing for the joint on the anterior face would easily have produced the nicks recorded here.

[^55]In contrast, butchering marks appearing on the lower shaft of the humerus and upper shaft of the radius are related to muscle removal. Tendons of attachment for most of the upper arm muscles pass over the joint to anchor on the radius for manipulation of the elbow, while tendons for the lower arm muscles originate on tuberosities of the upper radius and insert below the carpal (wrist) joint. Cutting around the bones at these levels would effectively sever these tendons and allow the individual muscles to be peeled back from the bone shafts.

The evidence of butchering on cattle limbs from Godin Tepe parallels that found on sheep and goats. Although a greater proportion were cut, far fewer cattle remains were recovered, and as a result, the pattern of cuts on the various joints is not as well documented. Muscle stripping is nevertheless indicated by marks across the same tendon lines, and the extension of incisions down to the lower legs further suggests that the longer strands of tendon that control extension and flexion of the digits might have been freed and utilized. ${ }^{60}$

## Summary

The three models depicting cattle are, in all likelihood, related as a visual time series depicting sequential activities in the provisioning of Meketre's soul with beef.

The first model, described as the cattle inspection by Winlock, was presumed by him to represent the counting of animals in connection with census taking and tax assessment. Such an interpretation is supported by other similar representations bearing captions to that effect. However, in addition to this principal theme, it is not unlikely, given the cattle-related scenes that seem to follow in sequence, that the portrayal may also involve a review of young bulls (sired by a prime stud?) for purposes of planning subsequent management phases leading to fattening and slaughter.

The second and third models relate in succession the preparatory finishing and the final butchering. If the difference in size between cattle in the review and those being stable fed is indeed a reliable indicator of biological growth and weight gain, then the fattening process was a lengthy one, perhaps lasting several months, and involving castration, polling, and manual force-feeding seemingly with a minimum of energy expenditure by the animals.

The slaughterhouse model stops the action at the very moment of death, perhaps

[^56]symbolically reflecting on its ritual importance or the flowing of the animals' life-blood. A good illustration of the end result is provided in the form of a previously butchered carcass, divided into its constituent cuts hanging where they should in the drying air of the rear balcony. The curious abundance of triangles dangling from the line represents the filleting of muscle bundles, apparently the most common and certainly the most sensible means of carcass reduction in a pre-industrial world.

Products of butchery, in addition to foodstuffs, include the hide, fat, bone, sinew, and horn, the last possibly having been removed earlier during the finishing routine. No indication is given that these materials, generated by activities depicted in the cattle models, were used by the deceased, although it is a fair assumption that some may have been exploited in real life. Only the spinning and weaving of flax in Model H and the woodworking in Model J provided manufactured items for Meketre's soul. If they were unrepresented among the now-lost furnishings of the tomb chamber, carcass byproducts were probably ignored by the model builders. The real life problem of trash disposal on Meketre's Theban estate would have been solved by his stewards, possibly creating an archaeological midden deposit of skeletal debris the recovery and analysis of which would provide the most effective means of testing the inferences made here.

View of Cattle Review (model C), Cairo JE 46724 (pp. 71-3)
(photo by the Egyptian Expedition, MMA)
THE SLAUGHTERHOUSE OF MEKETRE



Views of fattening stable (model D) (pp. 73-8)
(photo by the Egyptian Expedition, $M M A$ )
THE SLAUGHTERHOUSE OF MEKETRE


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Details from cattle review (model C) (p. 7I)



1. Cranial articular surface of female sheep showing cuts made upon decapitation


2. Ventral aspect of female goat, showing ventral cu across entire base


Ventral aspect of female sheep, showing cuts running side to side across ventral tubercle
THE SLAUGHTERHOUSE OF MEKETRE (p. 85)

# NEW LIGHT ON KIYA FROM TEXTS IN THE BRITISH MUSEUM* 

$B y$ C. NICHOLAS REEVES

Publication of six further objects relating to Akhenaten's lesser wife, Kiya. These are a portion from an offering slab of the type held by a standing figure; three column fragments from the North Palace at el-Amarna with texts appropriated by Meritaten; a fragment from a calcite cosmetic vessel; an additional kohl-tube fragment in faience. Kiya's status at the Amarna royal court is considered in the light of this new material, and her probable importance to the eventual outcome of the Amarna episode stressed.

In the twenty-nine years since Kiya's existence was first noted in print by Hayes, ${ }^{1}$ the corpus of monuments relating to Akhenaten's Nebenfrau has grown significantly. ${ }^{2}$ Kiya is now attested by two fragmentary calcite cosmetic jars, of unknown provenance; ${ }^{3}$ by a series of fragmentary text-models in gypsum, from the Maru-Aten complex at el-Amarna, which outline her characteristic titulary; ${ }^{4}$ by several palimpsest fragments from Maru-Aten, where her name and titulary have been partially erased and replaced by texts relating to the king's daughter Meritaten; ${ }^{5}$ by a small, inscribed, wooden panel, perhaps acquired during the course of Petrie's work at el-Amarna in $189 \mathrm{I} / 2 ;{ }^{6}$ by several blocks of likely el-Amarna

[^57]provenance from el-Ashmunein, where Kiya's name and titulary have been erased and the representations appropriated in a similar fashion to those from Maru-Aten; ${ }^{7}$ by the coffin from King's Valley tomb no. 55 at Thebes, which had been altered for eventual use by Akhenaten himself; ${ }^{8}$ and by four fragmentary kohl-tubes from el-Amarna. ${ }^{9}$ Less formal references to the lady have been recognized on two wine-jar dockets from el-Amarna, ${ }^{10}$ and on a funerary cone of presumed Theban origin. ${ }^{11}$ Kiya's formal appearance is known from a number of two-dimensional representations associated with texts which relate to her, ${ }^{12}$ and it is possible that her portrait is to be recognized in three extant sculptor's studies in gypsum, one of unknown provenance and two from the so-called 'studio of 'Thutmose' at el-Amarna. ${ }^{13}$ To this corpus may be added six unpublished fragments from the reserve collections of the British Museum, from which a little more information may perhaps be gleaned about Kiya and her role at the Amarna royal court.
I. EA 26814. Fragment of indurated limestone, maximum dimensions 12.5 cm across, 12.7 cm deep, and 4.9 cm in thickness. Purchased from 'Mr Fraser' ${ }^{14}$ in I891, and said to come from el-Amarna. Pl. XV, 2-4.

This fragment seems to represent one side of an offering slab, ${ }^{15}$ the offerings
${ }^{7}$ Cf. Harris, CdE 49, passim; Hanke, Amarna-Reliefs, passim.
${ }^{8}$ Cairo JE 39627: cf. Perepelkin, Perevorot, I, part 3, 114 ff. and esp. 136ff.; Hanke, $S A K$ 2, 92 f.; idem, Amarna-Reliefs, 17 I ff.; C. N. Reeves, $G M_{54}$ (1982), 6 I ff. I have suggested elsewhere ( $\mathcal{F E A} 67$ (1981), 5 I n. 17) that the KV 55 canopic jars were also prepared for Kiya and their distinctive texts later erased. This impression perhaps finds support in the facsimile of traces to be discerned upon the New York canopic (MMA 07.226.i (jar) and 30.8.54 (lid)), published by G. T. Martin in Mélanges Gamal Eddin Mokhtar, il (Cairo, 1985), i i 3, fig. ib. Certainly, it seems improbable that these traces-with no sign of any cartouche-should conceal the name $\quad$ h-n-itn, which would make little sense where the signs occur. An article by Rolf Krauss, MDAIK 42 (i986), 67 ff. , received after this paper had been written, reaches a similar conclusion, and provides further support for the Kiya attribution.
${ }^{9}$ (i) Ägyptisches Museum, Berlin, 22173 : R. Krauss, Das Ende der Amarnazeit (Hildesheim, 1978), 109 f., 285, pl. 4; (ii) Petrie Museum, University College London, UC 585 (a fragmentary double kohl-tube in blue faience, with remains of two vertical opposing columns of text ending [ . . k]yis and [. . ky]is respectively; unpublished); (iii) Petrie Museum, UC 60 I (blue faience, fragmentary, with remains of a single vertical column of text reading hmt [. . .]; unpublished); and (iv) Petrie Museum, UC 603 (blue-green faience, fragmentary, with remains of a single vertical column of text reading [. . . mrrt]y ${ }^{\text {cst } n} n$ [nsw] $b i[t y \ldots]$; (unpublished). A fifth $k o h l$-tube fragment in the British Museum is published below, no. VI. It may be noted that a small calcite vessel fragment from the Great Palace (Bolton A.59.1967), mentioned by Thomas, $C d E$ 57, 13 n. 2, perhaps also contains an echo of Kiya's formal titulary ([. . ]ps šri [. . .]); the arrangement of the signs, however, is not altogether conclusive.
${ }^{10}$ (i) W. M. F. Petrie, Tell el Amarna (London, i894), pl. 25, 95 (Year in); (ii) H. Frankfort and J. D. S. Pendlebury, City of Akhenaten, in (London, 1933), pl. 58, i6 (Year 6 or [1]6). On each of these dockets Kiya is referred to as $t$ s špst (on the latter without being named), for which cf. Manniche, GM $18,33 \mathrm{ff}$. The Petrie docket passed via Amherst (Sotheby, Wilkinson and Hodge, Amherst Collection (London, 13-17 June 1921), 74, part of lot 83 I) and Warren R. Dawson into the collections of the British Museum, where it now carries the number EA 5995 I; cf. pl. XV, 1.
${ }^{11}$ N. de G. Davies and M. F. L. Macadam, A Corpus of Inscribed Egyptian Funerary Cones, I (Oxford, 1957), no. 527. Cf. Manniche, $G M$ I 8, 33 ff .
${ }^{12}$ Harris, CdE 49, 28 n. 5; cf. Hanke, SAK 2, 79 ff.; idem, Amarna-Reliefs, passim.
${ }^{13}$ Cf. Harris, $C d E 49,28$ n. 5.
${ }^{14}$ Presumably George Willoughby Fraser, for whom cf. W. R. Dawson and E. P. Uphill, Who Was Who in Egyptology (2nd edn., London, 1972), 109.
${ }^{15}$ For the layout of the offering surface, cf. Labib Habachi, Tavole d'offerta are e bacili da libagione (Turin,
themselves perhaps originally supplied in faience or some other contrasting material. ${ }^{16}$ The fact that the rear edge of the fragment displays evidence of having been 'keyed-in' to a larger composition (cf. pl. XV, 2-3) possibly indicates that this offering table was once supported by a standing figure ${ }^{17}$-presumably of Kiya herself. ${ }^{18}$


Fig. I

The front edge of EA 26814 is inscribed with a competently cut text reproduced in facsimile in fig. i. On the assumption that the offering surface was symmetrical, it is clear that a little under half of the table and text has survived. The inscription might be restored, therefore, along the lines of Kiya's 'shortened' titulary: [hmt mrrty rst $n$ ]



Fig. 2
II. EA ${ }^{581}$ I79. Fragment of coarse limestone, maximum dimensions 46.5 cm high, 31.5 cm wide, and 6.5 cm in thickness. Remains of pigment in the palimpsest signs of the left-hand column: yellow base, with superimposed traces of blue in the
1977), Museo Egizio, Turin, 22028. Analogous offering-table fragments are in the Petrie Museum, University College London, UC 060 and UC 24325 (both unpublished); cf. further the fragment illustrated in Frankfort and Pendlebury, op. cit. II, 16, pl. 32, I (excavation no. 26/699; now in Auckland).
${ }^{16}$ British Museum EA 35783 is perhaps a model offering of this general sort: a trussed duck in limestone, acquired from the Revd Greville Chester in 1870 and of unrecorded provenance (unpublished).
${ }^{17}$ Cf. Cairo JE 43580, revealing photographs in H. Ranke, The Art of Ancient Egypt (London, 1936), figs. 132-3; P. P. Riesterer, Das Ägyptische Museum Kairo 1. Ausgewahlte Kostbarkeiten (2nd edn., Bern/Cairo, 1966), fig. 4I; S. Wenig, Meisterwerke der Amarnakunst (Leipzig, i974), pl. in. Cf. further an unpublished offering-table fragment in the Petrie Museum, UCi81, which has a mortice beneath, evidently for attachment to the main figure.
${ }^{18}$ Cf., perhaps, G. Roeder, Amarna-Reliefs aus Hermopolis (Hildesheim, 1969), pl. 22, no. 458-VIIA-a reference which I owe to Rolf Krauss.
${ }^{19}$ Cf. n. 4 above. The apparent spelling $k i 3 y$ is evidently the result of a horizontal rather than vertical ordering of the signs.


Fig. 3
$n$-hieroglyphs, red in the larger female determinative. Presented by the EES in 1926, from its excavations in the North Palace at el-Amarna. Excavation no. 23/94. ${ }^{20} \mathrm{Pl}$. XVI, .

To judge from the lateral curve of its surface, this fragment originally formed part of a column some 46 cm or more in diameter. Broken in two and crudely repaired in recent times, it carries an inscription (fig. 3) which exhibits evidence of at least two, and perhaps three, periods of ancient working: the primary cutting, represented by

[^58]

FIG. 4


Fig. 5
three vertical columns of rather lightly incised text; the secondary cutting, when the $\operatorname{sign}(s)$ at the top of the middle column and the entire left-hand column of text were erased and a series of deeply cut and somewhat larger hieroglyphs superimposed; and a probable third phase, when the middle and right-hand columns of text (including the palimpsest $\varpi$ at the top of the middle column) were plastered over ${ }^{21}$ and the signs subsequently re-emphasized with a point while the plaster was still wet. ${ }^{22}$ The resultant text may be restored as follows: (1) [nb hrw] (3h[-n-itn] ${ }^{[ }[\mathrm{c} 3] m$
 (3) [sst nsw] $n \underline{h} t \cdot f m r t \cdot f m r[t]-i t n^{23}$ (cf. fig. 5).

[^59]The original ownership of this inscription is suggested by the characteristic $p^{3}$ in the centre column, and confirmed by the trace of a $\&$ before the palimpsest seated-woman determinative and by the double strokes $\|$ to the left above her head. Moreover, the outline of a smaller female determinative belonging to the original text may be discerned in the lower left-hand corner of this column. The two left-hand columns of the primary inscription may thus be restored to correspond with the 'longer' version of Kiya's titulary: ${ }^{24}$. . (2) [hmt mrrty ©st n] nsw bity $n \boldsymbol{n h} m$
 (cf. fig. 4).
III. EA 59165. Fragment of coarse limestone, maximum dimensions 15.5 cm high, 10.5 cm wide, and 7.0 cm in thickness. Faint traces of yellow pigment in the hieroglyphs. Presented by the EES in 1926, from its excavations in the North Palace at el-Amarna. ${ }^{25}$ No excavation number. Pl. XVI, 4.


Fig. 6

The lateral surface is curved, suggesting that it, too, originated from a column some 46 cm or more in diameter. The fragment preserves the remains of two vertical bands of text (fig. 6), that on the left having evidently been erased, plastered over, and reinscribed in palimpsest. The primary text, traces of which are visible, appears to have commenced with the words hmt $m[r r t y ~ . ~ . ~] ~.(c f . ~ f i g . ~ 7) . ~ I t ~ i s ~ p r o b a b l e, ~$ therefore, that we have here a further Kiya text analogous to EA 58i79, appropriated, presumably, for the king's daughter Meritaten (fig. 8). Although the plaster into which this latter text had been carved has long since fallen away, what appear to be traces of the palimpsest sst nsw $n[\underline{h} t \cdot f]$ may still be discerned cut into the stone itself (cf. fig. 6).


Fig. 9
IV. EA 58 i 80 . Fragment of coarse limestone, maximum dimensions 19.7 cm high, 13.0 cm wide, and 6.0 cm in thickness. Traces of yellow pigment in the hieroglyphs. Presented by the EES in 1926, from its excavations in the North Palace at el-Amarna. Excavation no. 23/29. ${ }^{26} \mathrm{Pl}$. XVII, i.

$$
{ }^{26} \text { Ibid. }
$$

The surface of this fragment is curved, in common with the two preceding pieces, suggesting that it originally formed part of the surface of a similar column. The first few signs of a vertical band of text survive (fig. 9), inscribed in palimpsest for a 'king's daughter' (sst nsw n[ht•f . . .]) (cf. fig. i I) over an original text of which only traces remain. An angled cut above the $t$ of $s 3 t$ is appropriately placed to have formed the bottom left-hand corner of a long, low sign-perhaps $\rightleftharpoons, \check{s}$. If so, the likelihood is that this text essentially duplicates EA 58ı79, and conceals a reference to Kiya as [ $p$; $]$ š[ri nfr $n$ p; itn $\subset n h$. . .], etc. (fig. Io).


Fig. io


Fig. II
V. EA 65900 . Fragment of a calcite vessel, maximum dimensions 6.7 cm high, 3.9 cm wide, and 1.1 cm in thickness. Purchased 1959, formerly in the collection of the Revd G. D. Nash. ${ }^{27}$ Provenance not recorded. Pl. XVI, 2.

This body fragment from a bag-shaped jar, inscribed with the earlier form of the Aten cartouches and the prenomen of Akhenaten (fig. 12), was acquired with the fragmentary Kiya jar EA 65901, published by Fairman in 1961. ${ }^{28}$ The size and form of these two jars seem originally to have been virtually identical, as are the layout, content, and cutting of the surviving portions of the two text panels. Given these similarities, and the common source of the fragments, it is probable that EA 65900, like EA 6590 r, originated from a vessel inscribed with Kiya's full style of address ${ }^{29}$ (cf. fig. 13)-despite the fact that no distinctive traces of this titulary survive. ${ }^{30}$
VI. EA 69719 . Fragment of a kohl-tube, faience, white-glazed on the inner surface, green-glazed with blue hieroglyphs on the outer. 2.2 cm high, 2.2 cm wide, and 0.4

[^60]

Fig. 12


Fig. 13
cm in thickness. Presented by the EES, from its excavations in the magazines of the Great Palace at el-Amarna, i935/6. Excavation no. i 59. ${ }^{31}$ Pl. XVI, 3.

This kohl-tube, of characteristic form, originally carried a single vertical column of text of which only three signs are now extant (fig. 14). The combination of cartouche ( $[n f r-h p r w-r r] w^{-}-n-[r r] \mid+p^{3}$ is, however, sufficient to show that these signs originally formed part of the distinctive Kiya titulary, presumably in a variant,


These fragments serve to stress the importance of Kiya's position at the Amarna royal court during the middle years of Akhenaten's reign. The offering-table
${ }^{3 i}$ Cf. J. D. S. Pendlebury, City of Akhenaten, III (London, 1951 ), 49.


Fig. 14
fragment EA 268ı4, if it originates from a standing figure of the lady, provides a concrete depiction of her elevated status, since at el-Amarna only Akhenaten and Nefertiti are commonly represented in this manner. ${ }^{33}$ Similarly, the three column fragments from the North Palace indicate that the Kiya structures at Maru-Aten and the Great Temple of the Aten in the Central City were but two of several buildings to which she could lay claim in various parts of the capital. ${ }^{34}$ More significantly, perhaps, the addition of the North Palace to the list of Kiya-Meritaten appropriations removes the last, lingering support for the hypothesis which would have Nefertiti 'disgraced' and replaced in the king's affections by his daughter. ${ }^{35}$

In conclusion, what we know of Kiya may briefly be summarized. ${ }^{36}$ Perhaps a princess of Mitannian origin, ${ }^{37}$ her name first occurs in conjunction with the earlier form of the Aten cartouches. ${ }^{38}$ Her floruit, therefore, began before Akhenaten's Year 9 or Io, and probably extended at least until Year II. ${ }^{39}$ Her peculiar status at court is reflected in her unique and standardized titulary, ${ }^{40}$ though the basis for her favoured

[^61]position is nowhere explicitly stated. She evidently bore the king at least one daughter ${ }^{41}$ and, it has been suggested, a son-the future Tutankhamun. ${ }^{42}$ This latter achievement may well have hastened her downfall, ${ }^{43}$ of which there are indications in the appropriation of her monuments, in the damage occasionally found done to her eyes, ${ }^{44}$ and in the fact that she did not actually employ the sumptuous funerary equipment which had been prepared for her. ${ }^{45}$ It is perhaps significant that Kiya's apparent fall from favour coincided with an increase in the status of Nefertiti herself, who adopted the enhanced title hmt nsw cst at about this time ${ }^{46}$ and may even have gone on to rule as co-regent with her husband. ${ }^{47}$

Future research will no doubt reveal how closely this suggested scenario corresponds to reality; but it will be somewhat surprising (to this writer at least) if the position occupied by Kiya during her latter years proves to have been anything less than crucial to the eventual outcome of the Amarna episode.

[^62]
I. British Museum EA 5995I (p. 92 n. ıо)

3. British Museum EA 26814 (profile) (p. 93)

2. British Museum EA 268i4 (front) (p. 93)

4. British Museum EA 26814 (top) (p. 93)

## Plate XVI



1. British Museum EA 58179 (pp. 93-6)

2. British Museum EA 69719 (pp. 98-9)

3. British Museum EA 65900 (p. 98)

4. British Museum EA 59165 (p. 96)

5. British Museum EA 65901 (p. 98)

NEW LIGHT ON KIYA


University College, Swansea, Wellcome Museum W. 232 (pp. 103-6)

# THE VIZIER PASER 

By V. A. DONOHUE


#### Abstract

The description of a statuette-base bearing the names and titles of the Ramesside vizier (University College of Swansea, Wellcome Museum of Antiquities W.232) is followed by an annotated catalogue of his monuments. In an appendix it is argued that certain titles occurring upon four statues of Paser refer to the cult of Ramesses II, and are perhaps to be translated 'Priest of Usermaatre the pre-eminent', and 'Priest of Ramesses, sun of the isles'.


Readers of the fournal will have become increasingly aware of the variety of Egyptian material comprised within the collections formed by Sir Henry Wellcome, and particularly of that portion now administered by the University College of Swansea as the nucleus of its Museum of Antiquities. The description of a further object at Swansea, bearing the name and titles of the Ramesside vizier Paser, affords an opportunity to present a revised documentation for this celebrated individual, together with notes on other of his monuments elsewhere in Britain. ${ }^{1}$

Acquired without details of provenance at the sale of the MacGregor collection in $1922,{ }^{2}$ W. 232 is a rectangular plaque, measuring $9 \times 5.1 \times 2.4 \mathrm{~cm}$ and inscribed on each surface with inlaid hieroglyphs contained within a border (pls. XVII, 3-4, XVIII and figs. $1-2$ ). Its structure has been analysed by Dr G. Kelling of the Department of Geology and Oceanography, University College of Swansea, who reports:

The tablet is composed mainly of artificial (non-natural) material and two layers are present. There is a thin ( $1.0-1.5 \mathrm{~mm}$ ) outer skin of blue-grey 'glaze' which consists of artificially fused angular quartz grains of fine sand grade. This glaze is of rather poor quality since a number of minute gas-holes can be observed under the microscope together with traces of kaolin, probably derived from minor amounts of clay originally incorporated in the crushed quartz. The yellow-brown 'core' material is poorly indurated or semi-friable but is also composed of fine quartz sand. This layer is highly porous and evidently originated from crushed quartz, similar to the material of the outer, glazed layer, but less intensely fused,

[^63]

FIG. I


Fig. 2. University College, Swansea, Wellcome Museum W. 232.
resulting in the abundant large gas-holes and the less compact structure. Approximately two-thirds of the surface of the tablet is covered by a dark brown veneer (less than 0.1 mm thick) of an organic substance, possibly a wax of some kind. This veneer must be of late date since it covers many of the broken and chipped edges of the tablet. The hieroglyphics and other decorations appear to have been cut into the glaze by some sharp instrument to an average depth of about 2 mm and were then infilled with a paste of soft white alabaster (gypsum or crystalline calcium sulphate).

Dr Kelling adds that the composition appears to correspond most closely to 'ordinary faience' as defined by Lucas. ${ }^{3}$ Abrasion of the edges, where in one place a detached flake has recently been restored, has resulted in damage to a number of signs.

Three depressions, cut through the glaze and border inlay of what the alignment of the lateral inscription identifies as its upper surface (pl. XVII, 3-4, fig. r), reveal that the plaque was intended to serve as the base of a statuette. Whether of wood, stone, metal or composite structure, ${ }^{4}$ this seems most probably to have represented Paser standing, his left foot slightly advanced, ${ }^{5}$ and to have been approximately 15 cm in height. ${ }^{6}$

Identical columns of inscription occur on both upper and lower surfaces: Governor of the city, vizier Paser, justified. Commencing on the short surface behind the feet sockets, the lateral text is continuous (pl. XVIII and fig. 2): ${ }^{3}$ Iry-p ${ }^{\prime} t$
 sšt $3\langle m\rangle$ ḥwt-nt imy-r niwt ț $3 t y \operatorname{Pisr}$ [mır-hrw]: Prince, count, god's father, beloved of the god, chief justice, ${ }^{\mathrm{a}}$ who is favoured in the heart, ${ }^{\mathrm{b}}$ who keeps silent about the affairs of the palace, ${ }^{c}$ who adorns the king ${ }^{d}$ in his sacred image, master of secrets in the mansion of the red crown, ${ }^{e}$ governor of the city, vizier Paser, [justified.]

In the comments the first reference is to the list which follows.
a An ellipsis is indicated by I. I: K $R I$ III, 8, ı6; iII. 3: fig. 4; and iII. 8: K $R I$ III, 16, 3 where iry-prt haty-r is followed by $t ; y t y s ; b$ (and where $s ; b$ appears also to serve as the first element in $s 3 b$ iry $N h n$ ). The variants, however, are not unanimous:
 and III. 8: K RI III, I6, $5 s 3 b$ alone is present, again followed by $3 \boldsymbol{h} m$ ib hasp $\underline{h} t h r$ shrw ' $h$; whilst a jackal sign is retained after iry-prt haty-r it-ntr mry ntr in III. 7: K RI III,

[^64]17, 2 and III. ı8: S. I. Chodzhash, in N. V. Pigulerskaya et al. (eds.), Drevnĩ mir: sbornik stateй (Moscow, 1962), i9 1, on both occasions in the epithet hery sštı $n$ pr-nsw (here tsyty s;b occurs later in the text); and in III. i9: K RIIII, 33, 9 in the epithet hry sšts $m$ зht ( $n t$ ) nḥh.
 III, II , 5; and with $\beta$, apparently reversed, in III. 7: K $R I_{\text {III, I 7, 4, In our inscription } \beta}$ duplicates \$. All involve the consonantal principle as defined by H. W. Fairman ( $A S A E 43$ (1943), 291-8; BIFAO 43 (1945), 62-3, ı31-8); for $\approx$, E. Drioton, $R d E$ ı (1933), 15, 18; for $ß$ M. Burchardt, Die altkanaanäischen Fremdworte und Eigennamen in Aegyptischen (Leipzig, 1909-10), 56; Drioton, WZKM 54 (1957), 16; for $>$ H. Brugsch, Hieroglyphische Grammatik (Leipzig, i872), 126, 1 19-35 (26ı); Fairman, op. cit. 71. For the interpretation, cf. Sinuhe B 1о6: $3 h n\langle\cdot i\rangle m i b \cdot f$; in the present context the reference is presumably to the king.
 ix. i: K $R I_{\text {ini, }}$ i, 5.
 III, 16,5 writes more fully $\stackrel{0}{0}_{\infty}^{\infty} \neq$
e That the ill-shaped sign within hewt is intended to be is shown by ini. 4: K RI iii, 13, i i; iII. i9: K RI iii, 33, io; xiii. 3: K RI iif, 14, 6. See R. el-Sayed, La Déesse Neith de Saïs (Cairo, 1982), I, 165; II, 378.

Of Paser's career the outlines are now established. The son of Nebnetjeru, High Priest of Amun, ${ }^{7}$ he joined the court of Sethos I, to be appointed Principal Companion and then Chief Chamberlain. ${ }^{8}$ Since the latter's functions involved placing the crowns and other regalia upon the person of the king, ${ }^{9}$ reflected in our inscription by the epithet $s \underline{h} k r n s w m$ bit $\cdot f \underline{d} s r w t$, and in view of his other titles as High Priest of Werethekaw and Master of Secrets of the Two Goddesses, it has been suggested that it was Paser who performed the act of coronation at the beginning of Ramesses II's 'prince-regency'. ${ }^{10}$ If so, it will probably have been under the regency

[^65]that he was elevated to the southern vizierate by Sethos I. ${ }^{11} \mathrm{He}$ is known to have remained in office until at least the twenty-first independent regnal year of Ramesses II, ${ }^{12}$ whilst a terminus ad quem is provided by the appointment of Khay in year $30 ;{ }^{13}$ it seems likely, however, that he had retired several years earlier than this, replacing Wennofre, his father's second successor, in the Theban pontificate, ${ }^{14}$ and that he died some time before the nomination of Bakhenkhons to that office in what has been calculated to have been Ramesses' fortieth regnal year. ${ }^{15}$

Paser's monuments have been listed by Spiegelberg, ${ }^{16}$ Newberry, ${ }^{17}$ Petrie, ${ }^{18}$ Weil, ${ }^{19}$ and Helck, ${ }^{20}$ whilst the majority are included in the Topographical Bibliography, and are transcribed in Kitchen's Ramesside Inscriptions. In the following list it is to the latter publications that reference is made in the first instance. Objects upon which Paser is characterized solely as High Priest of Amun are indicated by an asterisk.

## I. Standing Monuments

i. Thebes, Sheikh 'Abd el-Qurna. Tomb io6. PM i², 219-24; K RI I, 285-30i; iII, i-9.
2. Gebel el-Silsila. Chapel. PM v, 210 ; K RI iif, 32 (41).

## II. Stelae and Architectural Fragments ${ }^{21}$

I. Qantir. Door-lintel. K RI iII, io (2).
2. Thebes. Stela. Copenhagen, Ny Carlsberg Glyptothek AEIN.i 553. PM I ${ }^{2}$, 803; K RI iII, 23 (i9).
3. Western Thebes. Stela. Private collection. KRI iiI, 23 (i8).
4. Deir el-Medina. [Stela. PM I², 695; K RI iII, 25 (25).]
5. Deir el-Medina. [Stela. PM I², 714; K RI iII, 24 (20).]
6. Deir el-Medina. Stela. PM i², 714; KRI iII, 24 (21).
7. Deir el-Medina. [Stela. PM I ${ }^{2}$, 73 I (a).]
8. Deir el-Medina. Stela. Turin, Museo Egizio 50095 ( $=$ Suppl. 6ı89 + 6i93). PM ${ }^{2}$, 73 I (b); K RI III, 25 (23).
9. Deir el-Medina. Stela(e). Turin, Museo Egizio 50116 ( $=$ Suppl. 6022); 50149 ( = Suppl. 6032). PM I ${ }^{2}$, 73 I (b); KRI iII, 25 (24).
ıо. Deir el-Medina. [Stela, B. Bruyère, Rapport . . . (1935-I940), 2, 94 (i04); pl. 4 (ir 8).]
if. Deir el-Medina. Stela. K RI iII, 24 (22).
12. Deir el-Medina. Stela. Boston MFA 09.287. K RI iII, 26 (28).
${ }_{11}$ Note 8 above; cf. Kitchen, Acts, 386.
12 xiII. 6 in the following list. $\quad{ }^{13} \mathrm{~K} R I$ iI, 380 . Cf. Helck, op. cit. $32 \mathrm{I}-2$.
${ }^{14}$ Kees, op. cit. 121-2. Cf. Kitchen, Pharaoh Triumphant, 126, 171. A statue of Paser as High Priest of Amun
(iII. 9 in the list below), considered by Lefebvre, op. cit. $117,136-7$, as evidence for a separate pontiff of this name on the mistaken assumption that the vizier, unlike his father, did not hold supreme religious office at Thebes (see n. 7 above), is inscribed with cartouches of Ramesses II where the nomen is written $R \mathrm{r}-m s-s-s w$, appropriate to a date later than regnal year 21: see Kitchen, Acts, 385 ; and for the $-s s / s w$ criterion also A. J. Spalinger, $\mathcal{J E A} 66$ (1980), 95-7. Cf. Kees, op. cit. 99-100; Helck, op. cit. 312-13.
${ }^{15}$ M. L. Bierbrier, $\mathcal{F} E A 58$ (1972), 303; cf. Kitchen, Pharaoh Triumphant, 171.
${ }^{16}$ PSBA ${ }_{15}$ (1893), 522-6. ${ }^{17}$ PSBA 22 (1900), 62-3; 24 (1902), 249.
18 A History of Egypt, iII (London, 1905), 97-8.
${ }^{19}$ Die Veziere des Pharaonreiches (Strasburg, 1908), 89-93.
${ }^{20}$ Op. cit. 447-9, with the review by J. Cerný, BiOr i9 (ı962), 142.
${ }^{21}$ Square brackets indicate material that appears to bear the titles or representation, but not the name, of Paser. B. Bruyère, Rapport sur les fouilles de Deir el Médineh (1935-1940) (Cairo, 1952), ir6 (273) with 117 (fig. 197); 135 (339) with fig. 222; 145 (395) with fig. 237 have been excluded.
13. Deir el-Medina. Stela/lintel. $\mathrm{PM} \mathrm{I}^{2}$, 695; K $R I$ iII, 26 (26).
14. Deir el-Medina. Stela/lintel. PM ín, 73 I (c); K $R I$ iII, 26 (27).
15. Deir el-Medina. [Stela/naos. PM I ${ }^{2}$, 740 (b); K $R I$ ini, 28 (33).]
16. Deir el-Medina. Lintel. Paris, Louvre E.16329. PM i², 696; K RI ini, 27 (3i).
17. Deir el-Medina. Lintel. PM I², 74I; K RI ini, 27-8 (32).
18. Deir el-Medina. Lintel. PM i², 696; KRI iII, 630 (32).
19. Deir el-Medina. Frieze. PM I², 740 (c); K $R I$ III, 27 (30).
20. Deir el-Medina. Plinth. K $R I$ ini, 28 (34A).
21. Deir el-Medina. Plinth. K $R I$ ini, 28 (34B).
22. Deir el-Medina. Plinth. K $R I$ ini, 28 (34C).
23. Deir el-Medina. [Jamb. $\mathrm{PM} \mathrm{i}^{2}$, 698.]
24. Deir el-Medina. [Relief. $\mathrm{PM} \mathrm{I}^{2}$, 697.]
25. Deir el-Medina. Relief. Chicago, Natural History Museum A.3i684. PM I ${ }^{2}$, 740 (a).
26. Serabit el-Khadim. Stela. PM vir, 363 (255); K $R I$ in, 34 (if5).
27. No provenance. Stela. Berlin, Staatliche Museen 10284. Königliche Museen zu Berlin; Ausführliches Verzeichnis der aegyptischen Altertumer und Gipsabgüsse (2nd edn., Berlin, i899), I 35.
28. No provenance. Stela. Berlin, Staatliche Museen i7276. K RI III, 34 (47).
29. No provenance. Stela. London, BM 35628. M. L. Bierbrier, Hieroglyphic Texts from Egyptian Stelae etc. in the British Museum, ıо (London, 1982), 17-ı8; p. 32.
30. No provenance. Stela. Paris, Louvre E.io8i6.

3 I. No provenance. Stela. The Vatican, Museo Gregoriano Egizio. K RI III, 32 (43).

## III. Statues

I. Qantir(?). Paris, Louvre E.2598o. K RI iII, iо (3); el-Sayed, Documents, 28-36, pls. 3-6.
2. Mendes. K $R I$ iII, 34 (46). Cf. no. iII. I 5, below.
3. Memphis, temple of Ptah. Durham, Oriental Museum N.5in. PM ini ${ }^{2}, 838$ (a). Below pp. III-I2.
4. Memphis, temple of Ptah. Cairo CG 630. PM III ${ }^{2}$, 838 (b); KRI III, II-I3 (5).
5. Saqqâra. Block Statuette. Hildesheim, Roemer-Pelizaeus Museum 4886. PM III ${ }^{2}$, 82 I. G. T. Martin, The Sacred Animal Necropolis at North Saqqâra (London, 198ı), 92, pl. 30 (1084).
6. Medamud. London, BM 954. $\mathrm{K} R I$ ini 14 - $\mathrm{I}_{5}$ (7).
7. Karnak. Cairo CG 42ı64. PM II ${ }^{2}$, 145 (a); K $R I$ iII, i6-ı7 (9); C. D. Noblecourt, Ramsès le Grand (Paris, 1976), 92-5.
8. Karnak. Cairo JE 38062. PM iı ${ }^{2}$, 145 (b); KRI iII, I 5-ı6 (8).
*9. Karnak. Cairo CG 42 I56. PM iI ${ }^{2}$, 145 ; K $R I$ iII, 292-3.
ıо. Deir el-Bahari, temple of Hatshepsut. Cairo CG 56ı. PM in ${ }^{2}$, 375; K RI ini, i9-20 (i2).
I I. Deir el-Bahari, temple of Mentuhotep. London, BM 687. PM iI ${ }^{2}$, 395 (a); K RI iII, 18-i9 (í).
12. Deir el-Bahari, temple of Mentuhotep. Philadelphia, University Museum E. 534 and

13. Sheikh 'Abd el-Qurna. Courtyard of tomb ıo6. L. Collins, $\mathcal{F} E A$ 62 (i976), 35 with fig. 30.
14. Deir el-Medina. $\mathrm{PM}_{\mathrm{I}}{ }^{2}$, $\mathrm{K} R I$ III, 27 (29).
15. No provenance. Copenhagen, Ny Carlsberg Glyptothek AEIN.50. K RI ini, 2 i (i8). Identified with ini. 2: H. De Meulenaere and P. Mackay, Mendes, in (Warminster, i 976), ı 96 (4i), with pl. i7 (a).
16. No provenance. Leningrad, Hermitage i8ıı.I. A. Lapis and M. E. Mate, Drevneegipetskaya skulptura i sorannii gosudarstvennogo ermitazha (Moscow, 1969), 82-3 (77); texts, II (77), pl. 46.
17. No provenance. London, BM 5 Io K RI iII, 33 (45).
18. No provenance. Block-statuette. Moscow, Pushkin Museum of Art I.I.a.i295. Chodzhash in Pigulerskaya et al. (eds.), Drevnǐ̃ mir: sbornik statě̆, 191-5.
19. No provenance. Varille Collection. K RI iII, 33 (44).

## IV. Depiction in Scenes

I. Sheikh 'Abd el-Qurna. TT 58 (Amenemone). Cairo JE 43591. PM i², 699; K RI I, 403.
2. Deir el-Medina. TT 4 (Qen). $\mathrm{PM} \mathrm{i}^{2}$, i i (6); K RI iii, 678.
3. Deir el-Medina. TT 7 (Ramose). PM i², 16 (9); KRI inı, 6 I3.
4. Deir el-Medina. TT io (Penbuy and Kasa). PM i², 2 I (6); K RI ini, 738-9.
5. Deir el-Medina. Stela of Khawy. Cairo JE 72021. PM i², 697; K RI iir, 699 (4).
6. Deir el-Medina. Stela of Karo. London, BM 328. PM i², 723; K RI iif, 826 (3).
7. Deir el-Medina. Stela of Qaha. PM I${ }^{2}, 425 ; \mathrm{K} R I_{\text {III }}, 609$ (22).
8. Deir el-Medina. Statue of Ramose. PM I², 696; 713 (b); K RI III, 630 (33).

## V. Graffiti

1. Western Thebes. K RI III, 22 (14).
2. Western Thebes. K RI III, 22 (15).
3. Deir el-Bahari. [TT 3 II (Khety). New York, Metropolitan Museum of Art 23.3.26. PM I', 387; K RI III, 23 (17).]
4. Sheikh 'Abd el-Qurna. TT 93 (Qenamun). PM i², 192 (16); K RI iil, 22 (i6).
5. Sehel. PM v, 252 (232); K RI III, 34 (42).

## VI. Ostraca

1. Deir el-Medina. Oxford, Ashmolean Museum, O. Gardiner 13. K RI ini, 29-30 (38).
2. Deir el-Medina. Oxford, Ashmolean Museum. O. Gardiner 71. K RI ini, 30-1 (39).
3. Deir el-Medina. Oxford, Ashmolean Museum. O. Gardiner 79. K RI ini, 28 (35).
4. Deir el-Medina. O. Michaelides 22. K RI III, 29 (36).
5. Deir el-Medina. O. Michaelides 62. K RI iII, 29 (37).
6. Deir el-Medina. Toronto, Royal Ontario Museum. O. Toronto AII. K RI iII, 3 I (40).
7. Deir el-Medina. Berlin, Staatliche Museen. O. Berlin if238. KRI iif, i6i.

## VII. Vessels

I. No provenance. Baltimore, Walters Art Gallery 48.457.
2. No provenance. Berlin, Staatliche Museen 19742. K RI iII, 35 (48G).
3. No provenance. Leiden, Rijksmuseum van Oudheden I.223. C. Leemans, Aegyptische Monumenten van het Nederlandsche Museum van Oudheden te Leyden, II (Leiden, 1844), pl. 94.
4. No provenance. Paris, Louvre E.5344. K RI iII, 35 (48F).

## VIII. Shawabtis ${ }^{22}$

1-22. Saqqâra, the Serapeum. Paris, Louvre. J.-F. and L. Aubert, Statuettes égyptiennes (Paris, 1974), 95. These would appear to include at least twelve figures from the Serapeum: N. 772 (three figures); N. 773 (nine figures). Cf. A. Mariette (ed.

[^66]G. Maspero), Le Serapeum de Memphis, i (Paris, 1882), 62, 139; P. Pierret, Musée du Louvre; Catalogue de la salle historique de la galerie égyptienne (Paris, 1882), 38 (174), 40 (196).
23. Thebes, the Ramesseum. J. E. Quibell, The Ramesseum (London, i898), pl. 5.
24. No provenance. Berlin, Staatliche Museen 367. KRI iII, 36 (50a).
25. No provenance. London, University College. Blue-glazed ware. $\mathrm{H} .8 \mathrm{~cm} ; \mathrm{w} .3 \mathrm{~cm}$; d. 2.I cm. KRI iII, 36 (50b); W. M. F. Petrie, Shabtis (London, 1935), pls. 9, 30 (94).
26. No provenance. London, University College. Blue-glazed ware. H. 3.7 cm ; w. 3 cm ; d. 2.3 cm . K RI III, 36 (50); Petrie, loc. cit. (95).
${ }^{*}{ }_{27}-8$. No provenance. London, University College. K RI III, 293.
29. No provenance. New York, MMA 22.2.29. W. C. Hayes, The Scepter of Egypt, if (Cambridge, Mass., I959), 333.
30. No provenance. Paris, Louvre A.75-N.5212. Pierret, op. cit. 48 (227); G. Lefebvre, op. cit. 1 37-8.

## IX. Amulets

i. Tanis[?]. Stela-form. Antwerp, Museum Vleeshuis 791.440. PM iv, 23; K RI iII, I I (4).
2. Saqqâra, the Serapeum. Pectoral. Paris, Louvre E.68-N.762. PM ini ${ }^{2}$, 783; K RI iI, 366-7 ( $130 B$ ).
3. Saqqâra, the Serapeum. Pectoral. Paris, Louvre E.69-N.763. A. Mariette, Le Serapeum de Memphis, III (Paris, 1857), pl. 12 (bottom); E. Feucht, Pektorale nichtköniglicher Personen (Wiesbaden, 1971), 70 (30); J. Vandier, Musée du Louvre; le départment des antiquités égyptiennes; guide sommaire (5th edn., Paris, 1973), 92.
4. Saqqâra, the Serapeum. wisd-form. Paris, Louvre E.75-N.760. PM ini², 783.
5. Saqqâra, the Serapeum. Scarab. Paris, Louvre E.70-N.725. Pierret, op. cit. 142 (597); C. Boreux, Musée national du Louvre; départment des antiquitès égyptiennes; guide catalogue sommaire, II (Paris, 1932), 340.
6. No provenance. Stela-form. Paris, Louvre N.2269-AF.2576. Pierret, op. cit. 83 (345).

## X. Plaques

1. No provenance. Berlin, Staatliche Museen 15389. P. E. Newberry, PSBA 24 (1902), 249.
2. No provenance. London, BM 53064. Below, pp. 112-13.
3. No provenance. London, University College 12798. Glazed steatite. H. i. 9 cm ; w. I. 4 cm ; d. 0.7 cm . K RI III, 34 (48D).
4. No provenance. New York MMA 10.130.322. Glazed steatite. K RI iif, 34 (48B); J. Ward, The Sacred Beetle (London, 1902), pl. 6 (255); Hayes, loc. cit.
5. No provenance. Paris, Louvre E.5I93. K RI iif, 34 (48A).
6. No provenance. Turin, Museo Egizio i650. K RI iif, 34 (48C).

## XI. Beads

I. Saqqâra, the Serapeum. Paris, Louvre E. 7 I -AF. 2434 . K $R I_{\text {II, }} 366$ (Bi); $=\mathrm{K} R I$ iII, 35 (48E).
2. No provenance. London, University College 12799. Blue-green glazed ware. H. i. 6 cm ; $\mathbf{w} .2 .2 \mathrm{~cm}$. Inscribed in black: tiyty ssb imy-r niwt t tsty Pssr. Petrie, Scarabs and Cylinders with Names (London, 1917), pl. 43 (150).
3. No provenance. New York, MMA 05.3.274. Blue-glazed ware. Hayes, loc. cit.
4. No provenance. Formerly Hilton-Price collection. Newberry, loc. cit.

## XII. Inscribed Bricks

I. Thebes[?]. Florence, Museo Archeologico 2641. PM i², 224.

2-3. Sheikh 'Abd el-Qurna. From the eastern wall of the court of tomb io6. New York,
 Hayes, loc. cit.
4-5. Sheikh 'Abd el-Qurna. Reused in 'monastery of Cyriacus', at tombs 65 and 66. New York, MMA 14.I.426, and formerly MMA 14.1.427. H. E. Winlock and W. E. Crum, The Monastery of Epiphanius at Thebes, i (New York, 1926), i7; Hayes, loc. cit.; K RI iII, 9 (i).
XIII. Miscellaneous ${ }^{23}$

1-2. Saqqâra[?]. Canopic jars. Cairo CG 4325-6. PM iní, 77ı; K RI inf, 35-6 (49A-B).
3. Abydos. Pen-case. Liverpool, Merseyside County Museums 24.9.00.92. PM v, 69; K RI III, 14 (6).
4. No provenance. Chest. Berlin, Staatliche Museen 6768. Königliche Museen zu Berlin; Ausführliches Verzeichnis der aegyptischen Altertumer und Gipsabgüsser, 197-8.
5. No provenance. Statuette-base. Swansea University College, Wellcome Museum W.232. Above, pp. Io3-6.
6. In cuneiform letter: E. Edel, $N A W G 1978$ (4), i17-58.

## Provenance

Tanis: Ix, I (?).
Qantir: II, I; III, I (?).
Mendes: III, 2.
Memphis: Temple of Ptah: III, 3-4.
Saqqâra: iII, 5; xiII, 1-2 (?); Serapeum: viII, i-22; IX, 2-5; XI, I.
Abydos: xiII, 3 .
Thebes: II, 2; xiI, I (?); Medamud: iII, 6; Karnak: III, 7-9; Western Thebes: II, 3; v, I-2; Deir el-Bahari: v, 3; temple of Hatshepsut: III, io; temple of Mentuhotep: iiI, in-i2; Sheikh 'Abd el-Qurna: tomb io6: i, i; in, in; xir, 2-3; other: iv, i; v, 4; XII, 4-5; Deir el-Medina: II, 4-25; iII, i4; iv, 2-8; vi, i-7; Ramesseum: viil, 23.
Gebel el-Silsila: $1,2$.
Sehel: v, 5.
Serabit el-Khadim: II, 26.

## Additional Notes

iII. 3 Statue. Durham University, Oriental Museum, N. 5 II . Grey granite. H. 79.5 cm; w. 30.5 cm . PM ${ }_{\text {III }}{ }^{2}$, 838; Birch, op. cit. 72, pl. A; Donohue, op. cit., pl. 7; P. Rawson, Apollo, 104 (1976), 90, fig. 3; Ruffle, op. cit. 8; id. Arts of Asia, 13 n. 6 (1983), 70; J. Malek, feA 72 (1986), 107 (3). Figs. 3, 4.

[^67]Paser is depicted kneeling upon a plinth. He wears a composite duplex wig, short beard, the long vizieral tunic secured by two straps tied behind his neck in a 'shoulder knot', and sandals. ${ }^{24} \mathrm{His}$ left arm is crooked to support the pedestal of a statuette of Ptah which rests against Paser's left breast and is held in place by his right hand, crossed over the stomach. ${ }^{25}$ The figure of Ptah lacks its head: a horizontal drill hole observed at the time of discovery (see below, n. 26) indicates either an ancient restoration or perhaps that the head was originally fashioned in another material.

As its form and inscriptions suggest, the statue was set up in the temple of Ptah at Memphis, apparently at the main southern entrance beside the Abu'l-Hol colossus of Ramesses II. With other sculpture of the New Kingdom and Late Period it was discovered by Joseph Hekekyan Bey in 1852 , and parts of the text were recorded by Alice Lieder during her visit to Memphis in the following year. ${ }^{26}$ Entering the collection at Alnwick Castle, for which it will have been acquired by the 4th Duke of Northumberland, it passed with the greater part of that collection to the University of Durham in 1950.

Each shoulder bears a short inscription (fig. 3), the interpretation of which is considered in the appendix below.

Upon the upper part of the tunic, across the chest, is inscribed: Governor of the city, vizier Paser, justified. The main text, of which (fig. 4) is a revised copy, occupies three vertical columns on the skirt of the tunic, and may be translated: ${ }^{1} \mathrm{~A}$ boon which the king gives to Ptah, south of his wall, lord of Ankhtawy: that you may cause to be steadfast my limbs ${ }^{2}$ in upholding your perfection, my arms in supporting your joyfulness ${ }^{\mathrm{a}}$ every day ${ }^{\mathrm{b}}$; and that my name be established and enduring in your temple; for the ka of the prince, count, chief justice, senior warden of Nekhen, ${ }^{c}$ priest of Maat, governor of the city, vizier Paser, justified.
a $n \underline{d} m-i b \cdot k$.
$\left.{ }^{\mathrm{b}} m \underline{h r t} h r w<n t r \subset n b\right\rangle$. Cf. Wb inf, 39.
c See above, p. 105 n. a.
x. 2 Plaque. BM 53064; accession no. 1914.2.16.126. Green-glazed steatite. H. ı. 8 $\mathrm{cm} ; \mathrm{w} . \mathrm{r} .4 \mathrm{~cm}$; d. 0.7 cm . Bierbrier, $\mathcal{f} E A 67$ (198ı), i95. Fig. 5. Longitudinally

[^68]

Fig. 3. Durham N.5if.

cm
Fig. 5. BM 53064.


Fig. 4. Durham N.5if.
pierced, the rectangular plaque is inscribed upon its obverse 'Ramesses beloved of Amun'; and upon its reverse 'Governor of the city, vizier Paser, justified'. Acquired in 1914 without evidence of provenance from the Cairene dealer N. D. Kyticas. ${ }^{27}$

## APPENDIX

## Two Ramesside titles

Monuments of Paser display a group of epithets that have hitherto eluded satisfactory interpretation. These occur, similarly placed, upon the upper arms or

[^69]

RIGHT
Fig. 6
shoulders of four statues: ${ }^{28}$ III, 3: Durham N.5II, from the temple of Ptah at Memphis; iII, 7: Cairo CG 42I64; ini, 8: Cairo JE 38062, both found in the cachette at Karnak; and III, I 5: Copenhagen AEIN.50, of unknown provenance, which now preserves the left-arm inscription alone. Elsewhere their apparently sole attestation is upon the arms of a statue of one Mentuhotep, perhaps to be identified with the vizier and son-in-law of Taharqa. ${ }^{29}$ The variant writings are shown in the accompanying fig. 6: none would seem to be significant other than the presence on the right arm of Durham N.5I i of the prenomen of Ramesses II. Following the free rendering by Birch, ${ }^{30}$ Roeder, in his treatment of the Mentuhotep-inscriptions, ${ }^{31}$ read the R-text as ḥm-ntr šrt 'Inpw, 'Prophet der Göttin Nase des Schakals', and L as $h m-n \underline{t r} R \mathrm{R}-n b w$, 'Prophet des Gottes Rec-nebu'. More recently Gaballa has hazarded for L 'ḥm-ntr $i \boldsymbol{i} h \mathbf{h} n b w$, "prophet of him who illuminates all", i.e. the sun-god', ${ }^{32}$ whilst Simpson, accepting Roeder's opinion in relation to R, 'priest of the Nose of Anubis', provisionally understands L to be $h \underset{m}{ }-\underline{n} \underline{t} \boldsymbol{j} j$ 'h (?) $n b w$, 'priest of the radiance of the lords (?)'. ${ }^{33}$ Although I have no great confidence that my own suggestions will ultimately prove to be correct in detail, it seems at least possible to elucidate the general sense in which these titles were intended. ${ }^{34}$

An initial clue is perhaps afforded by association. Cairo CG 42 I 64 records upon the upper surface of the altar that the vizier holds before him, and so of the other texts on the statue in closest proximity to the arm-inscriptions, the titulary $\underline{h r y}$ - $\boldsymbol{h} b$


[^70] $\underline{t} t y$ and across the chest of the statue of Mentuhotep is: <br>\& \& \& imy-r htmtiv Mntw-htp. Under the Sixth Dynasty the title hm-ntr hwy Hr 'priest of the two children of Horus', ${ }^{35}$ occurs in three closely defined sequences. In the tomb of



 seal of an unnamed functionary who held office under Pepy $\mathrm{II}^{38}$ defines him as:
 hry-hb wr idt.

All three individuals range the title with others that identify their office as $\underline{h r y}$ - $h \boldsymbol{b}$ and specify privileged tasks related to the $p r-d w ; t$ and/or $\underline{d} b ; t$, in which the king was daily washed and attired. ${ }^{39}$ Thus in the roles of $h \underset{m}{ }-n \underline{t r} d \stackrel{y}{r} r t$ and $\underline{h} r y-h \underline{b} b w r-i d t$ are performed the matutinal acts of clothing and purification, whilst their symbolic conferment of magical protection is articulated by the $h m-n \underline{t} r \underline{h k}$; and the s $\check{s}$ $m \underline{d} t-n \underline{t r} \cdot{ }^{40}$ In the present context something of the relevance of the hww $H r$, itself a formulation seemingly inherited from the courtly traditions of pre- and protodynastic times and centred upon the Horian personality of the living ruler, ${ }^{41}$ is revealed by Pyramid Texts $\S 619$ which pictures them in the act of carrying the deceased king. This aspect of their duties receives further definition in an early association with the souls of Pe and Nekhen, already indicated by the juxtaposition of their respective priesthoods in the titulary of Khuenukh, and elaborated in Spells ${ }^{1} 57$ and 158 of the Coffin Texts, where the Souls of Pe are identified as Horus, Imsety, and Hapy and those of Nekhen as Horus, Duamutef, and Khebsenuf. ${ }^{42}$ So, also (although in reliefs from the sun temple of Niuserre the task of carrying the king in procession is allotted to the wršyw, 'Guardians', of Pe and Nekhen, ${ }^{43}$ a group that are in the Pyramid Texts affiliated to the souls of the two localities $)^{44}$ in temple scenes of the New Kingdom and later it is the souls, and on occasion the king's sons

[^71]themselves, who are shown performing this role. ${ }^{45}$ Similarly, the association of the children of Horus in Pyramid Texts $\S 620$ with the appearance of the king in the $\underline{h} n w$-bark is echoed in later depictions of the sacred barks borne aloft by the souls, ${ }^{46}$
 mit as they are quoted in the Sixth Dynasty protocols. It would thus appear that during the Old Kingdom the function of the priest of the two children of Horus within the $p r$-dwst and the $\underline{d} b ; t$, in parallel to the priests of the souls of Pe and Nekhen, was to supervise the ceremonial emergence of the king in the sedes gestatoria, presumably at the conclusion of his toilet. In view of the probability that this reflects a patriarchal custom in which the ruler was supported and protected by his sons, ${ }^{47}$ it is noteworthy both that a significant proportion of those holding the title of hry š̌ts $n p r-d w s t$ are at this time viziers, and that many of the latter are also described as 'king's son'. ${ }^{48}$

The survival of these associations is attested for the Middle Kingdom by the subsidiary titles of the vizier Mentuhotep, a contemporary of Sesostris I who was both chief lector-priest and priest of the two children of Horus, the latter occurring amongst a catalogue of duties at court that involved responsibility for the royal insignia; ${ }^{99}$ whilst under the Eighteenth Dynasty the statue of one Teti, a scribe of the divine offerings of Amun, records that he was a priest of the two children of Horus and sem-priest of the $p r-d w s t .{ }^{50}$ Archaism is detectable in the more recent example from the depiction of the first child as wearing the crown of upper Egypt and the second that of lower Egypt, in apparent reference to Nekhen and Pe respectively. In contrast, the statue of Paser, Copenhagen AEIN 50, shows both children with the northern crown, whilst on Cairo CG 42 I 64 the first child wears the northern crown, and the second is seated upon the lap of a nurse, most probably indicating that the office was now understood to be that of a hnmti-priest, of which the titles are regularly determined in this way. ${ }^{51}$ Finally, on the statue of Mentuhotep at Buffalo

[^72] Kees, $Z \ddot{A} S 84$ (1959), 66-7; H. De Meulenaere, BIFAO 6ı (i962), 37. Cf. Helck, ap. Habachi, op. cit. 48 n. ıо.
the first child appears wearing the northern crown, and the second with the combined crowns, the presence of a final $t$ suggesting that the whole should now be read $h m(-n \underline{t r})$ h h $h t \underset{H}{H}$, 'priest of the male-child and of the female-child of Horus' ${ }^{52}$ However this may be, it is apparent that in selecting this title for prominence Paser was recalling a tradition, appropriate to his vizieral dignity, that established an intimate relationship between its holder and the person of the king. ${ }^{53}$

Of less oblique significance is the physical position of the arm inscriptions themselves. Texts upon the uncovered shoulders and chests of sculpture in the round seem first to occur under the Twelfth Dynasty, when they are confined to private individuals and record the name of the reigning monarch, ${ }^{54}$ an apparent reflection of the practice of marking the body as an indication of ownership or dedication. ${ }^{55}$ Their appearance coincides with that of pectorals bearing pharaonic names, attested both by surviving examples ${ }^{56}$ and in representation upon statues of the king's family, ${ }^{57}$ and although deriving from a somewhat different decorative tradition they too were perhaps understood to possess prophylactic qualities. ${ }^{58}$ Under the Eighteenth Dynasty the fashion found increasing favour, ${ }^{59}$ exceptionally elaborated by the replacement of the royal name with the name or figure of a god. ${ }^{60}$ Other than upon statues of Akhenaten, where the presence of the earlier didactic names of the Aten within cartouches on the upper arms and chest continue to

[^73]acknowledge dependence upon a higher 'king', ${ }^{61}$ the motif seems not to have been considered appropriate for anthropomorphic royal sculpture until the Nineteenth Dynasty, ${ }^{62}$ first encountered, apparently, on statues of Ramesses II. ${ }^{63}$ Now, however, involving the presence of the king's own name, it served as a means of identification, complementary to the girdle cartouches that, as far as the actual figure of the king is concerned, had from the Old Kingdom achieved the same purpose; ${ }^{64}$ and in succeeding years, in at first a statistically small number of examples, the innovation was adopted by commoners. ${ }^{65}$ It is precisely within this stage of development, when a device originally intended to express the client relationship between subject and ruler came also, under the influence of its modification for royal use, to be secondarily employed as a means of asserting individual identity, that Paser's epithets are to be understood, as is underlined in one example by the addition of the prenomen of Ramesses II. ${ }^{66}$

The suggestion of inscriptional and physical context that Paser's titles are to be interpreted as the expression of his association with the king in the role of a priestly officiant finds support in their phraseology. Amongst the more conspicuous resumptions by the early Ramessides of forms current in pre-Amarna days is the accordance of divine honours to discrete manifestations of the reigning king both within appropriately named temples, and before colossal statues ${ }^{67}$ which, similarly qualified by a specific epithet, were supported by individual endowments and the service of their own personnel. ${ }^{68}$ For the latter, the most direct evidence is afforded by surviving examples which their texts fully designate as ( $p$ ) twt es ( $n$ ), hnty wr $n^{69}$ or $m n w w r$ followed either by the nomen or prenomen, apparently used indifferently, ${ }^{70}$ defined by some distinct predicate. Such is the case with two colossi of Ramesses II in the temple of Luxor where the respective epithets $h q ;$ tswy and $R \subset n$

[^74]$h q ; w$ are added to the royal name. ${ }^{71}$ Full designations are secondarily recorded as the identification of statues shown worshipped upon votive stelae; in the names of boats in some way dedicated to them; by inscriptions recording the quarrying of colossi; in administrative documents relating to the provision for their cult; and by their commemoration upon scarabs or the extant moulds and impressions. At times more difficult to assess is the employment of an abbreviated designation that, dispensing with the introductory phrase, retains only the royal name and epithet. Thus the epithet $h q^{3} t 3 w y$ recurs amongst others as the identity of colossi at Abu Simbel ${ }^{72}$ where, as in general in the inscriptions upon statues themselves and as the accompaniment of their portrayal on votive stelae, this abbreviated formula is preferred, often in reference to an aspect of royalty not elsewhere known to be attested by the use of a complete designation. In these examples the signification of the formula is apparent from its context. It is less so when encountered in isolation upon scarabs that record otherwise unknown epithets, and which a minimal interpretation would regard as simple evocations of some random facet of kingship. ${ }^{73}$ Since, however, it may happen that conclusive evidence for the existence of an individual cult survives only in the full designation of its statue upon a single scarab, ${ }^{74}$ and since in recording a far wider range of epithets in the abbreviated formula than within the context of full designations scarabs reflect the same convention as is observable upon statues themselves and upon their twodimensional representation, it seems probable that here too is to be recognized an expression of organized ritual practice. More attenuated still is the occasional reference to a statue by its epithet alone, without identification of the king in whose honour it was erected. In a devotional inscription at Aswan addressed to Khnum by one Minemheb, ${ }^{75}$ the significance of the latter's title, imy-r kiwt nre $n h q j w$, already suggested by the proximity of the granite quarries, is confirmed by the existing colossus at Luxor, ${ }^{76}$ by depictions with both full and abbreviated designations upon votive stelae from Qantir, ${ }^{77}$ apparently in reference to a colossus formerly standing there of which fragments, bearing the abbreviated formula, have been identified at Tanis and Bubastis; ${ }^{78}$ by statues in the Ramesseum ${ }^{79}$ and at Abu Simbel ${ }^{80}$ also with

[^75]the abbreviated formula; and by the employment of the full designation as the name of a boat. ${ }^{81}$ This last, apparently unique, usage is of particular importance in revealing the true significance of examples where the abbreviated formula of royal name and epithet is applied to boats, and military or naval contingents, ${ }^{82}$ and of the considerably more widespread practice of specifying them by means of an epithet alone. ${ }^{83}$ In these contexts also, it emerges, are recorded distinctly perceived manifestations of regality that would otherwise remain uncommemorated. ${ }^{84}$.

On the more limited basis of those defined statues of Ramesses II that may still be identified from their inscriptions or are known in representation or from the occurrence of their full designations, the accompanying list adequately reflects both the vagaries of the surviving evidence and the range of epithets employed. In general, these exhibit the king in relation to a deity ( $m r y$ ' $\operatorname{Imn} /$ ' $\operatorname{Itm} / \mathrm{Pth} / \mathrm{St} / \mathrm{h} / \mathrm{H} \mathrm{H} / \mathrm{H} \boldsymbol{H r}$ -
 as a god himself ( $p ; n \underline{t} r$ ) or one in the company of gods ( $h r m n \underline{t} r w$ ); or announce his
 manifestation of some deity ( $M n \underline{t} w m t ; w y / m M n-n f r ; R \subset n h q ; w)$. This last pair may be regarded as reflecting a totality of royal attributes in terms of antithesis, identical with the warlike aspect of Montu in combat and the beneficent power of Re in triumph and tranquil dominion, ${ }^{85}$ and are echoed elsewhere by descriptions of
 hiswt $n b^{90}$ and ptpt hiswt $n b .{ }^{91}$ Here, it seems, are appropriate parallels for Paser's inscriptions, ${ }^{92}$ which on other grounds also have seemed to refer to the king. Some measure of confirmation is the accompanying prenomen in the R-text of Durham N.5II, which exactly mirrors the abbreviated formula as it is used in reference to the royal cult, whilst in the light of evidence quoted above, their rarity, other than in what is presumably an archaizing source of the Twenty-fifth Dynasty, becomes

[^76]more explicable．It may therefore be suggested that the L－text identifies Paser as $h \neq n-n \underline{r}\langle R\ulcorner-m s-s w\rangle r \subset / s ̌ w / 3 h w n n b w / n b w t$ ，where $n b w / n b w t$ ，in view of the parallels $R \subset$ $n$ ḥqsw，$R \subset n$ nsyw，and šw $n$ nsyw may be translated as＇lords＇，but perhaps more plausibly as＇the isles＇，${ }^{93}$ on the model of wid b；w her hiswt nb，R $\mathrm{c}_{\text {c；}} n \mathrm{Kmt}$ and $n b$ T3－sty：＇priest of 〈Ramesses〉sun（vel．sim．）of the isles＇；and that in the R－text he appears as $h \underset{m}{ }-n \underline{t r}\langle W s r-m>r t-R r\rangle$ hnty，minimally translatable，understanding the jackal to be a determinative，as＇priest of 〈Usermaatre〉 the pre－eminent＇．Since hnty at times occurs alone as an epithet of Osiris，${ }^{94}$ it is conceivable that the complementary solar and Osirian aspects of kingship are here evoked．

Table 1．Cult－names of Ramesses II

|  | Existing statues defined as （p；）twt c 3 （ $n$ ），etc． | Statues defined as（ $p$ ）twt $\mathrm{c}_{3}$ （ $n$ ），etc．， attested in representational or textual sources | Existing statues bearing undefined royal name and epithet | Representations of statues bearing undefined royal name and epithet | Scarabs，etc．， bearing undefined royal name and epithet |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $m r y$＇Imn |  |  | I |  | 2 |
| mry＇Itm |  | 3 | 4 | 5 |  |
| mry Pth |  |  | 6 |  | 7 |
| mry Sth |  | 8 |  |  | 9 |
| mry Hr |  | 10 |  |  |  |
| mry Hr shty |  |  | 11 |  |  |
| mry Dhwwti |  |  | 12 |  | 13 |
| mrwt mi Pth |  |  | 14 |  | I 5 |
| mrwt mi Ptḥ m Mn－nfr |  | I 6 |  |  |  |
| mrwt mi Ḑhweti hr bikff |  |  | 17 |  | 18 |
| sh n＇Itm |  | 19 |  |  | 20 |
| shn R |  | 21 |  |  | 22 |
| sh n Sth |  | 23 |  |  | 24 |
| s）Pth |  | 25 |  |  |  |
| p；ntr |  | 26 |  | 27 | 28 |
| hr m ntrw |  | 29 | 30 |  | 3 I |
| $n b$ T3－sty |  |  |  | 32 |  |
| $h q ; ~ h q q z w$ |  |  |  | 33 | 34 |
| hqu；tswy | 35 |  | 36 | 37 | 38 |
| $\underline{d s r}$ šfyt |  | 39 |  |  |  |
| Mntw m Mn－nfr |  | 40 |  |  |  |
| Mntw m t3wy |  | 41 |  | 42 | 43 |
| $R \subset n$ haqsw | 44 | 45 | 46 | 47 | 48 |

I Habachi，Features，18－20．
2 H．R．Hall，Catalogue of Egyptian Scarabs， $\mathcal{E} c$. ，in the British Museum，I （London，1917），211（2104－5）；W．M．F．Petrie，Scarabs and Cylinders with Names （London，1917），pls． 40 （19．3．2）； 4 （19．3．36－7）； 42 （19．3．115－35）．

3 A．H．Gardiner，Ramesside Administrative Documents（London，1948），59，i i． 4 and 13；cf． 99.

[^77]4 Abu Simbel: Habachi, op. cit. 8.
5 Ibid. 28-34.
6 Memphis: Petrie et al., Tarkhan I and Memphis, v (London, 1913), 77; M. Mogensen, La Glyptothèque Ny Carlsberg; la collection égyptienne (Copenhagen, 1930), 8 (A.ı4 (AEIN.1483)); pl. 7. See n. 14 below.

7 E. Hornung and E. Staehelin, Skarabäen und anderer Siegel-amulette aus Basler Sammlung (Mainz, 1977), 272 (405).

8 Khawam, BIFAO 70 (i97i), pl. 32 (ii).
9 Ibid. pl. 32 ( 15 ).
ıо A. Weigall, A Report on the Antiquities of Lower Nubia (Oxford, 1907), i 13, pl. 64.
i I Abu Simbel: Habachi, op. cit. 8.
12 Abu Simbel: $B S F E 21$ (1956), 49.
13 Petrie, Historical Scarabs (London, 1889), 49; idem, Scarabs and Cylinders, pl. 40 (19.3.1ı, 19.3.14); Hall, op. cit. 218 (2186, 2187,2188 ), 220 (2205, 2206), 22 I (2207, 2208); P. E. Newberry, Scarabs (London, i906), pl. 34 (28, 30, 35).

14 Memphis: see n. 6 above: the statue bears both epithets mry Pth and mrwt mi Ptḥ; Kôm el-Muqdâm: E. Naville, Ahnas el Medineh (London, 1894), 3 1; Gherf Hussein: LD, Text V, 57. Cf. n. 17 below.
is The name of a quarry: A. Hamada, $A S A E 38$ (i938), pl. 30 l. 20.
i6 Khawam, op. cit. 139.
17 Memphis: M. el-Amir, $A S A E 42$ (1942), 359-63, where the inscription also refers to Ptah.

18 Cf. Newberry, Scarab-shaped Seals (London, i90ı), pl. 5 (36280).
19 Idem, Scarabs, pl. 36 (30) = J. Yoyotte, Kêmi, ı (ı949), 87 (8); Khawam, op. cit. 142.

20 M. Hamza, $A S A E 30$ (i930), pl. 4 (c).
21 Khawam, op. cit. 142.
22 Yoyotte, op. cit. 87 (i-7).
23 Ibid. (II-I2).
24 Ibid.
25 Hamada, op. cit., pl. 30, l. 7; Khawam, op. cit. 141.
26 Hamada, op. cit., pl. 30, 1. 4.
27 Habachi, op. cit. 29-34.
28 Yoyotte, op. cit. 87 (18-19). Cf. Petrie, Nebesheh and Defenneh (London, 1888), 30, pl. 2 (16b); Naville, Shrine of Saft el Henneh and the Land of Goshen (London, i888), 23.

29 Khawam, op. cit., pl. 32 (12).
30 M. el-Alfi, $\mathcal{J E A} 58$ (1972), 179.
31 Ibid. 179-8o, pl. 30 (2).
32 Habachi, op. cit. 16: A. Rosenvasser, Revista del Instituto de Historia Antigua Oriental, I (Buenos Aires, 1972), 99, figs. 1-2.

33 Habachi, op. cit. 33-4; K RI III, 499 (227).

34 Hamza, op. cit., fig. i5 (3); Khawam, op. cit., pl. 32 (19).
35 Luxor: Habachi, op. cit. 18.
36 Abu Simbel: C. D. Noblecourt and C. Kuentz, Le Petit temple d'Abou Simbel, I (Paris, 1968), i48-9; Habachi, op. cit. 8, 10.

37 Hall, op. cit. 223 (2225) = Yoyotte, op. cit. 87 (17).
38 Cf. Hamza, op. cit. 39; Hamada, op. cit., pl. 30, l. 19.
39 H. Gauthier, Le Livre des Rois d'Égypte, III (Cairo, I914), 49.
40 Khawam, op. cit., pl. 32 (13).
41 Yoyotte, op. cit. 87 (13); Khawam, op. cit., pl. 32 (14).
42 J. J. Clère, Kêmi, if (ı950), 36-40; Habachi, op. cit. 28-33; H. D. Schneider, OMRO 52 (1971), 16-2I.

43 Hamza, op. cit., fig. is (i).
44 Luxor: Habachi, op. cit. 17-20.
45 G. Roeder, $Z \ddot{A} S 6$ ı (1926), 53; Clère, op. cit. 27-8; Habachi, $A S A E 52$ (1954), 540; K RI III, 500 ll. 7-8.

46 Qantir (?) (Tanis and Bubastis): E. P. Uphill, The Temples of Per Ramesses (Warminster, 1984), I3, 129-3I; Ramesseum: Habachi, Features, 24-5; Abu Simbel: Noblecourt and Kuentz, op. cit. 149-50; Habachi, op. cit. io.

47 Clère, op. cit. 34-6; Habachi, op. cit. 29-3 I.
48 Hamza, op. cit., fig. i5 (4). Cf. quarry-master: Habachi, op. cit. 26.

2. British Museum EA 65901 (p. 98)

NEW LIGHT ON KIYA


University College, Swansea, Wellcome Museum W. 232 (pp. 103-6)


University College, Swansea, Wellcome Collection W. 232 (pp. 103-6)

# THE ROYAL BUTLER HORI AT NORTHERN SAQQÂRA* 

By JAROMIR MALEK

Publication of a tomb-chapel of the reign of Ramesses IV excavated in the mid-1920s and recorded by Gunn (stela in Neuchâtel, Musée d'Ethnographie, Eg.428). Discussion of the plans of offering-rooms in Memphite New-Kingdom chapels, stelae found in such chapels, stelae set up for their masters by servants/retainers, the Royal Butler Hori, royal butlers in general (particularly those temp. Ramesses IV), Saqqâra tomb-chapels of royal butlers, a characteristically Ramesside man-determinative.

## 1. The offering-rooms in Saqqâra tomb-chapels of the New Kingdom

Although the same concept underlies the plans of all free-standing tomb-chapels built at Saqqâra during the New Kingdom, ${ }^{1}$ they occur in many forms and can be divided into a number of types according to the complexity of their internal arrangement. As the exploration of the Memphite New-Kingdom necropolis advances, almost every newly discovered example adds another variation of the main theme. The nucleus is the offering-room at the western end which contains the main stela, and it is there that any attempt at systematization must begin. In an extreme case, the plan of the tomb-chapel can be reduced to this single room.

Elaboration can proceed in three directions:
A. Eastward, by adding a portico or one or more courts before the offering-room. The walls of the court are usually set off to increase its width. However, if the offering-room has side rooms flanking it on the north and south (see below, B), the walls of the court may be in direct continuation of the western end of the tomb-chapel.
B. Northward and southward, by adding a room on either side of the offering-room. This development may have been influenced by a similar tripartite arrangement at the western end of contemporary medium-size temples.
C. Westward, by placing the stela in a special stela room. This probably had as its origin the screening walls which sometimes close off the westernmost part and stela in the central offering-room of tripartite chapels.

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Fig. i. The reconstructed plan of the tomb-chapel [top-right], and a comparative table of the offering-rooms in other Memphite tomb-chapels and in the temple built by Ramesses II at Kom Rabia (all adapted and not to the same scale). Identifications and the sources of plans: 1. Raia; G. T. Martin, The Tomb-Chapels of Paser and Ra'ia at Saqqâra, pl. 2. 2. Tjay: V. Loret, BIE 3 Sér. ıo (ı899), pl. after p. ıoo, and K. A. Kitchen in Festschrift Edel, 283. 3. Paser; G. T. Martin, op. cit. 4. Haremhab (western part only); id., $\mathscr{F} E A 63$ (i977), fig. i on p. 14. 5. Amenemone I; V. Loret and K. A. Kitchen, op. cit. 6. Tia (western part only); G. T. Martin, $\mathscr{F} E A 69$ (1983), fig. I on p. 26. 7. Temple at Kom Rabia (western part); D. G. Jeffreys, The Survey of Memphis, i, fig. 30.

## 2. The tomb-chapel: Hori or Nekhtamun?

### 2.1. Discovery, location, and documentation

The tomb-chapel ${ }^{2}$ described below was excavated by C. M. Firth near the pyramid of Teti in the mid-r920s. It was probably situated above, or adjacent to, the cult temple against the eastern face of the pyramid ${ }^{3}$ and was dismantled in the course of the excavation. ${ }^{4}$ The only record of the monument known to me is among the papers of B. G. Gunn in the Griffith Institute, Oxford: four photographs (xix. 3) and two hand copies and notes concerning the stela and a relief fragment (Notebook 6, nos. 4, I3). The lower part of the stela shown on the excavation photographs is now in Neuchâtel, Musée d'Ethnographie, Eg.428.

### 2.2. The plan and architecture

Two of the photographs (pl. XIX, r-2) show the western part of the tomb-chapel: the western section of a court with a centrally placed doorway giving access to a narrower offering-room. Two incomplete columns with round bases flank the approach to the stela in the centre of the western wall. This corresponds to plan A described above. No measurements of the chapel (see fig. i for an approximate reconstruction of the plan) are extant, but the photographs suggest that its exterior north-south width was some 4.2 m ( $c .8$ cubits) across the offering-room, and some 5.2 m (c.Io cubits) across the court. The interior measurements of the offering-room were some 3.2 m by about 2.0 m (c.6×4 cubits). In comparison with some of the earlier tomb-chapels at Saqqâra, this funerary monument was of a very modest size. The walls of the offering-room were built of two rows of blocks with rubble filling between them. This method of construction is known from other Ramesside tomb-chapels at Saqqâra ${ }^{5}$ as well as from temple structures at Memphis. ${ }^{6}$ The stone lining of the main tomb shaft seems to be visible in the centre of the court in pl. XIX, i-2.

### 2.3 The main stela, Neuchâtel Eg. 428

Almost all stelae associated with free-standing Memphite tombs of the New Kingdom belong to one of the following three categories:
(a) Main tomb-stelae, at the extreme western end of the chapel. Those which are post-Amarna are usually rectangular, with a prominent 'lintel' and 'jambs' which frame the stela and turn it in effect into a shallow niche. These stelae invariably contain a scene of the worship of Osiris in their upper register.
(b) Subsidiary tomb-stelae flanking the approach to the central chapel. These stelae usually carry scenes and texts connected with deities other than Osiris (e.g. Ptah or Re-Harakhty), and vary in form.
${ }^{2}$ PM iII ${ }^{2}$, 57 I (Nekhtamūn and Dynasty i9). $\quad{ }^{3}$ Area-plan, $S A K$ I2 (i985), fig. io on p. 60.
${ }^{4}$ A similar case is that of the tomb-chapel of $H q ;-m \gg t-R \subset-n h h$, ibid. 43-60, illus.
${ }^{5}$ For example, Tia, cf. plan, G. T. Martin, $\mathfrak{f E A} 69$ (1983), flg. i on p. 26.
${ }^{6}$ For example, the small temple of Ptah at the south-western corner of the Ramesside enclosure, cf. plan, D. G. Jeffreys, The Survey of Memphis, I, The Archaeological Report, fig. 3 I.

a Left 'jamb'
b Right 'jamb'
c Middle register, right
d Bottom register, left
e Bottom register, right

e




Fig. 2. Courtesy Griffith Institute.
(c) Stelae naming other people, usually connected with the tomb owner in a professional or similar capacity. These were, it seems, set up by people who were accorded the privilege of being buried in or near the tomb-chapels of their superiors. The worship of Osiris is performed by the patron acting as intercessor for the man of a more humble rank.

The stela in Neuchâtel ${ }^{7}$ is the tomb-chapel's main stela (pl. XX and fig. 2). Only its lower half is preserved. According to Gunn, its measurements, when found, were $62 \times 140 \times 24 \mathrm{~cm} .{ }^{8}$ The stela is of limestone, decorated and inscribed in sunk relief, and originally probably had three registers. The completely lost top register probably contained a scene of the worship of Osiris. The middle register is partly preserved, with a double scene. On the left, two men are shown before a deity, probably Ptah. The god stands on a maat-shaped pedestal in a shrine. Two women are shown in a similar position on the right. The name of the second woman is $B ; k\langle t\rangle-S h m t$ (fig. 2, c). The bottom register contains a scene with Hori and his wife seated on the left, receiving bouquets from Nekhtamun, his two sons and four daughters.

## TEXTS IN THE BOTTOM REGISTER

## Above the seated couple

d 'Osiris, Royal Butler, Hori, son of Ptahemwia, (justified?)a; 'Osiris, [Henutmire]'. ${ }^{\text {b }}$

[^79]
## Above the people in front of the couple

e 'Osiris, N[ekh]tamun'c; ‘His son, Hori, justified’d; ‘His son, Hori, justified’d; ‘His daughter, ${ }^{\mathrm{e}}$ Nebt-neb-ta $\left(N b\langle t\rangle-n b-t ;\right.$ ) (?)' ${ }^{\mathrm{f}}$; 'His daughter, ${ }^{\mathrm{e}}$ Iabetmut ('Isbt-Mwt)'g;


## On the jambs

(left)

'... ascending ${ }^{i}$ (to) the lords of eternity, for Osiris, Overseer of Servants of the Royal Butler Hori, ${ }^{\text {j }}$ Nekhtamun. ${ }^{\text {j }}$
(right)
b . . .ts hु̧st (?) mi šmsw $\operatorname{H} r$ r $n$ Wir hary sdmww $n$ wdpw/wbs nsw Nḩt-'Imn.
'. . . the land and foreign country (?) as a follower of Horus, for Osiris, Overseer of Servants of the Royal Butler Hori, ${ }^{\text {j }}$ Nekhtamun ${ }^{j}$.'

## Comments

a Only mir of m3r-hrw may have been written as part of after the name, or the epithet may have been omitted.
b The name may be reconstructed as $\stackrel{\square}{\circ}$ P Hnwt-mi-Rc. ${ }^{9}$
c stela. I assume that the writing with $\sqrt[4]{ }$ on the 'jambs' aims at a more pleasing arrangement.
d Only m;r of mзr-hrw is written out after the determinative of the name Hori.
e Although the four figures on the right are clearly women, the indication of the filiation lacks the feminine ending (Gunn).
${ }^{f}$ Doubtful and the meaning unclear.
g The name, not known to Ranke, $P N$, is written quite clearly (Gunn), perhaps with the meaning 'The Left Eye of Mut' on account of the last sign. For $i ; b t$, 'the left eye', see $W b$. i, 30, in.
${ }^{h}$ I understand this as $\{$, though the absence of $i$ is very unusual.
${ }^{1} \leftrightharpoons$ presumably for $\frac{r^{\prime}}{\Delta}$ of $i \subset r$. J. van Dijk has suggested to me $r$-gs, 'beside'.
$j$ The determinative of the names of Hori and Nekhtamun shows a squatting man in a short-sleeved tunic, with his hands held on the chest and his elbows prominent, thus presenting a distinctive triangular silhouette for the upper part of his body with a round head on top. The position of the arms is reminiscent of that of shabti figures.

The sign has been noted on New-Kingdom Memphite monuments ${ }^{10}$ and is
${ }^{9}$ This suggests that the offering-table found by Bruyère, Rapport . . . Deir el Médineh (1935-1940), fasc. ii, 6 (43586), pl. i, belongs to another Hori. The Ashmolean shabtis of the woman Djimiro, mentioned by J. J. Janssen, $\mathscr{f} E A 49$ (1963), 66 n .9 , cannot be as late as Dynasty 20 on typological grounds (the position of the baskets). Other features exclude a Twentieth-Dynasty date for the British Museum shabtis (information Miss C. A. R. Andrews).
${ }^{10}$ Ahmad Badawi, $A S A E 44$ (1944), 191; R. Anthes, $M D A I K 9$ (1940), 94; J. Berlandini-Grenier, BIFAO 74
 Worship in Ancient Egypt, 89.


Fig．3．Courtesy Griffith Institute．
known from other parts of Egypt，including Thebes and Elephantine．H．De Meulenaere ${ }^{11}$ has quoted a number of additional Memphite examples and suggested that its use at Memphis did not extend beyond the reign of Ramesses II．The stela of Hori shows that the sign was still in use there during the reign of Ramesses IV or even later．Unless further study can demonstrate chronologically significant palaeographic differences，the sign only dates a Memphite monument to the Ramesside period．I am not aware of its occurrence at Memphis before the beginning of the Nineteenth Dynasty．

## 2．4．The relief fragment

The present location of this（fig．3）is not known．Gunn＇s description，which accompanies his hand copy，runs as follows：＇Mat $\langle$ erial $\rangle$ ： $\mathrm{L}\langle\mathrm{ime}\rangle$ st $\langle\mathrm{o}\rangle \mathrm{n}\langle\mathrm{e}\rangle$ ． Dim〈ensions〉： 47 （now）by 79 （now）by $21\langle\mathrm{~cm}\rangle$ ．Technique：incised．Colour： none．Work：fair．Pres〈ervation〉：surface much weathered．＇On the left of the relief， a figure，facing left，was represented on a cubic seat placed on a low pedestal．The type of seat is that usually associated with representations of cult statues of kings and gods．On the right，a man，facing right，was shown kneeling，with four columns of similarly oriented text behind him：
 $\underline{d} t$ 4．is．k m hert－ntrr Wsir wdpw／wbs nsw Hri m；
r．＇［Welcome］in peace from Egypt（To－meri）！May［the Ennead］of the West receive you，one who goes forth from his house to his tomb，one who receives 3 ．his offerings．May you join your mansion of eternity， 4 ．your tomb in the necropolis，（o） Osiris，Royal Butler，Hori，justified！＇

The relief perhaps comes from a wall which contained a series of tableaux showing the tomb owner kneeling before seated deities，and preserves parts of two such

[^80]scenes. It appears that the columns of text started approximately at the level of the present upper break of the block. This leaves the design of the wall above uncertain. The text, however, is that expected in connection with a funeral scene. The first three phrases are the same as those in the Saqqâra tomb-chapel of Mosi, temp. Ramesses II. ${ }^{12}$

### 2.5 The ownership of the tomb-chapel

The text of the relief fragment described above shows that it comes from the tomb of Hori but, unfortunately, there is no record indicating clearly that it comes from the tomb-chapel with stela Neuchâtel Eg. 428 . Nor is it certain where in this chapel we should place it. The available general photographs are of little help; indeed, they do not even establish whether the walls carried any decoration at all. The text may suggest the court, ${ }^{13}$ but the theme of the worship of deities by the tomb owner could be found almost anywhere in the chapel.

The monument in Neuchâtel is the main stela of the tomb, but it is not without problems. Its 'jambs' are very prominently inscribed for Hori's overseer of servants, Nekhtamun. ${ }^{14} \mathrm{He}$ is also shown with his children before his master and mistress in the bottom register. The ownership of the stela is thus of crucial importance for the ownership of the chapel.

An 'overseer of servants' (hry-sd $\boldsymbol{d} m w w)$ was a senior person who probably had authority over the personnel of a department of a royal/temple estate or, as is likely in this case, of an official's estate. E. S. Bogoslowski has shown ${ }^{15}$ that $s \underline{d} m w w(-r \tilde{s})$ were not only house servants, but also lower-order managers and specialists. The term, however, did not apply to field labourers.

The relationship of the people named on the stela is somewhat reminiscent of that on another, in the Oriental Museum, University of Durham, N.i965. ${ }^{16}$ There the 'jambs' are inscribed for the Overseer of Retainers (hry šmsww) Amenemhab Pekhoir, but the two figures before Osiris and Isis in the upper register are the Overseer of the Treasury Tia and his wife, while in the lower register the Scribe Iurudef ('Iw-rwd•f ) ${ }^{17}$ and 'Retainer beloved of his Lord' Pekhoir (i.e. Amenemhab) kneel before a cult image of the Hathor-cow. The shaft with the burial chamber of

[^81]Iurudef and a miniature chapel above it have now been discovered in the southern half of Tia's first court at Saqqâra. ${ }^{18}$

Stela Durham N. 1965 probably comes from Iurudef's chapel, though it need not be its main stela. The presence of Tia and his wife is explained by his professional relationship to Iurudef and the common practice of using a proxy to supplicate on one's behalf. ${ }^{19}$ Iurudef is shown kneeling in the lower register and a second man, significantly shown on a smaller scale, kneels behind him. The text above, apparently in continuation of Iurudef's name, runs ir.n šms[w] mrr nb•f $P 3-H ; r$ $m 3 r-h r w$. This probably is not an indication of filiation (and does not introduce the name of Iurudef's father, as I previously assumed), but rather represents a dedicatory formula showing that the stela was made by Amenemhab Pekhoir, whose offering-texts figure so prominently on the 'lintel' and 'jambs'.

Similarly, the Neuchâtel stela was set up by, or for, a member of Hori's estate, i.e. his Overseer of Servants Nekhtamun. The top register probably showed Nekhtamun or Hori and their wives. The middle register contained the figures of Hori and Nekhtamun on the left, and perhaps Hori's wife and the woman Baket-sakhmet (Nekhtamun's wife?) on the right. Nekhtamun and his children are shown before Hori and his wife in the bottom register.

If the owner of stela Neuchâtel Eg. 428 is Hori, then the whole tomb-chapel recorded in Gunn's papers belonged to this Royal Butler. The analogy of Tia and Iurudef would suggest that Nekhtamun was buried in a shaft within the chapel's confines. It is, however, possible that stela Neuchâtel Eg. 428 and the whole tombchapel belong to Nekhtamun, and that the relief of Hori comes from another tomb-chapel nearby. It seems best to leave the question open because only additional comparative material can help to identify the owner beyond doubt.

### 2.6. The date and identity of Hori

The Royal Butler Hori, son of Ptahemwia and Hathor, is known from several other sources. ${ }^{20}$ He has been discussed by J. J. Janssen, ${ }^{21}$ whose conclusions must be

[^82]modified to take into account the fact that Hori is already attested in Year 24 of Ramesses III, and Kitchen's suggestion that Hori's father probably held the same title under Ramesses III. ${ }^{22}$ Chronologically, it is impossible to connect him with another Ptahemwia who, in addition to his honorific titles, was described as wdpw/wbs nswwrb cwy, 'Royal Butler clean of hands'. His tomb was at Saqqâra, and a panel which may have formed part of a pilaster (Bologna 1891 ) ${ }^{23}$ and a jamb (Cairo JE. 8383$)^{24}$ are known. The titles iry-prt hity-r link these two monuments, and the iconography of the Bologna piece leaves no doubt that it is of the late Eighteenth Dynasty.

The texts of Hori's monuments have been assembled by K. A. Kitchen. ${ }^{25}$ Hori's dating to the reigns of Ramesses III (Year 24 on record) and IV (Year 2 attested) is secure, ${ }^{26}$ but he may have survived into later reigns. A Memphite location for the tomb of a man who has otherwise been known chiefly from the Theban area, and particularly Deir el-Medîna, is, perhaps, surprising, but evidence for the considerable 'mobility' of Egyptian officialdom and the close ties between Thebes and the Memphite area is increasing steadily. ${ }^{27}$ It is possible that Ramesses IV still maintained a palace at Memphis, and that a Royal Butler accompanied his master during his occasional sojourns there. Although Ramesses III seems to have been the last king of the Twentieth Dynasty who contributed substantially to the architecture of Memphite temples, ${ }^{28}$ even Ramesses IV apparently kept the temple of Ptah well provided with goods and equipped with a workforce. ${ }^{29}$ The main reason for the presence of Hori's tomb at Saqqâra may, however, have been his Memphite origins, as suggested by the theophoric name of his father. ${ }^{30}$

### 2.7. Conclusions concerning the tomb-chapel

Regardless of its ownership, the tomb-chapel seems to date to the reign of Ramesses IV or a little later, and was among the last free-standing tomb-chapels of the New Kingdom built at Saqqâra. When compared with the contemporary tomb of the Royal Butler Heqamaatre-neheh ${ }^{31}$ in the same area, its plan was less complex.

[^83]Despite its simplicity, the tomb-chapel has no exact parallel (those of Raia and Tjay are broadly similar, see fig. r). It is the only one known so far with a single offering-room, the roof of which was supported by two columns, and a regularly built court set off to make it wider. ${ }^{32}$ It shows that the division of Memphite tomb-chapels of the New Kingdom according to the plans of their western ends will hardly prove to be a dating criterion. While it may be true that the most elaborate free-standing chapels at Saqqâra date to the reign of Ramesses II, they were contemporary with tomb-chapels of the simplest plan. These continued to be popular until the end of the relatively short period during which such chapels were built. The wealth and social status of their owners and the prevailing economic conditions were the most important factors determining the size and complexity of tomb-chapels.

## 3. Royal Butlers and Saqqâra during the Ramesside period

The main study of the role Royal Butlers ${ }^{33}$ played in administration and politics during the New Kingdom is by Helck, ${ }^{34}$ with contributions from several other scholars, ${ }^{35}$ but the problem has not yet been investigated in all aspects. The involvement of Butlers quickly surpassed that of simple Royal Manservants suggested by the title, although this original aspect was perhaps never entirely lost. Their influence stemmed from their access to, and personal relationship with, the king, and they could be charged with duties and temporary tasks in almost any administrative sphere. Similar trends are known from ancient and medieval, as well as modern, societies.

Royal Butlers became particularly prominent during the Ramesside period, a fact which probably reflected the declining effectiveness of Egyptian bureaucracy. A number of them held the title simultaneously and some order of seniority probably existed. ${ }^{36}$ A preliminary list of Royal Butlers known from the Ramesside period has been compiled by Schulman. ${ }^{37}$

At least nine served Ramesses IV during his relatively short reign. ${ }^{38}$ Apart from

[^84]
 $R \subset-n h h,,^{46}$ and Sbk-ḥtp. ${ }^{47}$
${ }^{39}$ I. O.DM 45 recto, 16 , of Year 2 of Ramesses IV, with Hri, Černý, op. cit., pl. 34; K RI vi, i20. 2.
2. O. Sydney, Nicholson Mus. R. 97 recto, 2, probably with Heri, Eyre, op. cit.; K RI vi, i 51.16.
3. P. Turin, W. Pleyte, and F. Rossi, Papyrus de Turin, pl. 105 line $25=\mathrm{S}$. Allam, Hieratische Ostraka und Papyri, pl. 133 (transcription by Cerný, but Allam does not indicate the damaged area which probably contained 'Imn), and pl. 107 line 14 . In both cases the name is damaged, ['Imn-]hrw. The former led Schulman, $C d E 6_{1}$ (1986), 202, to suggest that there was a Royal Butler called Khay; this is almost certainly incorrect.
4. Graffito, J. Černý and A. A. Sadek, Graffiti de la montagne thébaine, Iv, 2, no. 2576; K RI vi, 148.8 .
5. The title is lost, but perhaps this man and 'Itm-nht are mentioned on O. Cairo CG 25311, 3, G. Daressy, Ostraca (Cat. Caire); KRI vi, i5i.in.
${ }^{40}$ i. P. Turin Cat. I89 r recto, of Year 2 of Ramesses IV, with Sth-ḥr-wnm•f and Hri, Pleyte and Rossi, op. cit. pl. 49 line 4; $\mathrm{K} R I$ vi, 77.1-2.
2. P. Turin, with $S t h-h r-w n m \cdot f, P_{3-}-R^{\prime}-n h t$, and $S b k-h t p$, Pleyte and Rossi, op. cit., pl. 105 line $15=$ Allam, op. cit., pl. 133 .
3. The title is lost, but perhaps this man and 'Imn-ȟw are mentioned on O. Cairo CG 253 II, 3, Daressy, op. cit.; KRI vi, $15 \mathrm{I} . \mathrm{II}$.
${ }^{41}$ Graffito of Year 3 of Ramesses IV, with Nht-'Imn, J. Couyat and P. Montet, Les Inscriptions . . . du Ouâdi Hammâmât, no. 12 line 13 with pl. iv; K RI vi, i4.2.
${ }^{42}$ P. Turin, with Sth-ḥr-wnm•f, 'Itm-nht, and $S b k-h \not t p$, Pleyte and Rossi, op. cit. pl. 105 line $14=$ Allam, op. cit. pl. 133 .

It is unclear whether $P_{3-[\ldots]-n h t, ~ n a m e d ~ a f t e r ~ ' I m n-h r w ~ a n d ~ ' I t m[-n h t] ~ o n ~ O . ~ C a i r o ~ C G ~ 25311, ~}^{\text {I (Černý's }}$ transcription) is this man.
${ }^{43}$ 1. Graffito of Year 3 of Ramesses IV, with $W s r-m 3 \subset t-R c-s h p r$, Couyat and Montet, op. cit., no. in line in with pl. iv; K $R I$ vi, 14.2 .
2. O. Cairo CG 25580, 3, Černý, Ostraca hiératiques; K $R I$ vi, i 50.14.
3. Schulman, CdE6I (1986), 201, ascribes stela Toronto, Royal Ontario Museum, 910.35.5, to this man. The monument is unpublished and I have included it in the list solely on his authority.
${ }^{44}$ I. Stela with cartouches of Ramesses IV, Amsterdam, Allard Pierson Mus. 9114, E.Ch.L.v.d. Vliet, Mededelingen van de Egyptologische Vereniging Sjemsioethot, 5, 5 (1974), 4-1 1, fig. 1; K. C. M. van den Brink and W. M. van Haarlem, Mededelingenblad. Vereniging van Vrienden van het Allard Pierson Museum, 11 (1976), 2-3, fig. 2; W. van Haarlem, in A. Eggebrecht (ed.), Corpus Antiquitatum Aegyptiacarum (HäB 12 ), 67-9 with fig.; W. M. van Haarlem and R. A. Lunsingh Scheurleer, Gids voor de afdeling Egypte (1986), 24, fig. 4; K RI vi, 85 (63).
2. Stela copied by H. Salt, present location not known, GM 64 (1983), 43, fig. 2; C. C. Van Siclen III, GM 95 (1987), 73-8 illus.
3. O. Cairo CG 2525 I, Daressy, op. cit. (transcription in Černý MSS i7.ioi.i6); KRI vi, i52.10-ıi.
${ }_{45}$ I. P. Turin Cat. I891 recto, of Year 2 of Ramesses IV, with 'Itm-nht and Hri, Pleyte and Rossi, op. cit., pl. 49 line 3; $\mathrm{K} R I$ vi, 76.i6.
2. O. Cairo CG 25565, i-2, of Year 5, Černý, Ostraca hiératiques (Cat. Caire); K RI vi, 142.15.
3. O. Cairo CG 25274, i-2, of Year 6, Daressy, op. cit.; K RI vi, 145.12.
4. Graffito of Year 6, W. Spiegelberg, Ägyptische und andere Graffiti, no. 790; K RI vi, 145.3.
5. O. Cairo CG 25283, i-2, of Year 6, Daressy, op. cit. (transcription in Cerný MSS i7.10i.27).
6. O. Cairo CG 25277 , 1-2, of Year 6, ibid.
7. Graffito of Year 6, Černý and Sadek, op. cit. iv, i, no. 2056; K RI vi, i46.3-4.
8. P. Turin, with $P_{3-} R^{\prime}-n h t$, 'Itm-nht, and $S b k-h t p$, Pleyte and Rossi, op. cit., pl. 105 line $14=$ Allam, op. cit., pl. I 33.
9. O. Cairo CG 25309, 2, Daressy, op. cit. (transcription in Černý MSS i7.101.42); KRI VI, 148.5.

A Royal Butler of the same name, probably a different man, is known from the reign of Ramesses II (see below), and some of the documents not specifically dated to Ramesses IV may refer to him.
${ }^{46}$ See above.
47 I. Stela from Serâbît el-Khâdim, of Year 3, at New Haven, Yale University Art Gallery, PM. 2853, Gardiner, Peet, and Černý, op. cit., no. 302, pl. lxxv; K RI vi, 85-6 (64); Gerry D. Scott III, Ancient Egyptian Art at Yale (New Haven, 1986), 126-7, 20 I.
2. P. Turin, with Sth-hr-wnm•f, P3-R‘-nht, and 'Itm-nht, Pleyte and Rossi, op. cit., pl. ıo5 line $16=$ Allam, op. cit., pl. 133 .

Some Ramesside Royal Butlers were, it seems, Egyptianized foreigners, ${ }^{48}$ and their basilophoric names are often interpreted as the main evidence of this. It is, however, possible to explain the latter as the result of the close ties of their owners to the king to whom they refer, regardless of their nationality. This anticipated the reappearance of the basilophoric 'good names' during the Twenty-sixth Dynasty. ${ }^{49}$ The choice by the ruler of 'unattached' personal attendants and confidants, some of whom may have been brought up in the royal palace in their youth and owed their status entirely to him, would have been a generally human, rather than specifically Egyptian, feature. Hori and his father did not, apparently, belong to the foreign category, but were of Egyptian stock. ${ }^{50}$

The Saqqâra tomb of the Royal Butler, Clean of Hands, Pth-m-wi;, of the late Eighteenth Dynasty, has already been mentioned. The tomb-chapel of $P ;-I t n-m-h b$ in Leiden ( $\mathrm{PM} \mathrm{HI}^{2}, 709-\mathrm{II}$ ) is of the same date. $Q m$, whose Memphite $d d$-pillar is in Bologna (no. 1892) ${ }^{51}$ probably also dates to the end of the Eighteenth or the early part of the Nineteenth Dynasties. In addition, the tomb-chapels of six Ramesside Royal Butlers were at Saqqâra. The chapel of Heqamaatre-neheh is known, and the extant monuments of Hori, Seth-her-wenemef, ${ }^{52}$ temp. Ramesses II, Ramesesemperre, ${ }^{53}$ temp. Ramesses II-Merneptah, Wenef-djedsen ${ }^{54}$ and Tjay To, ${ }^{55}$ both of the Nineteenth Dynasty, suggest the same location. A relief from the Teti pyramid area mentions a Royal Butler whose name is lost, ${ }^{56}$ and another block with the name of the tomb owner missing was found by the EES/Leiden expedition in $1987 .{ }^{57}$ This situation is in sharp contrast to that at Thebes, where no tomb of a Royal Butler is known after the Amarna period. ${ }^{58}$

Thus, two tomb-chapels of Royal Butlers of the reign of Ramesses IV were situated near the Teti pyramid, and the same is almost certainly true of Seth-herwenemef and Wenef-djedsen. This may be a simple reflection of the continued popularity of the Northern Saqqâra necropolis during the Nineteenth and Twentieth Dynasties, but it may also suggest the existence of groups of tombchapels based on a professional relationship, ${ }^{59}$ perhaps paralleling similar divisions in the city of Memphis itself. The evidence is as yet insufficient to establish the reason(s) with certainty.

[^85]

1. The tomb-chapel from the north-east (p. 127) (courtesy of the Griffith Institute)

2. The tomb-chapel from the east (p. 127) (courtesy of the Griffith Institute)


# THE LARGEST PROJECT FOR A ROYAL TOMB IN THE VALLEY OF THE KINGS 

By RAPHAEL VENTURA


#### Abstract

When Ramesses VI took over $\mathrm{KV}_{9}$ from his predecessor, he initiated a project to enlarge that tomb to unprecedented dimensions. In an attempt to complete its excavation in three years, a working plan was devised according to which each working team had to excavate 54 cubic cubits daily, 348 days per year. Because of unforeseen delays, a whole year's work was lost, and the quotas had to be recalculated. This information, which is extracted from P. Turin 1923 'verso' + fragments, brings into focus new aspects of working procedures in the Ramesside community of workmen, and incidents which occurred during the early years of Ramesses VI.


The written documents pertaining to the Ramesside royal necropolis contain valuable information on the methods employed in the preparation of a royal tomb. In some cases, this information can be verified or appreciated by direct observation, inasmuch as the final outcome, i.e. the tomb itself, is available for comparison. The basic study on this subject was made by Jaroslav Černý, but only part of it was published. ${ }^{1}$ Following the guidelines set by Černý, there have been several attempts to fill in missing details ${ }^{2}$ but more remains to be done.

One would like, for instance, to improve one's understanding of the initial stages in the organization of the work, following the accession of a new king. After the plan of a projected royal tomb was drawn and the desired measurements of its components were inserted, ${ }^{3}$ the overall volume of the tomb could be easily calculated. Then, since the average daily output of a work-team (at least for the stage of excavation) had been probably established through long experience, the authorities should have been able to estimate the number of working days that would be needed to complete the excavation. Furthermore, on the basis of the habitual working schedule of the people of $p ; h r$, they could have calculated the number of years that these days represented. Finally, depending on the result of this calculation, they might consider demanding a more energetic working schedule if some urgency was felt in the royal court for the completion of the tomb.

Assuming that this theory represents the approach of the Egyptian authorities to the problem, one may further enquire into the procedures by which a particularly urgent or ambitious tomb project could be realized. Is it logical to assume that the authorities could rely upon the zeal and industry of the workmen, expecting them to respond voluntarily by speeding up the pace of their activities? Should we not,

[^86]rather, expect a deadline to be set for the completion of the tomb, and a fixed daily output of work to be imposed (in excess of the established average), precalculated on the basis of that deadline?

Černýs research has shown that the workmen had a rather leisurely daily schedule; ${ }^{4}$ Helck has established that the frequency of their 'free' days was high. ${ }^{5}$ This state of affairs, though constituting an important social achievement on the part of the workmen, would seem to be incompatible with the natural tendency of the authorities to have the king's tomb ready for occupation as soon as possible. Hence one expects that, at least in a time of crisis, many additional working hours could be squeezed into the workmen's schedule, by force or persuasion, without causing them unbearable discomfort.

One reason for our lack of information on these particulars is the fact that most of the documents at hand stem from the administration of the workmen, which was responsible for the execution rather than the planning of the work. Reports occasionally mention the amount of work performed, ${ }^{6}$ but hardly ever the expected amount, or any discrepancy between the two that may have accumulated.

A noteworthy exception to this rule is P. Turin $1923+$ fragments ( 146 [2073], 171[2082], i80[2083]) 'verso' (henceforth: P. Turin 1923 'verso'), which contains precious data on work organization, presented from what seems to be the point of view of the authorities. Several excerpts from the text have been mentioned or quoted by Černý and others, ${ }^{7}$ and lately the entire 'verso' was made available in Kitchen's Ramesside Inscriptions. ${ }^{8}$ Unfortunately, the text is lacunary to the extent of preventing a running translation, but the amount of information that has been preserved (or can be deduced), as well as the rarity of the subject, provide adequate compensation for this shortcoming.

In order to facilitate the discussion, the 'verso' has been subdivided into four sections (lines: 0 -IO; II-I4; 15-20; 20-4) each of which will be treated separately. Even though the logical connection between the sections is not immediately apparent, particularly in view of the state of preservation and the laconic style, this document is neither a compilation of miscellaneous entries nor a fragment of a work-journal; ${ }^{9}$ it deals with a single specific problem of work organization at the Theban royal necropolis, at its planning stage.

The text bears a single date in Year 2 of Ramesses VI. The tomb should therefore be KV9 which was taken over by Ramesses VI from his predecessor, ${ }^{10}$ while the work

[^87]schedule, which is the main subject of the 'verso', probably refers to the renewed activity in the tomb after the takeover.

## A

Lines $\mathrm{I}-\mathrm{IO}$ are separated from the rest of the page by a blank 5.5 cm , and constitute a separate, though connected, part of the document. They contain a series of measurements of various parts of a royal tomb, totals and remainders.
(o) $[$ r]/|||||||||||
(1) $2: / / / / /[+]$ Ioo $[+] / /[+] 60$
(2) $3: 1,125 .^{11} t 3$ ????? ${ }^{12} 2 \operatorname{dny}(\text { ? })^{13} / / / /[+] I o o[+] / / /$

(4) wsht isq: 567
(5) mrkbt: 1,792
(6) tpy $n$ wpt: $630 . d m d: d n y^{14} 9,432$
(7) wd $3 t: 113,484$

(9) dmd b;kw iryt $r-\breve{s}_{3}<m p ; t p r t ;$ wsht $m ;<t$ :
(⿺辶) mh 162; ivi•n dny Io,o62. wd 3 t: III2,82I

## Translation

(o) [r:] $/ / / / / / /^{\mathrm{a}}$
(1) $2:^{\mathrm{b}}| || || |+100+|/|+60$ [c.c. $]^{\mathrm{c}}$
(2) 3: 1,125 (c.c.). ${ }^{\text {d }}$ The two ????: |/||//c.c.(?). [Total]: $/ \mid /+$ roo $+/ / /{ }^{\text {e }}$

(4) Hall of denial of access: ${ }^{\text {h }} 567$ (c.c.)
(5) (Hall of) chariot(s): ${ }^{i}$ I,792 (c.c.)
(6) First (passage) of the $w p t$. $^{\mathrm{j}} 630$ (c.c.). Total: $9,43^{2}$ c.c. ${ }^{\mathrm{k}}$
(7) Remainder: 113,484 (c.c.)
(8) That (the passage which lies) after it: ${ }^{m}$ (length) of ${ }_{15}$ cubits, width of 6 c ., height of 7 c. , making 630 (c.c.).
(9) Total of work done from the apex(/head/beginning) to the Hall of Maat: ${ }^{\mathrm{n}}$
(ı) (length): 162 c. , $^{\circ}$ amounting to (volume of) 10,062 c.c. Remainder: 112,82 I (c.c.).

[^88]
## Notes to the translation

(a) Only a tiny trace remains from this line. To judge from what follows, it contained at least the volume of the first passage of the tomb. The numerical value of the missing volume, which can be of assistance for the evaluation of the totals further on, may be derived from P. Turin 1885 verso 1,2 which contains additional data on the same tomb, ${ }^{15}$ including the linear measurements of the first passage. ${ }^{16}$ Multiplying length by width by height ( $30^{17} \times 7 \times 15$ ) we obtain 3,150 c.c.
(b) The numerals at the beginning of lines 2-4 identify the passages (stiwn-ntr) in progressive order starting from the entrance. Thus ' 2 ' stands for ${ }^{*} s \underline{t} \boldsymbol{j}-n \underline{t} r$ $r-m h \not 2$ (cf. Černý, VK, 27). 'I' in line o of our text has been supplied by analogy.
(c) Unfortunately, the volume of this second passage, which has been almost totally lost in the lacuna, cannot be calculated from the data of P. Turin 1885 verso I, because of a lacuna in line 3 there, as well (K $R I$ vi, 223.13). See, however, n. 18.
(d) The length of this passage (including its gate) is 25 c . This datum was not taken from P. Turin 1885 verso $\mathrm{I}, 4$ because of a lacuna there. It has been calculated from Piankoff's plan (A. Piankoff with N. Rambova (eds.), The Tomb of Ramesses VI, I (New York, i954), fig. 2 opposite p. 9). It also coincides with the measurements presented in K. Weeks, The Berkeley Map of the Theban Necropolis (Berkeley, i979), I4 (adding the values (in cubits) for 'Chamber B-length' and for 'Gate C-length'). If we divide 1,175 (the number read by Černý and Kitchen (see n. ir)) by 25 , we obtain 47 . If we divide 1,125 (our proposal, see $n$. i I) by 25 , we obtain 45 . Since the width of the passage is 6 c . and its height 7 c . (or 7 c .2 p. 2 d . adding the height of the gate's jamb to that of its lintel (Weeks, loc. cit.)), one would expect the quotient to be 42 (or 44.1 ). $45(6 \times 7.5)$ has been preferred being closer to those numbers than 47 . Hence the volume of the passage should be $25 \times 6 \times 7.5=1,125$ c.c. See also n. i8.
(e) Passage no. 3 of $\mathrm{KV}_{9}$ (as well as of other royal tombs) has two symmetrically placed niches at the upper part of its walls (cf. Piankoff, op. cit. II, pl. 5). Judging from line 3 of the present document, where the treatment of a similar case of two niches is preserved without lacunae, we expect the combined volume 'passage + niches' to follow immediately after the separate volume-entries of each component. Therefore, ' $t 3$ ????? 2' which follows the numeral $\mathrm{I}, \mathrm{I} 25$ (the volume of passage no. 3) should be an abbreviated term denoting its two niches, termed elsewhere ns hmyw
 lacuna is the volume of those niches followed by the combined volume 'passage + niches' of which only $/\|+100+/\|$ remains. Černý's reading $t$ ? ???? 62 does not fit

[^89]this explanation, since a bare ' 62 ' cannot represent the volume of the niches or any other dimension thereof, their actual combined volume being approximately one-third of that number in cubic cubits.
(f) For the niches of passage no. 4 see Piankoff, op. cit., pls. 23, 53. For the term rt $\operatorname{iry}(w)-\mathrm{r}_{3}$ see Černý, $V K, 28-9$.
(g) Černý and Kitchen hesitate between 886 and 887 (cf. K $R I$ vı, 367 n. 3a). The number we need, however, is $888(882+2 \times 3)$. In one of his manuscripts, MSS 3.545 , Černý has read the niche volume as ' 4 ' instead of ' 3 ' and marked his reading with a 'sic'. Taking the volume as ' 4 ' could save the scribe's calculation (886) only if the preceding sign, hesitatingly read as we $n b$ (cf. Černý MSS i7.16, p. 46), has been misread. In that case, ' 4 ' would represent the combined volumes of the two niches. This solution would be more consistent with the treatment of the niches in line 2. Calculating from Piankoff's plan of $\mathrm{KV}_{9}$ (op. cit. I, fig. 2 opposite p. 9), I obtained a volume of approximately 2.5 c.c. for each niche which, being half-way between the two versions, cannot settle the issue. See, however n. 18.
(h) This term is discussed in Černý, VK, 29; E. Thomas, The Royal Necropoleis of Thebes (Princeton, i966), 278; idem, $\mathscr{F} E A$ 64, 80-3.
(i) See Černý, $V K, 29$.
(j) Ibid. 3 I.
(k) This total sums up the individual volumes of rooms, passages, and niches mentioned hitherto, representing the entire volume of the tomb up to and including the first passage after the descent from the pillared chamber. All partial volumes but three (those of Passages 1 and 2, and niches in Passage 3) are preserved in the papyrus. Among the missing volumes, that of Passage i was calculated from another document (note a) while that of the niches should be roughly five times as large as the volume of the niches in Passage 4 (hence between 20 and 30 c.c., cf. n. g). The missing volume of Passage 2 will be marked ' X '. Adding all the volumes in progressive order: $3,150+X+1,125+20 / 30+882+4 / 6+567+1,792+630$ we obtain: $8,170 / 8,182+X$ c.c. Since the actual total is 9,432 c.c., the value of ' $X$ ' (volume of Passage 2) should be $1,262 / 1,250$ c.c. ${ }^{18}$
(l) For the significance of the values of the 'remainders' see the commentary following these notes.
(m) For nty hr $s 3 \cdot f$ see Černý, $V K$, 32. Instead of Černý's definition of the term, which embraces any rooms or passages of the tomb beyond the tpy $n$ wpt, I suggest that it denotes a single passage, the one that follows immediately beyond the $t p y n$ $w p t$. To be more precise, nty her siff does not include the wsht M3‘t or the burial chamber with its annexe. It is therefore equivalent to $p^{3} k y s \underline{t} \boldsymbol{z}-n \underline{t r} r-m h 2$ of O . Cairo 25269 (ibid. 3 I n .8 ). This is made quite clear by comparing the measurements

[^90]of $n t y h r s 3 \cdot f$ with its equivalent in Piankoff's plan, Passage ' $G$ '. The comparison shows that even Passage ' $G$ ' itself had not been given the form we now see in KV9 at the time of inscription of the papyrus, but stopped short at the point where the ceiling drops abruptly by a whole cubit. One feels that this drop, as well as the sloping of the floor and the lengthening of the passage, had not been part of the original plan, but should be assigned to the 'new project' initiated in Year 2 of Ramesses VI.
(n) This is Hall 'H' in Piankoff's plan, for which see Černý, $V K$, 32. Wsht $M_{3\ulcorner } t$ had not been excavated at the time the papyrus was written but was scheduled to be excavated next, according to the original plan. Thus, the overall length of the tomb that is given in this line sums up the lengths of all the elements that had been excavated, up to the (as by that time unexcavated) wsht M3ヶt. For a parallel
 $\operatorname{pr} n n b w .$. , see the Turin Plan of KV2 in H. Carter and A. H. Gardiner, $\mathscr{F} E A_{4}$ (1917), I39.
(o) The following is an evaluation of the lengths of the individual components, which should add up to a total length of 162 c . (presented in progressive order from the entrace): $30+30+25+21+10+16+15+15=162 .{ }^{19}$ This result corresponds exactly to the value mentioned in the papyrus.

## Commentary

Černý has made it clear that the terms used in this section of the papyrus refer to various parts of a royal tomb. ${ }^{20}$ The nature of the document, and particularly the summations and remainders, imply that we are dealing with a single, specific royal tomb. The order of enumeration, starting with four tomb units identified merely by numbers ( I to 4 ), then followed by others identified by names, indicates that the measurements of the tomb are presented in consecutive order of its components, starting from the entrance and proceeding inwards. The mention of a remainder immediately following the summation of the volumes of the various tomb-units proves conclusively that the document was written while the tomb in question was still in the process of excavation.

[^91]The amounts representing each hall or passage are given in cubic cubits, which is only natural for an account in which distances were measured in cubits. The scribe of this document omits the units of volume in many cases, but fortunately he mentions one in front of the numbers 9,432 in line 6 , and 10,062 in line 10 . Since the latter was obviously obtained by the addition of 9,432 (line 6 ) and 630 (line 8), the unit of $6_{30}$ has to be cubic cubits as well, as do those of the components which add up to 9,432 . Alternatively, the product $6_{30}$ in line $8(15 \times 6 \times 7)$, each factor being a linear distance measured in cubits, is obligatorily measured in cubic cubits. The reason for emphasizing this seemingly trivial detail lies in the magnitude of the remainders (lines 7 and io). On the basis of the aforedetailed reasoning, the conclusion that these remainders are also given in cubic cubits is inescapable. When one adds the excavated volume of 9,432 c.c. of line 6 to the remaining volume (to be excavated) of 113,484 c.c. (line 7 ), one obtains the unprecedented total of 122,916 c.c. as the volume of the entire projected tomb. This result cannot be brushed aside as being a scribal mistake or an error in reading the hieratic, since the same number is actually mentioned later on (line 20), accompanied by its appropriate unit. It is, moreover, utilized once again, divided by 3 for reasons that will be discussed later, in line 14 ( 40,972 c.c.). A volume of this magnitude implies that the tomb in question was by far the most pretentious project ever to be attempted in the Valley of the Kings, being almost ten times as large as most of the existing tombs. ${ }^{21}$ Obviously the project never came anywhere near realization.

Part A of the text contains two additional details worthy of mention at this stage. The first has to do with the fact that the scribe found it necessary to sum up the excavated volumes of the various 'rooms' of the tomb twice: in lines 6-7, before dealing with the unit qualified as nty $h r s^{3} \cdot f$, and in line 10 , following the addition of that item. The special status of nty $h r s 3 \cdot f$ is further accentuated by the inclusion of its linear measurements (length, width, height) to substantiate its derived volume. The second summation seems to be of a more final nature, since, besides the data pertaining to the excavated and remaining volumes, we find the unexpected information regarding the overall length of the excavated part of the tomb.

The second detail concerns the value of the remainder in line 10 . Having added the 630 c.c. (nty $h r s \cdot f$ ) to the previous subtotal 9,432 c.c., the scribe correctly obtained the new total io,062 c.c.; the new remainder, however, is not iI2,854 c.c., as one would expect (subtracting 630 from 113,484 ), but rather 112,821 c.c., i.e. less than the calculated result by 33, as if the volume of the additional unit nty $h r s i \cdot f$ had been 663 instead of 630 c.c. In the commentary of Part B we shall attempt to demonstrate

[^92]that this discrepancy is not necessarily due to a miscalculation on the part of the scribe.

## B

Following the blank space of $5 \frac{1}{2} \mathrm{~cm}$, the scribe resumes with a seemingly different topic. Had it not been for the number 40,972 c.c. of line 14 , which is exactly one-third of the projected volume of the tomb as figured from the data of Part A , we might be tempted to consider Part B as being a totally unconnected entry, a not unusual feature in papyri of the period.

Lines in to 14 have all lost their beginnings.
 г.w.s.).
(12) $/\| \| / h r w(I ?): d n y 52^{24}$; hrw $3:^{25}$ dny 162 ;
(ェ3) /|//|[hrw 9: d]ny? 486;
(14) $/ / / / /[r n p t]: d n y 40,972$.

## Translation

(ir) [Output per team] ${ }^{a}$ to completion, ${ }^{\text {b }}$ (by the) day, starting from Regnal Year 2, second month of the Third Season of Nb-m3ヶt-R - (mry-'Imn L.P.H.) (Ramesses VI).
(12) [Work] per day: 52(?) c.c.; per three(?) days: 162 c.c.;
(ı3) [per nine days]: 486 [c.c.]
(14) [resulting in a total yearly volume of]: 40,972 c.c.

## Notes to the translation

(a) The texts that have been supplied in the lacunae do not pretend to represent the exact missing words. Their only purpose is to convey my understanding of the text. The justification will be given in the commentary.
(b) In this case, $g r h$ should be understood as 'completion of the excavation' (cf. also line 20) and not 'finishing' as in the Turin Plan of KV2 where $g r h$ follows the stages of drawing, engraving, and filling of the tomb's decoration (Carter and Gardiner, $\mathscr{7} E A_{4}$, ı36-7).

## Commentary

The information supplied in this short section is of prime importance for the understanding of the entire 'verso'. In order to overcome the difficulties of
${ }^{22}$ According to Černý MSS 3.545, a small lacuna should be indicated between $g r h$ and the sun disc. Therefore, the latter should not be necessarily understood as a determinative of $g r h$.
${ }^{23}$ The remaining signs of line if are written above the line proper (KRIvi, 367 n . 9a-a). See commentary of Part B (p. 147).
${ }^{24}$ The numeral for ' 50 ' is not preserved entirely on the right-most edge of the left papyrus fragment (see Černý MSS 3.545). Hence there is a slight possibility that one or two number units may have been lost underneath the missing part of ' 50 '.
${ }^{25}$ Černý and Kitchen have read ' 8 ' in this damaged part of the papyrus. My reasons for suggesting ' 3 ' instead, will be presented in the commentary.
interpretation caused by its telegraphic style and the lacunae, various approaches of reasoning were used which, unfortunately, require a detailed justification.

The three volume-values $52($ ? ), 162 , and 486 will serve as a starting-point. They are given in a straight sequence, each value apposed to a time expression measured in days. Since 486 is exactly three times 162 , one may assume a misreading or scribal error in ' 52 ', as 54 would, in turn, be exactly one-third of 162 . Furthermore, since $52 / 54$ c.c. seems to be the volume requirement for one day's work, it stands to reason that 162 c.c. were required for three days, and 486 for nine. One should therefore tentatively replace ' 3 ' for the damaged numeral read by Černý and Kitchen as a possible ' 8 ' (line 12 ), and supply a ' 9 ' in the lacuna of line 13 .

Line 14 mentions the volume 40,972 c.c. which is exactly one-third of the total projected volume of the tomb. Following directly the one, three, and nine days' volume requirements, it serves as a precious link between them and the text of Part A. We may consequently assume that these three time-v.-volume entries had to do with the new project for the completion of KV9, indicating the amounts of tomb-volume that had to be excavated in the respective periods of time. Line 14 is, therefore, a total of some kind, or an expression of the outcome that should be expected if the aforementioned work schedule was kept.

The most plausible reason for one-third of the total volume to be indicated as a desired goal seems to be that a period of three years had been allowed for the completion of the excavation of the tomb. A year is not only the most convenient subdivision of lengthy periods of time, but also one that constitutes a necessary step in the calculation of the daily amount of work to be done.

Were he dealing with an entirely new project, the scribe would have only to divide the calculated annual volume requirement ( 40,972 c.c.) by the number of working days in a year, in order to obtain the number of cubic cubits that ought to be excavated daily. Since, however, the preparation of the tomb in question had been under way for quite some time, ${ }^{26}$ this being a revised schedule brought about by changed conditions, the scribe was bound to take into account in his calculations the work that had been invested in the tomb already. This could be done by subtracting from 40,972 (one-third of the projected, hence the annual, volume) one-third of 10,062 (the excavated volume), and dividing the difference by the number of working days per year. In that manner, a schedule would result that could be valid not only for the year in question, but for the entire duration of the project, provided that there would not be any unforeseen delays.

Assuming that the scribe of P. Turin 1923 'verso' reasoned along those lines, he must have divided 10,062 (the volume already excavated, line 10) by 3 , obtaining 3,354 c.c. His next step would be to subtract the quotient from 40,972 c.c., the difference being 37,618 c.c. Then he would conclude by dividing the result by the number of working days per year. Unfortunately, we cannot follow the scribe's calculation through this last stage since we do not know the number of working

[^93]days per year of the necropolis crews. Moreover, even if that number were known, it could hardly be applicable to our case, the magnitude of the project and the three-year deadline demanding a far more active schedule than the workmen were accustomed to. ${ }^{27}$

Rather than divide, as the scribe would have done, 37,618 by the (unknown to us) number of working days which the authorities must have imposed in view of the circumstances, to obtain the required daily output, we shall, instead, divide it by the daily output itself, which is provided by the text ( $52 / 54$ c.c.) ; If our assumptions are right, the quotient should reveal the number of working days per year that had been imposed for the project.

Dividing by 54 we obtain 696.6 ; dividing by 52 we obtain 723.4 days. These numbers are obviously unacceptable, but upon halving them we arrive at plausible results ( 348.3 and 36 I. 7 days respectively). Three hundred and forty-eight working days leave the workmen with seventeen days off work per year; 36 I days leave a mere four days. The latter result seems to me unacceptable by even the strictest official working standards, and should be rejected. This consideration amplifies our earlier suggestion that the number ' 52 ' in line 10 be substituted by ' 54 '. Seventeen 'free' days, though far too few compared to the normal working schedule, would allow for one free day per month plus the five epagomenals. For additional free days the teams would have to compensate by working harder.

The only justification that comes to mind for having to halve the quotient is to assume that the value $\boldsymbol{*}^{52} d n y(t)$ per day relates to a single working team. Thus, the entire force would be expected to produce twice as much work per day. Since the teams did work independently of each other, each being accountable for its own progress, ${ }^{28}$ one should expect the required output to be calculated per team.

We may now resume the calculation in the manner the scribe would have performed it. Upon dividing 37,6 I 8 c.c. by 348 days he would come up with the quotient of 108.097 c.c. per day for the entire working force. This result would lead, upon further division by 2 and elimination of the decimals to the number ' 54 '. The result, in itself, would be quite satisfactory, but there is a possibility that, for the sake of perfection, the scribe preferred not to merely round off the decimal figures of his result, but rather to calculate the amount of work that would remain unaccounted for by such rounding off, and compensate for it. 0.097 c.c. per day multiplied by 348 days produce in a year 33.7 c c.c. of work. This refinement may have been the source of the 33 c.c. that were found missing from the final remainder in line 10 (112,82I instead of the calculated 1 I 2,854 c.c.). By means of this 'tailoring' of the data, which is tantamount to assuming that 33 c.c. had been excavated during the year in question prior to the imposition of the new schedule, the scribe managed to bring his accounts to precision.

Having resolved the probable purport of the contents of Part B, we should be

[^94]better equipped to tackle the meaning of its heading, presented in line II. One would expect the following: 'List of production figures per team, required in order to complete the tomb, arranged according to days, for the year starting on date $\mathrm{X}^{\prime}$. The actual heading is much shorter, in accordance with the general style of the document, but says essentially the same thing: '[Output per team] for completion, [by the] day, starting from date X '.

Originally, the date contained only the regnal year, the season and the month. On a later occasion the name of the king was added above the line proper. It would be interesting to check whether the handwriting of the addition is the same as that of the main text of the 'verso', and whether the main text itself should be assigned to a single or to two different scribes. The context, as we shall see, can easily admit the possibility that the document was written in two instalments, roughly one year apart, probably by different scribes (early stage: Parts A and B; late stage: Parts C and D). In such a case, the royal name may have been added during the later instalment. These details shall have to wait until the publication of a photograph or a facsimile for their final resolution.

## C

Lines i 5 to mid-20 present what may initially seem to be an altogether different topic than the measurements and lists of Parts A and B. Yet, the contents of this section will prove to be closely connected with that of the rest of the 'verso', and indispensable for the understanding of the document. The lacunae, which are even more numerous here, do not allow a continuous translation.

(16) ||||||||||sbdw 6 ||||||
(17) |||||||iryt her b; $[k]|/|||| | m$ ts st nfrw $n$ p; 6 qrsw

(19) ||||||iryt (?) /||||||htm n p; hr hrw I2.ir•n 5 rnpt
(20) //I/\|//[i]ryt har bsk imes \{continued in Part D\}

## Translation

(15) [Access (to the Valley of the Kings)] was sealed off all the way up from the 'Mouth of the Valley', a after the burial ${ }^{\text {b }}$ was finished ///////
(i6) $/ / / / / / /$ six months [+days?]
(i7) /|/|/|/ Spent ${ }^{c}$ working ///// in the Valley of the Queens ${ }^{d}$ for the six burials ${ }^{e}$
(i8) |/||||| four months. Spent /|/|| [at] the settlement of $p ; h r$ (the village of Deir el-Medina) ${ }^{\text {f }}$ because of (in anticipation of?) Pharaoh L.P.H.:g twenty-five days.
(i9) /////// spent (?)///// [at the] administrative outpost (lit. 'the closing') of $p$; $h r:^{\text {h }}$ twelve days. Making five yearly (days) ${ }^{\mathrm{i}}$
${ }^{29}$ For the variant writing of $m-\underline{d} r$ with an $n$, see J. Černý and S. Groll, LEG, 412.
(20) [actually] spent working (at the royal tomb) ${ }^{\mathbf{j}}$ during its course (lit. 'in it'). ${ }^{\mathbf{k}}$ $\{$ Continued in Part D $\}$.

## Notes to the translation

(a) This passage has been treated in Cerný, Community, 93. See, however, Ventura, $L C D, 149,164$, where it is proposed that $r n t$ int should be identified with the entrance to the valley of Deir el-Medina, not far from the Ptolemaic temple of Hathor, where the workmen's path leading up to the Valley of the Kings started.
(b) Obviously a burial in the Valley of the Kings for which see the general discussion.
(c) The verb iri in a combination with a time-element means 'to spend (time)' (Wb. I, 109, 24). The construction consists of the passive participle of iri (spelled iryt, Černý and Groll, $L E G$, 474) without antecedent, followed by $h r+$ infinitive. On this use of the participle we find (ibid. 477) the following remark: 'An archaic feature of administrative documents is the use in list headings of the past participle with no preceding article or noun. The noun or nouns to which the participle refers follow the headings.' The pattern: 'Spent, performing X activity: Y months/days' occurs again in lines 18 and i9 (additional items in the list), while in line 20 , which contains the total, the pattern varies slightly.
(d) The identification of st nfrw with the Valley of the Queens is discussed in Černý, Community, 88-9.
(e) See the general discussion.
(f) For a short discussion of this term, with bibliography, see Ventura, $\mathscr{F E A} 73$ (1987), 152.
(g) Since the text does not clarify the part played by the king in the decision to keep the workmen in their settlement (and away from work in the tomb), it is hard to choose among the various nuances of $r$-ḩst. See Y. Koenig, in Hommages à Serge Sauneron, I (Cairo, 1979), 198-9 (d).
(h) For an extensive bibliography on $p ; h t m n j$ hr see Ventura, $\mathcal{F E A}$ 73, I 50 nn. 4, 5 .
(i) So, rather than 'five years', for the following reasons: (i) in time expressions the numeral often follows the noun (Černy and Groll, LEG, 86-7); (2) all other time expressions in this text list the numeral after the noun (see particularly: rnpt 2 in line 20 [Part D]); (3) the periods of time with which this text is concerned (as I understand $i t$ ), neither add up to nor leave a remainder of five years. Upon adding the time-elements listed in Part C (six months $+X$ days, four months, twenty-five days, twelve days), we obtain eleven months seven $+X$ days of various occupations other than working in the tomb. When we add the seventeen free days, we are left with eleven - X days of actual work in the tomb for the whole year. If X (the number of days which may have been lost in the lacuna of line 16 ) was six, then the workmen would have worked only five days during the course of that year in the royal tomb, as we propose in the translation; (4) the feminine resumptive pronoun in $\mathrm{im} \cdot \mathrm{s}$ (line 20 ) cannot refer to the royal tomb which is masculine ( $p ; h r, p ; r-r b z k$ ). Hence it
must refer to the year, meaning 'in the year', i.e. 'in the course of the year'. If there had been five years, the resumptive pronoun would have to be in the plural (Černý and Groll, op. cit. 87); (5) Mention of a remainder of two years, following immediately the summation of the list (line 20 Part D), accords well with our basic assumption of a three-year project of whose first year only five days were employed for work on the project.

For adjectival/adverbial uses of $r n p t$ see Ventura, $\mathcal{F} N E S 42$ (1983), 274 n. 25; see also $P$. Harris $I$, pls. 12a.5, 32a.9, 5 ib.6.
(j) Only work for the royal tomb project, which is the subject of the 'verso', is obvious enough to mention by a simple $h \underset{r}{ } b_{3} k$, without further qualification, in the present context.
(k) Meaning 'in the course of that (first) year', see n. i (4).

## Commentary

The gist of the four activities or situations mentioned in the list of this lacunary text, each followed by a time expression in days or months, can be better understood by consulting the following paraphrased list:

1. Spent away from the Valley of the Kings which was declared 'out of limits' after the (royal) burial: . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . six months + [six days]
2. Spent working for the preparation of six tombs in the Valley of the Queens:
four months
3. Spent in the village of Deir el-Medina because of Pharaoh:
twenty-five days
4. Spent working(?) / looking for provisions(?) at the htm:

Total of days devoted to work in the royal tomb in the course of the whole year: five

Items $1-4$ have the following traits in common: they describe situations that were particular to the workmen of the royal necropolis, ${ }^{30}$ and yet these situations have nothing to do with the principal task of those workmen, namely the construction of the royal tomb. The impression conveyed by the text is that the scribe's intent was to emphasize and demonstrate the fact that the workmen had been diverted from their normal duties of tomb building, rather than to present a casual account of their

[^95]activities. Two of the entries in particular, the closing up of the Valley of the Kings and the need to remain within the confines of the village, are declarations of compulsory inactivity rather than descriptions of a specific occupation. This impression is further accentuated by the entry of line 20 which epitomizes the scribe's intent.

The connection of this passage with Parts A and B is clear. A three-year project had been established for the excavation of the royal tomb, and the daily work requirements had been calculated accordingly. If the teams had kept working at the indicated pace, they could have completed the work by the deadline. Minor delays might have been corrected by appropriate compensation, but major ones would necessitate a thorough reappraisal of the situation and recalculation of the daily work requirements. The purpose of Part C was to indicate that a rare combination of unforeseen delays had resulted in the loss of virtually a whole year of work. Under these circumstances there could be no alternative than to recalculate, unless the authorities would accept to postpone the deadline by one year.

On the basis of what has been said, Part C (and D) should be considered as a later addition to the original document, to be dated not earlier than a full year after Year 2 II šmw of Ramesses VI. On the other hand, there is a possibility that the entire text was written at the later date by a scribe who wished to present the case in full, for reasons of his own. There is still a third possibility, which cannot be rejected off hand on account of the lacunae, namely that the entire text was written at the earlier date, referring to a project that had been initiated one year earlier, i.e. Year 1 of Ramesses VI. In that case, line in of Part B should be read as follows: '[Recalculation of the output per team], for completion, [by the] day, starting from date $X^{\prime}$, while line 12 should start with the words: 'Initial calculation' or something to that effect. The specific weight of each possibility will be commented upon in the general discussion.

## D

The concluding section of the 'verso' consists of lines 20-2 of consecutive text, and lines 23-4 which should be considered as containing disparate mathematical jottings which served the scribe in his calculations. ${ }^{31}$
(20) \{Second half \} . . . wd $\boldsymbol{z} 3 t:{ }^{32}$ rnpt 2. ir $\cdot n$ dny $I[2] 2,9 I 6 \mathrm{grh} / / / / /$
(21) |||||||| ?????? m b3k dny 9,422 [sic]. wd $3 t: 113,484$
(22) |||||||| m rnpt: 240,458
(23) 53
(24) 530

## Translation

(20) \{Second half $\}^{\mathrm{a}} \ldots \ldots$ Remainder(?): Two years, amounting to $\mathrm{I}[2] 2,9 \mathrm{I} 6^{\mathrm{b}}$ c.c. (when) complete ${ }^{\mathrm{c}}$ $\qquad$
${ }^{31}$ For similar 'scattered annotations' at the end of a text see $P$. Turin 1885 verso $\mathrm{I}, 8$ ( $\mathrm{K} R I$ vi, 224.7).
32 Černý and Kitchen read $m$ with a query here (K RI vI, 368.2 and n .2 a ). The hieratic sign may, however, be a hurriedly made $w d 3 t$, which fits the context much better.
(21) ||||||| ????? in/from (the) work: 9,422 [sic] c.c. Remainder ${ }^{\text {d }}$ I 13,484 (c.c.).
(22) |||||||| in a year: 240,458 (c.c.)
(23) 53 (c.c.)
(24) 530 (c.c.)

## Notes to the translation

(a) The beginning of this line belongs to Part C.
(b) Even though the second ' 10,000 '-sign was not seen by Černý, a small lacuna is indicated where it should have been, with just enough room for it. Without that sign, the number would have been $\boldsymbol{H}^{112,916}$ c.c. which cannot be related to any one of the known numbers of Part A. On the other hand, 122,916 c.c. is exactly the total projected volume of the tomb, as calculated from the data of Part A.
(c) Alternatively, though less probably, grh may mark the beginning of a new sentence or a new item in the account.
(d) I am not able to establish a meaning to the sequence of four signs that were read by Černý in line 21, before $m b ; k$.
(e) This sign, which was not transliterated by Černý, occurs between two numbers which are known from Part A. The first is a total and the second, the remainder. Hence, as in Part A (line 7), the problematic sign should be understood as $w d ; t$.

## Commentary

This last section leaves our topic unfinished, and is the hardest to comprehend. Not only is it full of lacunae at the most interesting spots, but also contains badly made signs, copy, and calculation errors. Fortunately, it mentions several numbers known to us from Part A which will serve as guide-lines for its interpretation.

The last statement of Part C was that only five days had been devoted to tomb building during the entire first year of the three-year project. Therefore, the scribe duly concluded that only two years were now left (while the work to be done remained essentially the same as before).

Then, without further comment, he proceeded to recalculate. Since we are not given any new data, we have to assume that the deadline was not changed, and consequently we expect to find a repetition of the calculations of part B , with the difference that instead of dividing by three, the scribe would now have to divide the volume to be excavated by two years.

In the first place, there is a repetition of the basic numbers. We find here for the first time the explicit mention of the total ('[when] complete') volume of the projected tomb, 122,916 c.c. (line 20). Then we are given the total and remainder which sum up the situation prevailing before the nty $h r s^{3} \cdot f$ was begun, containing a scribal error which occurred in copying the total from line 9 : instead of 9,432 which is obviously the right value, we have in line 219,422 . There is no mention at this stage of the additional volume of the nty $h r s 3 \cdot f$ be it the actual one of 630 c.c. or the 'tailored' one of 663 c.c. (cf. p. 143 above).

The last amount to be mentioned in the continuous text, 240,458 , is preceded by the words 'in a year', which means that this must be the recalculated volume to be excavated in one year. Unfortunately, this number not only differs from anything one would expect, ${ }^{33}$ but is even higher than the projected volume for the entire tomb, being almost twice as large. One wonders, therefore, whether the scribe did not commit here a gross mathematical error.

Being aware of the futility of juggling with numbers in order to obtain a desired result, it is with great reservation that I propose the following course of miscalculation that might have resulted in the number in question.

Instead of halving 122,916 (the total projected volume of the tomb), the scribe mistakenly doubled it and obtained 245,832. He then duly halved his slightly erroneous 9,422 to obtain 4,71 I and subtracted the result from 245,832 , as he should have done. The difference (241,121) turns out to be higher than his final result $(240,458)$ by exactly 663 c.c., which is the 'tailored' volume of the $n t y h r s \cdot f$. This means that he did not neglect to subtract the volume of that additional hall after all, yet he would have been more consistent with the method of calculation in Part B, had he halved that number before subtracting it. This, however, does not constitute an error, but rather a different approach to the repartition of work requirements between the two years. All in all, this attempted reconstruction of the scribe's calculations postulates a single error on his part, multiplication instead of division. Despite its grossness, errors of this nature can occur.

At this stage of the calculation we should expect the five days' work performed during that first year to be subtracted, and the result divided by 348 , to obtain the daily volume requirement for the teams. This, however, was never performed, the scribe having possibly given up on account of the unnaturally high values he obtained by utilizing his erroneous result.

## General discussion

The tomb whose measurements are given in Part A has been identified with $\mathrm{KV}_{9}$ (started by Ramesses V and completed by his successor) by all those who have dealt with P. Turin 1923 'verso'. ${ }^{34}$ Having established the connection between Part A and the remaining sections of the 'verso', we may now conclude that the entire text is concerned with the fate of that tomb.

Among the few documents which have preserved identifiable plans or measurements of royal tombs, ${ }^{35} \mathrm{KV} 9$ is the most widely represented (P. Turin 1885 verso I (see n. 15 above); P. Turin 1923 'verso'; O. Berlin B+O. Nash 10; ${ }^{36}$ O. Cairo $25269{ }^{37}$ ). P. Turin 1885 verso $I$ seems to be the earliest, since the innermost

[^96]element mentioned in it is the $m r k b t .{ }^{38}$ The next should be O. Cairo 25269 which mentions work being performed in the second passage beyond the $m r k b t^{39}$ (this passage is identical with the nty $h r s 3 \cdot f$ of our text). The ostracon is dated to Year 4, III $\operatorname{sht} 18$, which should be assigned to Ramesses $\mathrm{V},{ }^{40}$ since in Year 2 of his successor (P. Turin 1923 'verso') that passage is mentioned as already hewn. ${ }^{41}$ From one of Cerný's remarks regarding the unpublished O. Nash io, one may infer that by its time the entire tomb had been excavated, ${ }^{42}$ hence this is the most recent among the documents of KV9, while P. Turin 1923 'verso' should be ranked third in the series. To these data one may add the evidence of the tomb itself (usurpation of cartouches of Ramesses V by Ramesses VI), according to which the decoration of the rooms under Ramesses V had progressed up to the mrkbt (chamber E according to Piankoff's plan). ${ }^{43}$

One interesting conclusion to be drawn from this seriation is that between Year 4, III sht 18 of Ramesses V and the date of P. Turin 1923 'verso', the only progress that was made in $\mathrm{KV}_{9}$ was the completion of the excavation of $n t y ~ h r r s 3 \cdot f$ (later it was further enlarged under the new project). Had it been completed under Ramesses V, the scribe of our papyrus would have had no reason to treat that room differently than he did all the others, even less so to sum up the state of excavation of the tomb before mentioning the nty $h r s 3 \cdot f$. Hence, work in KV9 under Ramesses V practically stopped in III 3 ht of his fourth year, ${ }^{44}$ which would seem to imply that III 3 ht 18 should be placed close to its end, and that his fifth year, if there was one, lasted less than three months. ${ }^{45}$

On the other hand, we learn that Ramesses VI took his time before ordering the large-scale resumption of works in KV9 which is evidenced in P. Turin 1923 'verso'. Unless we accept the extreme possibility that the project was initiated in II šmw of his Year ${ }_{1},{ }^{46}$ we have to admit that during sixteen months following his accession, ${ }^{47}$ the only work done in KV 9 was the completion of $n t y ~ h r r s \cdot f$. On top of that considerable delay there should be added the twelve months of inactivity mentioned in Part C, which occurred after the project had been initiated. Therefore, normal work was not resumed in KV9, under Ramesses VI, before II šmw of his Year 3, and possibly even later than that.

Before we attempt to offer an explanation for this unusual state of affairs, the theoretical possibility that the project referred to in P. Turin 1923 'verso' had been

[^97]initiated in Year 1 (the Year 2 date of the papyrus being that of its revision after one year's inactivity), should be considered.

If this possibility were correct, there should follow that the diversions of the workmen from their duties in $\mathrm{KV}_{9}$, mentioned in Part C , should be dated to the period between II šmw of Year I and II šmw of Year 2. The most prominent among those 'diversions', the closing up of the Valley of the Kings, is said to have followed 'the burial'. Since a royal burial in the early reign of Ramesses VI could only be that of Ramesses V, and since the latter is known to have been buried belatedly on II 3ht I of Year $2,{ }^{48}$ i.e. much later than the aforementioned time span, the theory should be rejected. There have been speculations regarding the possibility of an earlier, temporary burial of Ramesses V in the Valley of the Kings, pending the preparation of his definite tomb. ${ }^{49}$ If that were the case, 'the burial' might refer to that earlier incident which would, indeed, have taken place in Year i. This possibility should be equally eliminated on the basis of the wording of O . Cairo 25254 (of the belated burial) which states that on Year 2, II 3 ht i, Ramesses V 'was brought to Western Thebes' being $m q r s$, i.e. mummified and ready for burial. Had the king lain in Western Thebes in temporary burial, the scribe of the ostracon would not have stated that the king was brought there on that particular date.

Consequently, the project was initiated in Year 2, and the papyrus was either written entirely in Year 3, or partly in Year 2 (Parts A, B) and partly in Year 3 (Parts C, D). The second possibility seems more likely, considering the unusual amount of errors in Part D, which tend to imply that a different, less gifted scribe had taken over by that time. This issue should, however, be settled by comparison of the handwritings.

At this point we should consider Černý's hesitation in assigning the terms recto and verso to the sides of the papyrus, which is evident by his use of brackets. ${ }^{50}$ The main text of the 'recto' deals with the excavation of a well near the entrance of Deir el-Medina, ${ }^{51}$ and is dated to II šmw 15 of a year which can be either 2 or 3 ('recto' 2 ). ${ }^{52}$ If the year was 2 , the 'recto' could have predated the entire 'verso', or at least its later instalment. If, however, the year was 3 , the 'recto' could (though not necessarily) have been written later than the entire 'verso'.

Returning now to the incidents of Years i to 3 which brought about the delays in the initiation and the implementation of the project of $\mathrm{KV}_{9}$, we may consider the following theory:

Ramesses VI acceded to the throne after the premature death of Ramesses V, most probably of smallpox. ${ }^{53}$ The particulars of the transition are still hazy despite

[^98]the abundance of documents from that period, a fact which may reflect a certain uneasiness or indecision in matters of procedure on the part of the Egyptian authorities. One has the impression that the officials were suddenly faced with problems, probably stemming from the circumstance of the king's death, which could not be resolved by traditional methods. The belated burial of Ramesses V, the fact that his ultimate tomb has not been discovered in the Valley of the Kings, the abnormally long duration of the sealing off of the Valley after the burial, the unprecedented usurpation of the king's tomb (and mortuary temple) by his successor, ${ }^{54}$ the retention of the workmen in their village for almost one month 'on account of Pharaoh', the ensuing delays in the preparation of KV9 and particularly the fact that they had not been foreseen, ${ }^{55}$ the need for six urgent burials in the Valley of the Queens, ${ }^{56}$ the later extraordinary reprimand of some high officials of the state by Amun, ${ }^{57}$ are ample testimony to the unusual situation which had developed.

The smallpox which probably killed the king must have claimed more victims among the royal family. This assumption can account for the six urgent burials in the Valley of the Queens. Dread from both the natural and the magico-religious implications stemming from the plague of smallpox could have been the cause for altering the established rules for the burial of a king. A tomb in the remote part of some lateral wadi may have been preferred to a burial in the centrally located KV9, and a prolonged sealing up of the region after the burial may have been judged essential. While such tomb was being urgently prepared (during the sixteen months that had elapsed between the accession of Ramesses VI and his Year 2, II šmw of the present document), the dead king and members of his household must have been waiting mummified in the north. ${ }^{58}$ Since KV9 was not to be occupied by its original owner, Ramesses VI could take it over for his own use, and initiate the project for the resumption of work in it on a much larger scale. This was ordered as soon as the workmen had completed the preparation of the tomb for Ramesses V, on II šmw of Year 2, and a steady pace of work was secured by setting the three-year deadline for the completion of the excavation. Before the new project could start, however, there occurred a last-minute change of plan, the authorities having decided to postpone the king's transfer to the south for burial until such time as six tombs could be made ready in the Valley of the Queens for the dead members of his household. As soon as those tombs were hurriedly prepared by the workmen of the royal necropolis, four months later, the group of mummies was transferred to Western Thebes and the royal burial took place (Year 2, II $3 h t \mathbf{I}-2$ ). ${ }^{59}$ Only then did it occur to the authorities

[^99]that access to the Valley of the Kings should be forbidden for about six months following the burial, thus causing further delay in the preparation of KV9.

Though largely theoretical, the above description of events accounts for the principal activities mentioned in Part C of P. Turin 1923 'verso'. Whether it can be accepted or not depends on its ability to accommodate events and situations mentioned in other documents of the period as well, the investigation of which would take us too far astray from our present subject.

The main contribution of P. Turin 1923 'verso' to our knowledge of the activities in the community of workmen consists in the provision of a rare insight to the methods employed during the stages of planning and organization of work, of which very little, apart from the selection of a site for the tomb, the drawing of its plan, and the initial handing out of tools to the workmen, is known from other sources.

# A GROUP OF OSIRIS-CLOTHS OF THE TWENTY-FIRST DYNASTY IN THE CAIRO MUSEUM 

By ALY ABDALLA


#### Abstract

Publication of a group of twelve decorated and inscribed linen cloths from the second cache of Deir El-Bahari (Bab El-Gassus), found by Daressy and Grébaut in 1891. They belong to the lower ranks of priests and priestesses connected with the cult of Amon at Thebes during the Twenty-first Dynasty. Termed here Osiris-cloths they are of three main types: the most common type shows a standing figure of Osiris, while the second depicts a standing figure of the deceased before Osiris. The third is simply a vertical line of text. The cloths are usually made of coarse, thick linen, with figures and texts drawn in black or red. The texts usually give some of the titles of Osiris, an offering or religious formula, and the name and titles of the deceased. The group is discussed in relation to earlier and later practices.


In January i89i, while the Antiquities Service was excavating the upper terrace of Deir el-Bahari temple, Mohamed Abd-Rasoul drew the attention of Grébaut to a nearby depression where it seemed likely that there would be a tomb. Work was begun here by Grébaut and Daressy, and after the removal of large pieces of stone a mud-brick pavement, over and around the mouth of a shaft, appeared at bed rock. ${ }^{1}$ When the upper part of the shaft was cleared of debris, another mud-brick floor appeared. Breaking through this, they removed sand and the stones from the remaining lower part of the shaft. At a depth of 8 m from the upper floor and to the north side, there was an entrance to a chamber which contained the remains of a coffin from the Nineteenth Dynasty. At the depth of i i m, at the bottom of the shaft and to the south, there was an outline of an opening entirely closed by a mud-brick wall.

Work was suspended at this point for some time, but it was resumed on 4 February 1891. A break was made into the wall, behind which was a corridor, known now as the upper gallery. It measures 93 m in length, 1.70 m in width, and 1.90 m in height. This gallery descends slightly with a curve and runs horizontally towards the south. It terminates with an almost square room, connected with a smaller chamber.

At a distance of 76.20 m from the entrance of the upper gallery, there was a junction, perpendicular to this gallery, running towards the east to form what is known as the lower gallery. The length of this gallery is 52.40 m . The upper and lower galleries are connected by a staircase. The width and height of the lower gallery are more or less the same as the upper.

According to Daressy, the coffins were everywhere in this catacomb and everything was in great disorder. Just beyond the entrance to the upper gallery, the passage was obstructed by three coffins, piled one above the other. Further down,

[^100]the coffins were placed along both sides of the gallery in double lines, leaving a free passage in the middle. On 5 February i89i the removal of the objects began and by i 3 February the lower gallery was cleared. The material recovered was extensive, comprising stelae, shabtis, canopic jars, a wooden bed, Osiris statuettes, garlands and wreaths of flowers, coffins, and other funerary equipment. ${ }^{2}$ The coffins and other finds arrived at Cairo Museum early in May i89ı. They were on display to the public in the winter of $189 \mathrm{I} .{ }^{3}$ Apart from some of the coffins in the Cairo Museum, ${ }^{4}$ there has been no comprehensive catalogue of the material, which has been widely distributed. ${ }^{5}$

Included in the material are 'mummy cloths', twenty-four of which are now in the Cairo Museum. They are behind glass and labelled from A to Z. The Registration Book of the Cairo Museum does not contain any information about their origin or provenance. They carry the S[erial] R[egister] numbers 14376 to 14399. Twelve of the cloths are published here by kind permission of Dr M. Saleh and Mr M. Gomaa. ${ }^{6}$

Similar cloths were also found by Winlock in his season of excavation of 1922-3, when he discovered a small cache of burials priests of Amon and princesses of the same period, close to the site of the Bab el-Gassus cache of Daressy. ${ }^{7}$

According to the accounts of Daressy and Winlock, each mummy was wrapped in a protective sheet of linen, longer and wider than the body. The ends were tied or tucked under the head and feet. The edges of this sheet were then stitched up the back. Over this protective sheet was a double band of linen, crossing in the middle. After removing the bands and the protective sheet, there was another piece of linen, thick and coarse, painted usually with the conventional image of Osiris, wearing the stf-crown and a false beard, arms crossed and holding the flail and $h q q^{3}$-sceptre. The cloth was spread over the bandages of the mummy and tied in place by cords woven in for the purpose. ${ }^{8}$ Described by Daressy as 'suaire', 'linge', or 'toile' and by Winlock as 'Osiris sheets', ${ }^{9}$ they are termed here Osiris-cloths since they are not shrouds and do not depict any deity except Osiris. Copies of the texts are given in fig. I .

[^101]

1. SR no. ı4378[C], pl. XXI, ı. L. ı 70 cm , w. 76 cm . Daressy, $A S A E 8$ (1907), 23, no. 30. Aston: Tomb Groups (TG) 667 (A.30), 330-r. Date: Pinedjem II. ${ }^{10}$

Rectangular piece of cloth, fringes at bottom, with figure of Osiris drawn in red, vertical line of hieroglyphs in red on body below arms, reading: Wsir wrb ${ }^{\circ}$ < $q$ $n p r-' I m n$ 'Ipt-swt š̌ pr-ḥd $n$ 'Imn $\check{S} d$-sw-'Imn mзヶ-hrw: 'The Osiris, the priest who has free entry to the temple of Amon (in) Karnak, the scribe of the treasury of Amon Shedsuamon, justified.'
2. SR no. 14379 [D], pl. XXI, 2. L. $183 \mathrm{~cm}, \mathrm{w} .76 \mathrm{~cm}$. Daressy, op. cit. 3 I , no. 1 I $4 .{ }^{11}$ Aston: TG 76i (A.ri4), 359-60. Date: Pinedjem II.

Rectangular piece of cloth, fringes and cords at bottom, with figure of Osiris drawn in black, vertical line of hieroglyphs in black on body below arms, reading: Wsir it $n t r$ ḥry-sšts(w) n 'Imn P3-diw-'Imn mзг-hrrw hr psdt ${ }^{\text {cst }}$ Wsir nb 'Imntt: 'The Osiris, the god's father, master of the secrets of Amon, Padiamon, before the great ennead, Osiris lord of the West.'
3. SR no. $1438 \mathrm{i}[\mathrm{F}]$, pl. XXI, 3. L. $133 \mathrm{~cm}, \mathrm{w} .65 \mathrm{~cm}$. Daressy, op. cit. 25, no. 43 . Aston: TG 690 (A.43), 336. Date: Psusennes III.

Rectangular piece of cloth, fringes at bottom, cords at top, middle, and bottom, vertical lines of hieroglyphs in black, bordered on either side by a vertical line,
 $r(n) p t \quad n b \quad n$ Wsir it ntr $n$ 'Imn-Re nsw ntrw imy-r pr-ḥd $n$ pr-dwst $n$ 'Imn $N s-p ;-q 3-s ̌ w t y ~ m з r-h r w: ~ ' W o r d s ~ s p o k e n ~ b y ~ O s i r i s ~ K h e n t y-A m e n t y, ~ O n n o p h r i s, ~$ the ruler of the living ones. May he give offerings, provisions and all fruits and vegetables to the Osiris, the god's father of Amon-Re, King of gods, the Overseer of the treasury of the $p r-d w_{3} t$ of Amon, Nesipakashuty, justified.'
4. SR no. $14383[\mathrm{H}]$, pl. XXI, 4. L. 152 cm , w. 76 cm . Daressy, op. cit. 25, no. 46. Aston: TG 693 (A.46), 337. Date: between 1040 and 1000 Bc. ${ }^{12}$

Rectangular piece of cloth, fringes and cords at bottom, with figure of Osiris on small platform, drawn in black, vertical line of hieroglyphs, in black, in front of Osiris to the right, reading: Wsir hsy is $n$ nb ntrw imy-r pr-ḥd $n$ pr-'Imn wrb n 'Imn Snsn $m$ sr-hrw $m$ htp: 'The Osiris, the great praised one (favourite) by the lord of the gods, the Overseer of the treasury of the temple of Amon, the priest of Amon, Sensen justified in peace.'

[^102]5. SR no. $14384[\mathrm{I}]$, pl. XXII, i. L. $170 \mathrm{~cm}, \mathrm{w} .60 \mathrm{~cm}$. Daressy, op. cit. 32, no. 123. Aston: TG 770 (A.123), 363. Date: mid to early tenth century Bc. ${ }^{13}$

Rectangular piece of cloth, fringes at bottom, cords at top, middle, and bottom, with Osiris figure on a small platform, drawn in red, vertical line of hieroglyphs, in red, in front of him to the right edge, reading: $W \operatorname{sir} n b t$ pr šm‘yt $n$ 'Imn $D y-r-p w$ mir-hrw: 'The Osiris, mistress of the house, the chantress of Amon, Direpu, justified.'
6. SR no. $14388[\mathrm{M}]$, pl. XXII, 2. L. $168 \mathrm{~cm}, \mathrm{w} .76 \mathrm{~cm}$. Daressy, op. cit. 24, no. 45 . Aston: TG 692 (A.45), 337. Date: Twenty-first Dynasty. ${ }^{14}$

Rectangular piece of cloth, fringes at bottom, cords at top, middle, and bottom, with a figure of Osiris in black, vertical line of hieroglyphs in black on body below arms, reading: Wsir nbt pr šm‘yt n 'Imn Dd-mwt mзr-hrw: 'The Osiris, mistress of the house, the chantress of Amon, Djedmut, justified. ${ }^{15}$
7. SR no. $14390(\mathrm{O})$, pl. XXII, 3. L. 175 cm , w. 76 cm . Daressy, op. cit. 32, no. i 19 . Aston: TG 776 (A.ir9), 36i-2. Date: Pinedjem II.

Rectangular piece of cloth, with a figure of Osiris drawn in black, vertical lines of hieroglyphs in black, two before his head and one on body below arms, reading: Wsir hntt 'Imntt Wn-nfr haq; ‘nḩw Wsir wrt hुnrt n 'Imn-R॰ nsw ntrw s;-2nw T;-nt-ipt $m 弓\ulcorner-h \mathrm{r} w \mathrm{~m}$ pt mi Re wsr snd (?) hgr Gb: 'Osiris, Khenty-Amenty, Onnophris, the ruler of the living ones. The Osiris, the chief of the harem of Amon-Re, King of gods, (in) the second phyle, Tenetopet, justified in the sky like Re great of respect (?), before Geb.'
8. SR no. ı4392[Q], pl. XXII, 4. L. 175 cm, w. 76 cm . Daressy, op. cit. 27, no. 65. Aston: TG 712 (A.65), 343. Date: Psusennes III. ${ }^{16}$

Rectangular piece of cloth, fringes at top, cords at top, middle, and bottom, with figure of Osiris standing on the $n b w$-sign (gold sign), drawn in black, vertical line of hieroglyphs, in black, before Osiris to the right edge, reading: $W \operatorname{sir} P_{3}(-n)$-'Imn mзr-hrw: 'The Osiris Piamon justified.'
9. SR no. $14394[\mathrm{~S}]$, pl. XXIII, i. L. $170 \mathrm{~cm}, \mathrm{w} .76 \mathrm{~cm}$. Daressy, op. cit. 30, no. 105. Aston: TG 752 (A.105), 355-6. Date: Pinedjem II.

Rectangular piece of cloth, fringes and cords at bottom, with a figure of Osiris drawn in black, vertical line of hieroglyphs, in black, before Osiris, reading: Wsir nb nḥh


[^103]eternity, the ruler. The Osiris, the priest of Mut, the scribe of the treasury, Userhetmes, justified under the great ennead.'
10. SR no. i 4395 ['T], pl. XXIII, 2. L. 155 cm , w. 76 cm . Daressy, op. cit. 30, no. 98. Aston: TG 745 (A.98), 343-54. Date: early years of Pinedjem II.

Rectangular piece of cloth, fringes at bottom, with a figure of Osiris on a platform, drawn in red, two vertical lines of hieroglyphs, in red, before Osiris, reading: $\underline{d} d$ $m d w$ in Wsir nb nḥh hnty 'Imntt dit•f ḥtpt dfiw m henqt k;w spdw Wsir hem-ntr $n$ 'Imn imy-r nfrw $n$ pr-'Imn Ns-p;-nfr-ḥr mir-hrw: 'Words spoken by Osiris, lord of eternity, Khenty-Amenty. May he give offerings and provisions consisting of beer, oxen and fowls (to) the Osiris, the priest of Amon, the overseer of the recruits of the estate of Amon, Nespaneferhor, justified.'
í. SR no. i4396[U], pl. XXIII, 3. L. 168 cm , w. 80 cm . Daressy, op. cit. 32, no. 120. Aston: TG 767 (A.ı20), 362. Date: Pinedjem II.

Rectangular piece of cloth, with figure of Osiris on a small platform and a standing figure of the deceased, in short kilt, with shaven head, one arm raised in adoration, the other held at the side, both figures drawn in black, eight short vertical lines of hieroglyphs, in black, above their heads, reading: h.tp di nsw Wsir nb nḥh hnty imntt Wn-nfr hqq; ‘nhw di•f htpw dfiw Wsir w<b $n$ 'Imn-R॰ nsw-ntrw sš sḥn $n$ pr 'In-ḥrt hery sš n pr sḥn pr Wir nb зbdw Hnsw- $(m)-r n p$ mır hrw wist: 'A boon which the king gives to Osiris, lord of eternity, Khenty-Amenty, Onnophris, ruler of the living ones. May he give offerings and provisions (to) the Osiris, the priest of Amon-Re, King of gods, the scribe of commands of the estate of Onuris, the chief scribe of the department of orders of the estate of Osiris Khonsemrenep, justified. Thebes.'

1 2. SR no. $14398[\mathrm{~W}]$, pl. XXIII, 4. L. i 60 cm , w. 76 cm . Daressy, op. cit. 35, no. 134. Aston: TG 78ı (A.i34), 368. Date: about 980 to 930 bc.

Rectangular piece of cloth, fringes at bottom, with figure of Osiris on a small platform, drawn in black; two vertical lines of hieroglyphs, in black, one either side of his head, reading: $\underline{d} d m d w$ in $W \operatorname{sir} n b n h ̣ \nmid W \operatorname{sir} \check{S} d(-s w)-H r$ : 'Words spoken by Osiris, lord of eternity. The Osiris Shed(su)hor ${ }^{17}$ justified.'

These cloths usually have fringes at the bottom but in one case (no. 8) at the top instead. The other borders of the cloths have a selvage. Each Osiris cloth has three sets of cords on either side at the top, middle, and bottom, although they do not show in all cases on the photographs, the cords being hidden behind the cloth in the glass case. The purpose of these cords is to tie the cloth to the mummy. Holes or gaps in the area of the inscriptions and the figure of Osiris can be seen in nos. in, i2. Some

[^104]corrosion reaction has occurred, where the paint has been heavily applied, resulting in the surface of the cloth disintegrating. ${ }^{18}$

From the Seventeenth Dynasty onwards, especially in the Theban district, linen was used for different purposes in the funerary context or practice. Wrapping sheets, or 'shrouds' as termed by some scholars, covered with some spells and vignettes from the Book of the Dead are to be found from the Seventeenth Dynasty. The best example is the fragments of the wrapping sheet or shroud of the princess Ahmose, daughter of Seqenenre-Tao. ${ }^{19}$ In the Eighteenth Dynasty such sheets are more commonly found. The most famous one is that of Tuthmosis III. ${ }^{20}$ This practice of providing sheets or shrouds of this nature seems to have fallen away, but, towards the end of the Twentieth Dynasty, individual bandages were inscribed with spells from the Book of the Dead. ${ }^{21}$ Apparently, it was believed then that the effectiveness of these spells in protecting the deceased in the afterlife would increase if they were closer to the mummy. Furthermore, the protection would be applied earlier during the period devoted to the bandaging of the mummy, and not at the conclusion of this part of the mummification process.

In the Twenty-first Dynasty amuletic pieces of cloth were tied beneath the outer protective wrapping in both the second Deir el-Bahari cache and Winlock's small cache. On them the deceased was identified with Osiris. The amuletic use of a decorated cloth would have some parallel with the painted cloths found with burials at Deir el-Medina, depicting the deceased seated before a table of offering, sometimes with an officiating priest. The manner in which such cloths were arranged is shown in the case of the tomb of Sen-nefer. The anthropoid coffin was draped with a large plain pall ('un grand suaire de toile ecrue') on which the painted cloth was placed, over the breast. ${ }^{22}$ Examples in Leiden and Brooklyn, ${ }^{23}$ of similar character and technique to the Osiris cloths but with other deities represented, suggest that this practice may not have been confined to the priests of Amon ${ }^{24}$ and to the Theban region. In general, it would seem that the amuletic function of these cloths was taken over by 'bead-shrouds'. ${ }^{25}$ The practice of providing cloth inscribed with spells and vignettes from the Book of the Dead was briefly revived in the Persian to Ptolemaic

[^105]Period. ${ }^{26}$ In the Graeco-Roman period the decoration of the outer shroud reached its greatest development, with the deceased depicted full length as Osiris or Hathor, with representations imitating scenes which in an earlier period would have been the subject of relief or painting in tomb chapels. ${ }^{27}$
${ }^{26}$ Caminos, $\mathcal{f} E A 56$ (1970), 121-2.
${ }^{27}$ For a general study of the Graeco-Roman shrouds, see Parlasca, op. cit. 152-92.


## Plate XXII




A GROUP OF OSIRIS-CLOTHS OF THE TWENTY-FIRST DYNASTY

# LES ACTES DE VENTE EN EGYPTE ANCIENNE, PARTICULIÈREMENT SOUS LES ROIS KOUCHITES ET SAÏTES* 

By BERNADETTE MENU


#### Abstract

This is a brief exposition of ( I ) the characteristic features of sale in Egyptian law, especially of the fundamental distinction, which appeared very early, between reciprocal contracts intended for immediate execution, for which the model is sale, and unilateral contracts with an implicit delay, such as loans, and of (2) the main lines of evolution of sale contracts. To a basically oral law was added the practice of documents, which developed from the New Kingdom, but especially with the notarized acts of the Kushite and Saite periods. If the notion of consensual sale existed in germ from the Old Kingdom onwards, it was in the Twenty-fifth and Twenty-sixth Dynasties that a conscious conceptualization of legal relations and the identification of different juridical strains associated with agreement between parties appeared. This brought radical modifications in the redaction of formulae, between those of the Twenty-fifth Dynasty and the early years of Psammetichus I, and those of the following reigns. This major development, underlined by the change in script, became apparent in the course of Psammetichus I's reign, spreading gradually from north to south, from Year 8 at Memphis to Year 21 at El-Hibeh, but much later at Thebes: P. Vienna 12002 (cow sale, Year 25) and P. Turin 2120 (sale of land, Year 45), for example, still belong to the earlier group, and are still in abnormal hieratic. Appendices list the documents on which the study is based, and classify the diagnostic formulae.


Les actes de la pratique constituent une importante source du droit. Les actes de vente forment un groupe homogène et relativement abondant de documents, à partir desquels il est possible de tirer un certain nombre de conclusions d'ordre économique et juridique. Sur le plan du droit, on peut constater que:
(i) l'évolution est très sensible dans les formulaires, entre les stades successifs ou concomitants du troc, de la vente translative de propriété et de la vente consensuelle, génératrice d'obligations;
(2) le contrat de vente, largement utilisé, a servi de 'moule' pour réaliser toutes sortes d'opérations juridiques impliquant des obligations réciproques: échange, partage, succession, voire adoption;
(3) enfin, dès les époques les plus reculées, les praticiens ont effectué une importante distinction entre, d'une part, les contrats synallagmatiques à réalisation en principe immédiate, même si l'une des prestations est exceptionnellement reportée à plus tard, et les contrats unilatéraux comportant nécessairement un délai, dont le prototype est le prêt.

Il y a contrat dès que deux ou plusieurs personnes s'engagent réciproquement. C'est ce qu'exprime le Code Civil français en définissant assez largement le contrat: 'Le contrat est une convention par laquelle une ou plusieurs personnes s'obligent, envers une ou plusieurs autres, à donner, à faire ou à ne pas faire quelque chose' (Art.

[^106]IIOI). Le contrat est essentiellement générateur d'obligations. La vente est un contrat, quelle que soit la forme utilisée par les parties pour le réaliser: convention orale, simple écrit, acte juridique dressé devant témoins et enregistré.

En Egypte, l'accord oral est parfois sanctionné par un écrit. C'est le cas, dans l'Ancien Empire, lorsque la vente porte sur des biens immobiliers, même s'ils sont de faible valeur (maisons villageoises, très petits terrains à bâtir); si la vente présente une modalité (vente à terme ou à crédit), elle est de plus publiée sur un support de pierre, stèle ou relief. On peut en effet voir, dans le droit égyptien ancien, deux stades principaux d'évolution:
(i) Un droit oral et coutumier en vigueur jusqu'à la $18{ }^{e}$ dynastie. Le contrat est en principe verbal (et solennel lorsque l'enjeu est de quelque importance); il peut aussi faire l'objet d'un écrit. C'est le cas, notamment, en ce qui concerne la vente, lorsque celle-ci est assortie de conditions ou de termes; le fait que, dès cette époque, les cocontractants aient pu stipuler des modalités particulières d'exécution, prouve que la vente n'était pas seulement matérielle mais consensuelle.
(2) A partir de la $188^{e}$ dynastie, des contrats sont rédigés par écrit, même s'ils portent sur des biens mobiliers et ne comportent aucune clause exceptionnelle. L'accent est mis sur l'accord, sur la notion de juste contrepartie, toutefois les contrats de vente sont relativement embryonnaires et il faut attendre la Basse Epoque pour constater une évolution qui va d'ailleurs en s'accélérant: les plus anciens contrats, ceux de la $25^{\mathrm{e}}$ dynastie et du début de la $26^{\text {ème }}$, font état de la remise d'un prix déterminé, les plus récents de la satisfaction du vendeur au sujet du prix convenu, mais non spécifié dans l'acte.

Le troc et la vente au comptant ont coexisté en Egypte ancienne jusqu'à une époque avancée, du fait de l'absence de monnaie frappée avant la première domination perse, au $6^{e}$ s. av. J.-C.: les parties pouvaient échanger des marchandises auxquelles elles attribuaient la même valeur, ou bien se référer à un 'système monétaire' basé sur les métaux (or, argent, bronze ou cuivre), les étoffes, les céréales ou l'huile, selon un barème des équivalences qui a varié au cours de l'histoire pharaonique: l'unité de base, par exemple, qui est le deben de cuivre, pèse 27,5 grammes sous les Amenemhat et 91 grammes à l'époque du Nouvel Empire. La méthode d'évaluation d'un bien par rapport à des unités-étalons est apparue dès l'Ancien Empire. A partir du moment où des modalités étaient envisagées par les parties, et ceci déjà sous les $4^{e}-6^{e}$ dyn., on peut admettre que la vente consensuelle était née: le consentement des parties s'exprime au moyen de l'accord sur le prix, c'est la raison pour laquelle la clause relative au prix (spécification ou paiement) prend autant d'importance dans les premiers contrats de vente.

L'utilisation des mécanismes de la vente (cession d'un bien ou d'un droit contre réception d'un 'prix') comme moyen de réaliser une autre opération juridique résulte, d'une part, de la nécessité de matérialiser le consentement de celui qui acquiert des droits, d'autre part, d'équilibrer sur le plan économique la situation des
deux parties après que l'une d'entre elles eut reçu des avantages: la théorie, proposée par Erwin Seidl, selon laquelle aucun droit ne peut être transféré sans qu'une contrepartie pécuniaire soit versée, est donc exacte dans la mesure où elle retient l'élément économique, mais elle néglige un peu l'élément consensuel: la contrepartie reçue, à quelque occasion que ce soit, prouve que la partie adverse a accordé son consentement à la transaction en cause.

Cependant, les notaires égyptiens n'ont pris conscience de ce phénomène, n'ont perçu la différence qui existait entre vente translative et vente consensuelle que vers le milieu du $7^{\mathrm{e}} \mathrm{s}$. av. J.-C. Ils ont alors modifié les formulaires des contrats de vente. En effet, à la formule: 'J'ai reçu de toi tant de deben d'argent, je t'ai donné telle chose', calquée sur la technique de l'échange sur le marché, ils ont substitué des clauses plus complexes faisant état de la satisfaction du vendeur d'avoir reçu un prix (indéterminé dans l'acte) et, en corollaire, de la reconnaissance des droits de l'acheteur: 'Tu m'as contenté le coeur avec l'argent de telle chose. Elle est à toi, c'est ta chose.' A partir de ce moment-là, le droit de la vente s'est trouvé cristallisé autour de ses deux éléments fondamentaux: d'une part, la satisfaction du vendeur au sujet du prix, d'autre part, la cession de la chose vendue et des droits afférents. Cette distinction a atteint son paroxysme à l'Epoque Ptolémaïque, puisqu'une même vente était consignée dans deux contrats différents: l'écrit pour argent' ou écrit de paiement ( $s \underline{h} n d b ; h \underline{d}$ ) et l'écrit d'éloignement' ou écrit de cession ( $s \underline{h} n w j$ ).

Sur un plan purement formel, les anciens Egyptiens ont utilisé le moule commode de la vente pour plusieurs raisons: la vente comporte, de la part du vendeur, une obligation de garantie vis-à-vis de l'acheteur. Le vendeur promet à l'acheteur de renoncer à toute réclamation et d'écarter tous les tiers qui pourraient revendiquer la chose vendue: cette sécurité a poussé les parties contractantes à préférer les formes de la vente pour réaliser des conventions telles que partage, adoption, servitude, etc. Les parties ont aussi choisi ce cadre formel pour déguiser certaines opérations lorsqu'elles se trouvaient rejetées hors du contexte légal ou coutumier. Enfin, le droit égyptien des obligations repose, surtout à partir du Nouvel Empire, sur une dualité contractuelle que j'ai évoquée au début de cet exposé: les transferts de biens ou de services dont la réalisation est immédiate sont rédigés dans les termes de la vente, ceux qui comportent ou impliquent un délai d'exécution utilisent les formules du prêt.

Dans l'Ancien et le Moyen Empires, le contrat de vente est en principe verbal. Il ne nécessite la rédaction d'un écrit, comme nous l'avons vu précédemment, que si l'objet est immobilier (maison, partie de maison ou parcelle de terrain), a fortiori si la vente est assortie d'une modalité (vente à crédit, vente à terme ou transfert d'obligation à une tierce personne; les trois cas ont pu être relevés dans l'Ancien Empire). ${ }^{1}$ La forme des actes de vente peut être plus ou moins solennelle, allant de la simple transcription par écrit du dialogue entre les parties, prononcé devant

[^107]témoins et enregistré devant le Conseil local, lorsque l'on cède un objet déterminé, jusqu'à l'acte d'imyt-pr, procédé qui se réfère à la garantie royale et même divine pour le transfert d'ensembles patrimoniaux comportant des biens et des services.

Durant le Nouvel Empire, la situation n'évolue guère, si ce n'est que les actes de vente se banalisent: la convention orale est mentionnée par écrit, la plupart du temps sur un ostracon, dans le seul but, semble-t-il, de constituer la preuve; on possède aussi pour cette période des contrats plus développés consignés sur papyrus, mais ils suivent eux aussi le processus du dialogue et semblent être invoqués, voire rédigés au cours d'une procédure judiciaire entraînée par la contestation des droits de l'une des parties.

Le gouvernement des rois-prêtres, sous les $2 \mathrm{I}^{\mathrm{e}}-22^{\mathrm{e}}$ dynasties, confirme le rôle des temples au cœur de la vie des affaires, notamment dans la région thébaine. Dès la $22{ }^{\mathrm{e}}$ dynastie, on voit apparaître des actes notariés élaborés dans les temples, mais ces pratiques se développent avec une relative intensité sous les $25^{\mathrm{e}}-26^{\mathrm{e}}$ dynasties. Deux traditions notariales s'opposent alors en Egypte, entre le Nord et le Sud, en contrepoint de l'évolution politique du pays, jusqu'à la généralisation de l'aire d'application du démotique marquant l'emprise progressive du Nord sur le Sud, à partir de l'an 8 de Psammétique $\mathrm{I}^{\mathrm{er}}$. Les actes de vente sont dressés dans le cadre du temple; les notaires sont des clercs formés à la pratique juridique dans les 'Maisons de Vie', écoles de scribes spécialisés qui dépendent des temples. On peut reconnaître, d'après les formulaires de la vente, les traditions locales propres à chaque grand centre religieux.

Sur le fond, une importante transformation dans la réflexion juridique, à laquelle j'ai déjà fait allusion, s'est opérée au cours du règne de Psammétique i ${ }^{\text {er }}$. Comme cette période est particulièrement féconde dans le domaine du droit, je vais maintenant tirer les conclusions d'une analyse comparée des formulaires, menée à partir d'environ quatre-vingts contrats, depuis le règne de $\operatorname{Pi}(a n k h) i$ jusqu'à celui de Nectanébo II.

Une remarque préliminaire s'impose: c'est le vendeur qui tient le discours contractuel, pour une double raison:
(i) son obligation est plus complexe que celle de l'acheteur: il doit fournir la chose, la livrer en bon état et la garantir contre les risques de l'éviction, tandis que l'acheteur doit seulement verser le prix convenu;
(2) le contrat servira de titre à l'acheteur, une fois remis en sa possession avec la chose vendue, il pourra être invoqué comme preuve de ses droits.

On distinguera les clauses principales de la vente (réception du prix et remise de la chose vendue; transfert de propriété) et les clauses accessoires (garantie personnelle du vendeur et garantie contre les risques d'éviction). Les premières remplissent les conditions nécessaires pour que la vente soit parfaite. Les secondes, non moins importantes, garantissent à l'acheteur la jouissance paisible de la chose vendue.
(a) Les clauses principales
(i) Le versement du prix et la remise de la chose vendue sont primitivement deux opérations simultanées et distinctes, rapportées immédiatement dans le contrat. Les documents les plus anciens sont rédigés selon le schéma suivant: 'J'ai reçu de toi $x$ deben d'argent' (le prix est déterminé). 'Je t'ai donné telle chose'. La vente se réalise par l'accomplissement des prestations réciproques.

A ce procédé très simple va peu à peu se substituer un système plus évolué; la clause de satisfaction et son corollaire, la reconnaissance des droits de l'acheteur, va supplanter la double clause: acceptation du prix/remise de la chose vendue. La formule est alors rédigée selon le modèle suivant: 'Tu m'as contenté le coeur avec l'argent (équivalent au prix) de telle chose. Elle est à toi, c'est ta chose.' Le vendeur se déclare satisfait de l'argent reçu. Le paiement d'un prix (qui n'est pas déterminé dans l'acte) est la cause, au sens romain, de l'obligation du vendeur. La simultanéité ne se présente plus entre paiement et livraison, mais entre satisfaction du vendeur qui a reçu l'argent et reconnaissance des droits de l'acheteur sur la chose vendue. Ceci suppose un accord préalable sur le prix.

L'évolution peut être décrite, à partir des documents datés de Psammétique rer, selon le double critère chronologique et géographique. Les actes de vente provenant de Thèbes sont écrits en hiératique anormal et appartiennent au formulaire du premier type, au moins jusqu'en l'an 45 du pharaon. ${ }^{2}$ La stèle Louvre C.ioi, ${ }^{3}$ provenant de Memphis et probablement gravée d'après un original en démotique, date de l'an 8 de Psammétique ${ }^{\text {er }}$ et appartient au formulaire du second type, de même que les P . Rylands $\mathrm{n}^{0} \mathrm{I}$ et 2 , datés de l'an 21 du règne et provenant d'El-Hibeh en Moyenne Egypte.

Dans le premier stade ( $8^{\mathrm{e}} \mathrm{-}^{\mathrm{e}}$ s. av. J.-C.), le consentement des parties est censé s'exprimer au moment de la transaction, tandis qu'ultérieurement il peut précéder la vente effective. Dans le second stade de l'évolution, à partir de l'an 8 de Psammétique i er à Memphis, de l'an 2 I à El-Hibeh, le contrat ne fait plus état de notions matérielles mais de notions juridiques, ce qui représente un progrès très net et considérable dans l'effort de conceptualisation. Cette transformation capitale de la mentalité juridique, se déplaçant du plan pratique au plan théorique, va trouver son plein épanouissement à l'Epoque Ptolémaïque; c'est sans doute là qu'il faut rechercher l'origine des doubles documents (écrits pour argent et écrits de cession): l'accord préalable sur le prix ne sera plus seulement verbal mais rédigé, la somme versée n'étant d'ailleurs toujours pas spécifiée dans l'écrit pour argent, ce qui suppose des tractations préliminaires.
(2) La clause de transfert de propriété est inséparable de la notion de propriété elle-même. Le droit de propriété, en Egypte pharaonique, est surtout une prérogative d'autorité. Cette constatation, qui résulte de l'étude des textes juridiques au cours de l'évolution historique, est corroborée par la terminologie employée dans les documents de vente retenus ici.

[^108]Le 'droit de propriété' de l'acheteur est ainsi défini par le vendeur: 'Aucun homme au monde ne pourra - que ce soit (mes) père, mère, frère, soeur, fils, fille, pas plus que moi-même également - se considérer comme son propriétaire ( $j r \operatorname{shj} n$ - $j m=f$ ), excepté toi.'

Le vendeur prévient l'action en revendication éventuelle de ses ayants droits sur la chose vendue, il renonce à ses propres droits. Le groupe 'aucun homme au monde' n'a probablement pas un sens universel: il s'agit des ayants droits énumérés à la suite et de ceux qui seraient omis dans l'énoncé. Les simples tiers seront écartés par la clause subséquente qui renferme la garantie contre les risques d'éviction. Seuls en effet ont vocation immédiate à la propriété le vendeur et ses ayants droits.

L'expression $j r$ sh ('exercer la puissance, l'autorite', donc 'être propriétaire') mérite de retenir l'attention: elle confirme mon opinion selon laquelle la propriété en droit égyptién ancien était conçue comme une prérogative d'autorité et s'exerçait sur la jouissance des biens.

La clause de transfert de propriété comporte en réalité deux courants:

- le vendeur se dessaisit de ses droits (ses héritiers présomptifs se trouvent par là même dépouillés des leurs);
- il reconnaît l'acheteur comme étant dorénavant le seul propriétaire de l'objet vendu. C'est donc l'étape décisive de la vente.
(b) Les clauses accessoires

Les clauses de garantie se décomposent en trois éléments:
(i) garantie personnelle du fait du vendeur lui-même: il ne pourra plus réclamer la chose vendue;
(2) garantie du fait des ayants droits du vendeur (enfants, frères et soeurs, père, mère, maître, maîtresse). Le vendeur s'engage à écarter l'action en revendication de ses héritiers présomptifs (on peut remarquer une grande souplesse dans l'énumération qui ne respecte donc pas nécessairement l'ordre de vocation à la succession).

Ces deux premières garanties n'appellent pas de commentaire particulier, puisqu'elles sont la conséquence directe du transfert du droit de propriété. La troisième, en revanche, est plus complexe, il s'agit de la garantie du fait des tiers:
(3) Le vendeur s'engage à prévenir ou réparer leur action en contestation, à les éloigner de l'acheteur, il confirme en outre que leur opposition sera désormais irrecevable dans tout Bureau des Archives.

Cette garantie a subi une évolution en trois phases qui n'a pas suivi une progression constante mais a été marquée par de fréquents retours en arrière. Le vendeur prend conscience de sa responsabilité vis-à-vis de l'acheteur, mais celle-ci s'exprime à la fois dans ses rapports avec la chose vendue et dans ses rapports avec les tiers intéressés. Le vendeur, une fois qu'il s'est séparé de la chose vendue, considère comme étant de son devoir d'opérer un barrage entre la chose et d'autres utilisateurs
éventuels, ceci afin de garantir à l'acheteur la jouissance paisible du bien acquis. Ce point de vue, avec la pluralité des courants juridiques qu'il implique, a entraîné des expressions différentes de la garantie (libération ou affranchissement, dédommagement, éloignement) qui ont d'ailleurs pu coexister, eu égard aux différents rapports qu'elles définissent (vis-à-vis de la chose ou vis-à-vis des tiers).

Tout d'abord, le vendeur promet de rendre la chose 'nette' de tout droit autre que ceux créés entre la chose et l'acheteur (il s'agit aussi bien des anciens droits du vendeur que de ceux qui pourraient être invoqués par des tiers). L'idée a prévalu mais le vocabulaire a changé: c'est d'abord le mot $n\ulcorner$, 'lisse, net' qui a été utilisé pour l'exprimer, et ceci aussi bien à Memphis qu'à Thèbes, puis le mot wrb, 'lavé, blanchi, pur', dont l'emploi s'est maintenu.

Dans un stade également ancien, le vendeur, en transmettant à l'acheteur la chose avec la totalité des droits qui lui sont attachés, souligne que l'action en contestation d'un tiers est susceptible d'entraîner, au profit de l'acheteur, une indemnité en argent, en grains ou en toute chose qu'il plaira à celui-ci de demander.

Enfin, la formule qui a été retenue en définitive, fait état de l'intervention personnelle du vendeur pour évincer tous les opposants. C'est là un progrès considérable. La notion d'éloignement ( $w j$ ) a toujours été sous-jacente mais elle s'est peu à peu dégagée avec précision. La propriété étant le lien immédiat et constant entre la chose et son utilisateur, la conséquence du transfert de propriété est l'éloignement du vendeur par rapport à la 'res' et, de là, son intervention pour éloigner les tiers qui pourraient faire valoir des droits sur elle.

Le vendeur fait désormais la distinction, dans son obligation de garantie, entre l'obligation d'affranchir, de purger (wrb) la chose de tout droit qui pourrait l'entacher et l'obligation d'éloigner ( $w j$ ) les personnes qui pourraient empêcher l'acheteur d'exercer pleinement sur l'objet les prérogatives que lui confère la vente. C'est là le stade final et très élaboré de l'évolution du formulaire de la garantie vis-à-vis des tiers.

Le résultat d'une intense réflexion juridique déployée dans les temples et dont il faudrait, selon la tradition, attribuer l'origine à l'impulsion donnée par Bocchoris, s'est manifestée dès les premières années du règne de Psammétique $\mathrm{r}^{\mathrm{er}}$, s'étendant progressivement du Nord au Sud sur une durée de quarante années. On ne doit pas oublier, cependant, que ce très haut degré de précision juridique, atteint au $7^{\mathrm{e}}-6^{\mathrm{e}} \mathrm{s}$. av. J.-C., était déjà en germe dès le troisième millénaire dans la fameuse vente de Guizeh.

## ANNEXES

## 1. Liste alphabétique des sources

N.B. Cette liste inclut les contrats qui comportent des clauses de la vente, quelle que soit la véritable nature de la convention enregistrée; ex.: partage, succession, adoption, etc. Pour les compléments d'information sur les sources (date, bibliographie, nature du document), consulter H.-J. Thissen, Enchoria, 10 (1980) 105-25. Ajouter:
P. IFAO 90 I et 902 (B. Menu, BIFAO 8I (1981), 45-52 et pls. xi-xii);
P. Lille 25 (fragment à rattacher au P. Lille 22, H. Sottas, Pap. dém. Lille (Paris, 1921), 5 1-2 et pl . xi);
P. Louvre E.3228g (M. Malinine, $R d E 34$ (1982-3), 96-7);
P. Michigan 3523, 3525a, b, c (E. Cruz-Uribe, Saite and Persian Demotic Cattle Documents (Chico, California, 1985), 7, 17, 19, 30);
P. Rylands 7 (B. Menu, RdE 36 (1985), 85-6).

On notera que $P$. Vatican $2038 \mathrm{c}=10574$. Enfin, la chronologie que j'ai utilisée, pour la période qui précède l'invasion perse, est celle de K. A. Kitchen, The Third Intermediate Period in Egypt (Warminster, 1973), notamment p. 468.
P. Berlin 13571
$-15831+15832+$ P. Caire 50160
P. Bibl. Nat. 216

- 217
$-223$
P. Brit. Mus. 10117
- iol.20B
P. Caire 3066I
- 50058
- 50059
- 50062 (fragment)
- 50146
- 50150

Stèle Florence 1659 (2507)
P. IFAO 901

- 902
P. Leyde F.i942/5.I5
P. Lille 23
- 24
$-22+25$
$-26$
$-27$
P. Loeb 41
P. Loeb 43
-44
-47
P. Loeb 49 (fragment)
- 50
-3
- 68

Stèle Louvre C.ioi
Coupe Louvre E. 706
P. Louvre E. 2430
-E. 2432
-E. 3168
-E.3228a
-E. 3228 d
-E.3228e
-E. 3228 g
-E.3231a

- E. 7128
-E. 7832
-E. 7843
-E. 7858
-E. 9292
-E. 9294
-E. $10935+$ P. Bruxelles i
P. Michaelides A = P. Brit. Mus. 10846A
P. Michigan 3523
-3525a
-3525 b
-3525c
P. Moscou 135
P. Rylands i
$-2$
$-4$
$-5$
$-6$
$-7$
- 8
P. Sorbonne 1276
- 1277
P. Turin 2118
$-2118 \mathrm{~A}$
$-2120$
$-2121$
$-2122$
$-2123$
- 2124
$-2125$
-2126
- 2127
-2128
P. Vatican 2038 C
P. Vienne 3858
-D.ior 50
-D.ioris
-D.iois2
-D.ioi 53
-D. 12002
-D. 12003
-D. 12004


## 2. Analyse des formulaires

N.B. Des tableaux récapitulatifs complets figureront dans mon livre sur la vente dans le système socio-juridique de l'Egypte ancienne.
I. CLAUSES DE LA VENTE PROPREMENT DITE
(Réception du prix et remise de la chose vendue)
(a) Réception du prix
(1) 'foai reçu de toi $x$ deben d'argent de la Trésorerie de X comme prix de . . .' ou 'en son échange' (ou les deux):

| Exemples | Objet du contrat | Date | Provenance |
| :--- | :--- | :--- | :--- |
| -P. Leyde F.1942/ | Cession de services | An 21 de $\operatorname{Pi}(\mathrm{ankh}) \mathrm{i}=c .727$ | Thèbes |
| 5.15 |  | av. J.-C. |  |

(2) 'Tu m' (nous) as contenté le coeur avec l'argent (équivalent au prix) de . . .'
C.ioi

- Stèle Florence 1659 (2507)
-P. Rylands I
- Coupe Louvre
E. 706
—P. Rylands 6
-P. Rylands 8
-P. BM ioil7
- P. Louvre E. 7832
-P. Caire 50059
-P. Turin 2122
-P. Bibl. Nat. 223
-P. Louvre E. 7128
-Stèle Louvre Vente de tombe An 8 de Psammétique Memphis

Vente de tombe
Vente de tombe ${ }_{\mathrm{I}}{ }^{\mathrm{er}}=c .657$
An 4 de Psammétique Memphis
${ }_{\mathrm{I}}{ }^{\mathrm{er}}$ ou d'Apriès $=c .66 \mathrm{I}$ ou 586
Vente de fonctions
An 21 de Psammétique $\mathrm{I}^{\mathrm{er}}=c .644$
Servitude volontaire An 4 de Psammétique Thèbes? $\mathrm{II}=c .592$
Servitude volontaire An 3 d'Amasis $=c .568$ El-Hibeh
Vente d'une vache
Vente de terrain
Adoption à titre onéreux
Vente de fonctions
Cession de services
Cession de services
Vente d'un terrain à bâtir

An 8 d'Amasis $=c .563$
An 29 d'Amasis $=c .542 \quad$ Coptos
An 32 d'Amasis $=c .539 \quad$ Thèbes
An 8 de Cambyse $=c .518 \quad$ Assiout
An 5 de Darius $\mathrm{I}^{\text {er }}=c .517$ Thèbes An 6 de Darius $\mathrm{I}^{\text {er }}=c .516$ Thèbes An 12 de Darius $\mathrm{I}^{\text {er }}=\quad$ Thèbes c. 510

| Exemples | Objet du contrat | Date | Provenance |
| :---: | :---: | :---: | :---: |
| -P. Michigan 3525a | Vente d'une génisse | An 20 de Darius I $^{\text {er }}=$ c. 502 | Thèbes ou Edfou |
| - P. Loeb 68 | Vente de terrain | An 20 de Darius r $^{\text {er }}=$ c. 502 | Gebelêin? |
| - P. Loeb 44 | Vente d'un ânon | An $\times$ de Darius ${ }^{\text {er }}=$ c.522-486 | Gebelêin |
| -P. Michigan 3525b | Vente d'une vache | An 24 de Darius I $^{\text {er }}=$ c. 498 | Thèbes ou Edfou |
| - P. Louvre E. 9292 | Vente d' ${ }^{\frac{1}{2} \text { vache }}$ | An 29 de Darius I $^{\text {er }}=$ c. 493 | Thèbes |
| - P. Louvre E. 9294 | Vente d'une part de revenus | An 31 de Darius $\mathrm{I}^{\text {er }}=$ c. 49 I | Thèbes |
| -P. Lille 26 | Vente d'un terrain à bâtir | $\begin{aligned} & \text { An } \mathrm{x} \text { d'Achoris }=c .393^{-} \\ & 380 \end{aligned}$ | Medinet Ghoran |
| -P. Lille 27 | Vente d'une maison | An x d'Artaxerxès $\operatorname{III}=$ c.341-338 | Medinet Ghoran |
| - P. IFAO 901 | Vente d'une vache | An 12 ( 15 ?) de Nectanébo $\mathrm{II}=c \cdot 349 / 7 \text { ou } 346 / 4$ | Edfou |
| -P. IFAO 902 | Vente d'une vache | An i6 de Nectanébo $\mathrm{II}=$ c.345/3 | Edfou |

(3) 'Tu m’as contentéle cœur avec l'argent de . . . . . Tu m’as donnél'argent (équivalent à) son (prix). Fe l'ai reçu de ta main. Mon cæur en est satisfait.'
-P. Berlin $1357 \mathrm{I} \quad$ Vente d'une vache An 5 de Psammétique II $=$ Eléphantine

- P. Berlin i583i + Vente de vaches $\quad$ An i4 de Nectanébo ${ }^{\text {er }}=\quad$ Edfou $15832+\mathrm{P}$. Caire
50160
(b) Remise de la chose vendue
(1) Formules avec 'fe t'ai donné'
'Je te l'ai donné aujourd'hui en son échange':
P. Leyde Cession de services

An 2I de Pi(ankh)i
Thèbes
F.1942/5.15
-P. Vatican 10574
Cession de services
An 22 de $\operatorname{Pi}($ ankh $) i$
Thèbes
$=2038 \mathrm{c}$
-P. Louvre E.3228e Cession de services

- P. Louvre E.3228d

Cession de services

- P. Louvre E. 3168

Vente de fil à tisser
An io de Chabaka Thèbes
An 3 de Taharqa
Thèbes
-P. Vienne D.ir2002 Vente d'une vache An 25 de Psammétique $I^{\text {er }}$ Thèbes
-P. Turin 2118 Vente de terrain An 45 Psammétique ier Thèbes
-P. Turin 2120 Vente de terrain An 45 Psammétique $I^{\text {er }}$ Thèbes
-P. Turin 2125 Donation d'une part An 16 de Darius i ${ }^{\text {er }}$ Thèbes de maison

| Exemples | Objet du contrat | Date | Provenance |
| :--- | :--- | :--- | :--- |

'Je t'ai donné cette dite place':
-P. Louvre E. 7128 Vente de terrain An 12 de Darius if ${ }^{\text {er }}$ Thèbes à bâtir
'Je t'ai donné sa moitié aujourd'hui':
-P. Louvre E. 9292 Vente d' $\frac{1}{2}$ vache An 29 de Darius ${ }^{\text {er }}{ }^{2}$ Thèbes
(2) Formules avec 'il (elle) est' ou 'ils (elles) sont à toi'
-Stèle Louvre Vente de tombe An 8 de Psammétique $\mathrm{I}^{\text {er }}$
C.ioi
-Stèle Florence $\quad$ Vente de tombe
$1659(2507)$
-P. Rylands i Vente de fonction
An 4 de Psammétique ${ }^{\text {er }}$ Memphis
ou d'Apriès
An 21 de Psammétique $I^{\text {er }}$ El-Hibeh
'C'est votre emplacement':
-P. Rylands 2 Donation de terrain
An 21 de Psammétique $I^{\text {er }}$ El-Hibeh
'Je suis ton serviteur' ('ta servante'):

- Coupe Louvre Servitude volontaire
E. 706
-P. Rylands 3
-P. Rylands 5
-P. Rylands 6
Servitude volontaire
Servitude volontaire
Servitude volontaire
An 4 de Psammétique II
Thèbes?
An 2 d'Amasis
An 2 d'Amasis
An 3 d'Amasis
El-Hibeh
El-Hibeh
El-Hibeh
'Ils sont à toi, tes champs':
-P. BM ioil7 Vente de terrain
An 29 d'Amasis
Coptos
'Je suis ton fils':
- P. Louvre E. 7832

Adoption à titre
An 32 d'Amasis Thèbes onéreux ('vente' de soi-même comme fils)
'Elle est à toi, c'est ton ânesse':

- P. Loeb 43

Renonciation au droit de propriété

An 2? de Psammétique III Gebelêin

## Autres exemples:

- P. Loeb 41
-P. Caire 50059
-P. Turin 2122
-P. Michigan 3525 a
- P. Loeb 44
-P . Berl. $1583 \mathrm{I}+$
$15832+$ P. Caire
50160
-P. Lille 27
Vente d'une maison An x d'Artaxerxès (?)
Med. Ghoran

| Exemples | Objet du contrat | Date | Provenance |
| :--- | :--- | :--- | :--- |

(3) Formules avec 'fe t'ai donné . . . Il(s) (ou elle(s)) sont à toi'
'Je te l'ai donnée, elle est à toi, c'est ta vache':
-P. Berlin i357I Vente d'une vache An 5 de Psammétique II
-P. Rylands $8 \quad$ Vente d'une vache An 8 d'Amasis
Eléphantine
'Je te donne (mon) serviteur. Il est à toi, ton serviteur ici présent':
-P. Bibl. Nat. 223 Cession de services An 6 de Darius i ${ }^{\text {er }}$ Thèbes
Autres exemples:
-P. Turin 2123
Donation de la
moitié d'un terrain à bâtir
-P. Loeb 68 Vente de terrain An 20 de Darius $\mathrm{I}^{\text {er }}$ Gebelêin?
-P. Michigan 3525b Vente d'une vache
An 24 de Darius ${ }^{\text {er }}$
Thèbes ou
Edfou
—P. Louvre E. 9294 Vente d'une part de
An 3I de Darius ${ }^{\text {er }}$
Thèbes
-P. Turin 2128
-P. Lille 26
-P. IFAO 90I
revenus
Echange d'une vache
Vente d'un terrain à bâtir

- P. IFAO 902

Vente d'une vache
An 35 de Darius $\mathrm{I}^{\text {er }}$
Thèbes
An x d'Achoris
Med. Ghoran
An 12 (15?) de Nectanébo Edfou II
(4) Formule avec 'fe suis éloigné de toi':
—P. Rylands 4 Cession de services
(c) Transfert de propriété
'Aucun homme au monde [que ce soit père, mère, frère, sœur, fils, fille,] pas plus que moi-même également, ne pourra se considérer comme son propriétaire, excepté toi, [à partir d'aujourd'hui, dorénavant et à jamais].'
-P. Rylands I Vente de fonction An 21 de Psammétique $I^{\text {er }}$ El-Hibeh
-P. Rylands 2 Donation d'un An 2I de Psammétique ${ }^{\text {er }}$ El-Hibeh

- Rylands 2 emplacement
- Coupe Louvre
E. 706
-P. Berlin 13571
-P. Rylands 3
-P. Rylands 8
-P. BM ioil 7
-P. Louvre E. 7832
- P. Loeb 41

Servitude volontaire
Vente d'une vache An 5 de Psammétique II
Servitude volontaire
Vente d'une vache
An 2 d'Amasis
Eléphantine
El-Hibeh
Vente de terrain
Adoption à titre onéreux
Copropriété d'une
An 2 de Psammétique III
El-Hibeh
Coptos
Thèbes vache

| Exemples | Objet du contrat | Date | Provenance |
| :---: | :---: | :---: | :---: |
| -P. Loeb 43 | Vente d'une ânesse | An 2 de Psammétique III | Gebelêin |
| -P. Bibl. Nat. 223 | Cession de services | An 6 de Darius i ${ }^{\text {er }}$ | Thèbes |
| -P. Turin 2123 | Donation de la moitié d'un terrain à bâtir | An io de Darius i ${ }^{\text {er }}$ | Thèbes |
| -P. Louvre E.7128 | Vente de terrain à bâtir | An 12 de Darius $\mathrm{I}^{\text {er }}$ | Thèbes |
| - P. Loeb 68 | Vente de terrain | An 20 de Darius $\mathrm{I}^{\text {er }}$ | Gebelêin |
| -P. Michigan 3525a | Vente d'une génisse | An 20 de Darius $\mathrm{I}^{\text {er }}$ | Thèbes ou Edfou |
| -P. Michigan 3525b | Vente d'une vache | An 24 de Darius $\mathrm{I}^{\text {er }}$ | Thèbes ou Edfou |
| -P. Louvre E. 9292 | Vente d', ${ }^{1}$ vache | An 29 de Darius $\mathrm{I}^{\text {er }}$ | Thèbes |
| $\text { - P. Loeb } 44$ | Vente d'un ânon | An $x$ de Darius $\mathrm{I}^{\text {er }}$ | Gebelêin |
| - P. Louvre E. 9294 | Vente d'une part de revenus | An 3I de Darius i ${ }^{\text {er }}$ | Thèbes |
| -P . Berlin $1583 \mathrm{I}+$ $15832+$ P. Caire 50160 | Vente de vaches | An 14 de Nectanébo ${ }^{\text {er }}$ | Edfou |
| -P. IFAO 901 | Vente d'une vache | An 12 (15?) de Nectanébo II | Edfou |
| -P. IFAO 902 | Vente d'une vache | An 16 de Nectanébo II | Edfou |
| -P. Vienne ioisi | Echange de revenus | An 5 d'Artaxerxès ${ }^{\text {er }}$ | Eléphantine |

Plusieurs contrats de vente (et de partage réalisé ou non sous forme de vente) ne comportent pas cette clause dont l'absence est tout aussi révélatrice, dans certains cas, que la présence.

| Exemples | Date | Provenance |
| :--- | :--- | :--- |
| Cessions de services: |  |  |
| -P. Leyde F.1942/5.15 | $c .727$ | Thèbes |
| -P. Louvre E.3228e | $c .707$ | Thèbes |
| -P. Louvre E.3228d | $c .688$ | Thèbes |
| -P. Vatican 10574 (=2038c) | $c .726$ | Thèbes |
| -P. Turin 2122 | $c .517$ | Thèbes |
| Ventes de terrains: |  |  |
| -P. Turin 2118 | $c .635$ | Thèbes |
| -P. Turin 2120 | $c .620$ | Thèbes |
| -P. Lille 26 | $c .393^{-3} 80$ | Med. Ghoran |
| Vente d'une maison: |  |  |
| -P. Lille 27 | $c .341^{1-338}$ | Med. Ghoran |
| Vente d'une vache: |  |  |
| -P. Vienne D.i2002 | $c .640$ | Thèbes |


| Exemples | Date | Provenance |
| :--- | :---: | :--- |
| Echange d'une vache contre une autre vache: |  |  |
| -P. Turin 2128 | $c .487$ | Thèbes |
| Partages: |  |  |
| -P. Turin 2125 (maison) | $c .506$ | Thèbes |
| -P. Turin 2127 (revenus) | $c .491$ | Thèbes |
| -P. Louvre E.2430 (héritage) | $c .333$ | Thèbes |
| Société: |  |  |
| -P. Loeb 46 et 47 | $c .487-8$ | Gebelêin |
| (copropriété d'un troupeau d'oies et partage des pertes et profits). |  |  |

## II. CLAUSES DE GARANTIE

(a) La garantie personnelle
(1) Formule de compensation pécuniaire.
'Si je me récuse . . . je te donnerai alors x deben d'argent':
-P . Vatican $10574=2038 \mathrm{c}$
c. 726
Thèbes
(2) Promesse, sous serment, de ne pas renier le document, autrement dit d'honorer la convention. 'Aussi vrai qu'Amon vit et que le roi vit, . . . Je ne pourrai dire "faux" contre aucune parole ci-dessus. Je n'en renierai aucune parole' (avec des variantes plus ou moins développées selon les cas):
—P. Louvre E.3228d
c. 688 Thèbes
-P. Vienne D.i 2002
-P. Turin 2118
-P. Turin 2120

- Coupe Louvre E. 706
-P. Rylands 1
-P. Rylands 2
c. 640 Thèbes
c.635 Thèbes
c. 620 Thèbes
$c .592$ Thèbes?
c. 644 El-Hibeh
c. 644 El-Hibeh
(3) Formule d'engagement, sans serment, par laquelle le vendeur renonce à ses droits sur la chose vendue.
'Je n'ai aucune parole (de contestation) au monde à te dire à son (ou leur) sujet':
-P. Louvre E. 3 I 68
-P. BM ioiif
-P. Bibl. Nat. 223
-P. Turin 2123
-P. Louvre E.7128
- P. Louvre E. 9294
c. 675
c. 542 Coptos
$c .516$ Thèbes
$c .512$ Thèbes
c.5IO Thèbes
c.491 Thèbes
'Je n'ai (aucun) jugement, (aucun) serment, aucune parole au monde (à faire valoir) contre toi, aujourd'hui et dorénavant':
- P. Louvre E. 2430 c. 333 Thèbes

Dans P. Vienne ioifi (c.459, Eléphantine), le vendeur donne conjointement sa garantie personnelle et celle de ses enfants: 'Aucun enfant à moi ne pourra présenter un document(?) ancien ou un document nouveau contre toi, pas plus que moi-même également, au nom des parts sus-mentionnées.'

## (b) La garantie du fait des ayants droits

Elle n'existe séparément que dans les contrats les plus anciens. Elle s'est rapidement confondue ensuite avec la clause de transfert de propriété (voir supra, p. 170).

## (1) Formule avec serment:

'Aussi vrai qu'Amon vit, que le roi vit et qu'il est en bonne santé [et qu'Amon lui accorde la victoire], je n'ai pas de fils, fille, frère, sœur (ou) tout (autre) homme au monde entier qui pourraient faire une contestation à son sujet. [Quant à celui qui fera une contestation, sa déclaration ne sera entendue dans aucun Bureau des Archives, dorénavant].'
-P. Leyde F.i942/5.15 (c.727, Thèbes); - P. Vatican $10574=2038 \mathrm{c}$ (c.726, Thèbes); - P. Louvre E.3228e (c.707, Thèbes); - P. Louvre E. 3168 (c.675, Thèbes); - P. Turin 2118 (c.635, Thèbes); - P. Turin 2120 (c.620, Thèbes).
(2) Formule sans serment:

La clause est la continuation de la formule de garantie contre l'action des tiers 'et (il en sera de même pour mes) enfants, (mes) frères, jusqu'à (te dédommager en) tout argent, tout grain ou toute (autre) chose au monde entier qui plairont à ton cœur . . .'

- P. Rylands I (c.644, El-Hibeh); -P. Turin 2122 ( $c .5$ I7, Thèbes).


## (3) Formule absorbée par la clause de transfert de propriété:

'Aucun homme au monde ne pourra - que ce soit (mes): père, mère, frère, sœur, fils, fille, pas plus que moi-même également - se considérer comme son propriétaire, excepté toi' (ex.: P. Berlin 13571); cette énumération est le plus souvent abrégée: 'Aucun homme au monde, pas plus que moi-même également, ne pourra exercer son autorité sur eux ( = être leur propriétaire), excepté toi [à partir d'aujourd'hui, dorénavant et à jamais]' (ex.: P. BM iolif).

Les scribes se sont sans doute aperçus assez vite que cette clause rendait superflue une clause supplémentaire de garantie contre l'action en revendication des ayants droits (qui faisait au fond double emploi), et ont supprimé cette dernière.

## (c) Garantie contre l'action des tiers

Trois types de formules ont été employés, simultanémént ou successivement, nous les appellerons respectivement:

- clause de compensation (ou de dédommagement), - clause de libération, - clause d'éloignement.


## (1) La formule compensatoire

C'est la plus primitive: le vendeur n'engage pas sa responsabilité personnelle en cas d'éviction par un tiers; c'est le tiers opposant qui devra fournir une compensation pécuniaire.
'Celui qui viendrait contre toi (vous) à mon (son) sujet, disant:' ce n'est pas ta servante' ('votre emplacement'), te (vous) donnera tout argent, tout grain qui plairont à ton (vos) cœur(s).' (exx. Coupe Louvre E.706, P. Rylands 2.)
(2) La formule de libération
(a) employée seule:

Je les affranchirai (ou purgerai: wrb) de tout titre judiciaire, de toute contestation au monde. A toi appartient tout écrit par lequel je suis dans mon droit ( $j w=j m 3 r \cdot k$ ) à son (leur) sujet.' (exx. P. Lille 26, P. Lille 27.)
(b) le plus souvent elle est combinée avec une clause de dédommagement:
'Si quelqu'un se présentait chez toi à son sujet . . . en réclamant la redevance ( $\check{s} p$ ) qui lui revient, je devrai alors me libérer ( $n\ulcorner$ ) en ce qui te concerne. . . Si je me récuse vis-à-vis de toi (moi-même ou ma fille) . . ., je te donnerai (alors) $x$ deben d'argent' ( $=\mathrm{P}$. Vatican $10574=2038 \mathrm{c}$ ) .
'L'homme qui viendrait contre toi au sujet de ces trois parts susmentionnées, je l'obligerai à se désister ( $n r$ ) vis-à-vis de toi en ce qui concerne tout titre au monde . . ., jusqu'à te dédommager en tout argent, tout grain, etc.' ( $=\mathrm{P}$. Rylands I$)$.
N.B. L'intervention du vendeur est d'abord directe (P. Vatican $10574=2038$ c), puis indirecte ( P . Rylands i).
' S 'il lui arrive un endommagent, je vais me réhabiliter (blanchir, rendre net, $n$ r) vis-à-vis de toi, sinon je te donnerai, tête pour tête, une autre vache, etc.' (exx. P. Vienne D.i2002, P. Rylands 8).
(3) La formule d'éloignement
(a) employée seule:
'Celui qui viendra contre toi, en disant: "Ce n'est pas ton ânesse", je vais l'éloigner de toi' (ex. P. Loeb 43).
(b) combinée avec une clause de dédommagement:
'Celui qui viendrait contre toi à son sujet afin de te la (le ou les) reprendre, en disant: "elle (il, elles ou ils) n'est (ne sont) pas à toi'', en mon nom ou au nom de tout homme au monde, je l'éloignerai de toi en ce qui la (le ou les) concerne. Si je ne l'éloigne pas de toi en ce qui la (le ou les) concerne, je te donnerai une autre vache (ou x deben d'argent . . .), etc.' (exx. P. Berlin 13571, P. Turin 2122, P. Michigan 3525b, P. Turin 2128 , P. Loeb 44).
(c) combinée avec une clause de libération:
'Celui qui viendra contre toi à son (leur) sujet, en mon nom (ou) au nom de tout homme au monde, je vais l'éloigner de toi. Je vais le (la, les) affranchir (ou purger, wrb) pour toi de tout écrit, de tout titre, de toute parole au monde.' (exx. P. BM 10117, P. Bibl. Nat. 223, P. Turin 2123, P. Louvre E.7128).
(d) combinée à la fois avec la clause de dédommagement et la clause de libération:
'Celui qui viendra. . ., je vais l'éloigner de toi. Si je ne l'éloigne pas de toi, je te donnerai 20 (deben) d'argent de la Trésorerie de Ptah, en métal fondu . . . Je t'ai donné le document que m'a établi N . . . Je vais l'affranchir pour toi de de tout titre judiciaire, de toute parole au monde' (P. Vienne 10151).
'Celui qui viendra . . ., je l'éloignerai de toi. Si je ne l'éloigne pas de toi, je te donnerai $x$ deben . . . il(s) est (sont) garanti(s) pour toi (contre moi), à partir d'aujourd'hui, dorénavant et à jamais.' (exx. P. Loeb 68, P. Louvre E.9292: dans ces deux contrats, $n$ r est employé au lieu de wrb).
(e) renforcée par une clause de contrainte (appel à la force publique?):
'Celui qui viendra contre toi à leur sujet en mon nom (ou) au nom de tout homme au monde, je vais l'éloigner de toi. Si je ne l'éloigne pas, je l'éloignerai (par la force).' (exx. P. Louvre E.9294, P. Louvre E.2430, P. Berlin 1583 I $+15832+$ P. Caire 50160 , P. IFAO 901 ).

## Appendice

Le vendeur entoure en outre l'acheteur de garanties formelles (clauses relatives à la preuve):

- La présence des témoins à l'acte est notifiée sur le document. Dans les textes les plus anciens, chaque témoin reproduit dans son attestation les termes essentiels du contrat. Puis, les témoins apposent simplement leur signature à la suite ou au dos de l'acte.
- L'acte est remis aux mains de l'acheteur.
- Sont également transférés à l'acheteur les titres de propriété et les pièces de procédure:
'Je t'ai donné le document que m'a fait X' (exx. P. Vienne ioi5i, P. Lille 26).
'Sont à toi mes titres judiciares en tout lieu où ils pourraient se trouver' (ex. P. Louvre E.7128).

Formule corollaire: 'Sans faire état d'aucun titre judiciaire au monde contre toi.' (exx. P. Turin 2128, P. Loeb 44, P. Vienne io151).

- Enfin, on ne pourra obliger l'acheteur à produire l'acte de vente qui lui sert de titre de propriété ailleurs que dans la ville où cette preuve se trouve. Autrement dit, en cas de litige, c'est le tribunal du domicile de l'acheteur qui est compétent:
'Je ne pourrai dire: "produis un témoignage" que dans la ville où tu te trouves' (Coupe Louvre E.706).
'L'homme qui viendrait contre toi avec l'intention de t'amener auprès des juges au nom de ces parts (cet emplacement) susmentionné(es), ne pourra dire: "produis un témoignage écrit" que dans la ville où ce témoignage se trouve' (exx. P. Rylands i et P. Rylands 2).


## Conclusion

Soulignons pour conclure que, de l'Ancien Empire à la conquête perse, le droit contractuel a franchi trois remarquables degrés:
(i) de l'oralité à la transcription écrite des paroles échangées entre les parties (de l'Ancien Empire à la $188^{8}$ dynastie);
(2) du contrat dialogué à la déclaration unilatérale du débiteur (ou du vendeur), entre la $23^{\mathrm{e}}$ et la $25^{\mathrm{e}}$ dynastie;
(3) de la matérialité des prestations réciproques à la conceptualisation des droits acquis en vertu du contrat, entre la $25^{\mathrm{e}}$ dynastie et l'an 8 (ou 4) de Psammétique $\mathrm{I}^{\mathrm{er}}$.

Cette évolution dont le rythme s'accélère dans le courant du $\mathrm{I}^{\text {er }}$ millénaire av. J-C., rend compte des énormes progrès réalisés dans le domaine juridique, au long de leur histoire, par les anciens Egyptiens.

# THE EARLIEST DATED MONUMENT OF AMASIS AND THE END OF THE REIGN OF APRIES 

By ANTHONY LEAHY


#### Abstract

Publication of a donation stela BM 952 (year one of Amasis) followed by analysis of the sources for the civil war with Apries (P. BM 10113 , Elephantine stela, cuneiform tablet BM 33041, Herodotus, Diodorus Siculus). P. BM ioil 3 and BM 952 together show that Apries was still recognized at Thebes in October, 570, over eight months after the first monument dated by Amasis. It is argued that Apries was in Egypt for the whole of that period and only went abroad after his defeat at ' ${ }^{\prime} m ; w /$ Momemphis. His fortified palace at Memphis may have been his base, and it is suggested that Apries had more native support than hitherto supposed. The effectiveness of Amasis' subsequent propaganda, reflected in Herodotus, has misled historians in this respect.


Among the less prepossessing treasures of the British Museum is a stela (BM 952), ${ }^{1}$ dated to year 1 of Amasis (pl. XXV and fig. i). It is of limestone and measures $53.8 \times 30 \times 8 \mathrm{~cm}$. Although no information on its provenance is available, its dedication to Horus, 'lord of hwt-nsw', suggests that it comes from el-Kôm el-Ahmar el-Sawâris/Sharuna, a site on the east bank of the Nile, some twenty kilometres south of el-Hibeh, and currently being studied by an expedition from the University of Tübingen. ${ }^{2}$ The offering scene is unexceptional. The rounded top of the stela is echoed by an arched, elongated $p t$ hieroglyph, from the tips of which framing lines drop vertically to the bottom of the text section. Beneath the sky-sign is a conventional winged disc. Below this, the king, who faces left and is described as 'The Good God Khnemibre, living for ever', presents a field symbol to Horus, 'Lord of $h w t-n s w '$, behind whom stands Isis, 'Lady of hwt-nsw'. The king wears a wig encircled by a fillet and falling almost vertically onto, or behind, the shoulder. Traces of the uraeus can just be seen on the forehead. The cartouche is slightly damaged, as is the king's head, and the nomen in line two of the main text, but similar surface pitting is observable elsewhere on the stela, in quite innocuous places, and is certainly not deliberate. The text of six and a half lines is crudely incised, and somewhat obscured by a repaired diagonal break across the lower half. A blank section at the bottom of the stela would have allowed it to be inserted in the ground.

[^109]

Fig. i. BM 952.

## Translation

(i) 'Year one, second month of Inundation, day one, under the Majesty of the Horus $s[m n] m s^{\prime} t$, the Two Ladies $s 3$ Nt $s p d t ; w y$, Horus of Gold (2) stp ntrw, King of Upper and Lower Egypt $\underline{H} n m-i b-R^{\prime}$, Son of Re ['Thms ss $N t$ ], living for ever, beloved of Horus, lord of Hutnesu. On this good day, (3) donation ${ }^{\text {a }}$ of a field of ten arourae of dry land ${ }^{\mathrm{b}}$ which ${ }^{\mathrm{c}}$ is in the agricultural district of $\check{S} k k,{ }^{\text {d }}$ to maintain a lamp e (4) before Horus, lord of Hutnesu, under the authority of the doorkeeper of Horus, lord of Hutnesu, Djedthotefankh, ${ }^{\mathrm{f}}$ son of (5) Pediese. ${ }^{g}$ Its southern limit ${ }^{h}$ the dry land, its northern the field of $\ldots$ (?), ${ }^{i}$ its western (6) . . . [its eastern the] dry land which is near ${ }^{j}$ the ' $r$-tree, ${ }^{k}$ (7) [it being established for ever $]^{1}$ and ever before Horus, lord of Hutnesu.'

## Notes

(a) For $t 3$ st $3 t$ 3ht, see $W b$. IV, 356, iI.
(b) On šz-land, see D. Meeks, Le grand texte des donations au temple d'Edfou (Cairo, 1972), 83 (96).
(c) For the writing of nty, see Leahy, $R d E 34$ (1982-3), 84, s).
(d) For sht, see Meeks, op. cit. 147. $t 3$ sht $\check{S} k k$ is also mentioned in P. Rylands IX, i6/ I I (F. Ll. Griffith, Catalogue of the Demotic Papyri in the fohn Rylands Library, III (Manchester, 1909), 424, overlooked by me, GM 49 (1981), 44 n . io) as a village near el-Hibeh. Although only the determinative is used here, the most likely etymology of the toponym is $\breve{S}_{j-k(s) k(3) \text {, 'Field of kaka-plants'. } k k \text { has often been identified as Ricinus }}^{\text {a }}$ communis, L. Rizinicus, although R. Germer, Untersuchungen über Arzneimittelpflanzen im alten Aggypten (Hamburg, 1979), 331-5, has expressed reservations. The equation has recently been reasserted by D. Brent Sandy, CdE 62 (1987), 49-52. Meeks, ALex i, 77.452 I and III, 79.32 I 6 , has suggested that it can also have the more general sense of 'buissons' or 'broussailles', but the examples cited do not exclude a consistently specific usage. It seems to be a feature of the Heracleopolitan region, with strong religious associations, since Osiris, Nephthys, and Bastet are all called hry-ib ist-kk: P. Rylands IX, 22/7 = Griffith, Catalogue of the Demotic Papyri, i11, 425; G. Daressy, ASAE 2 (1921), 141, no. 4; Daressy, Textes et dessins magiques (Cairo, 1903), 37. It is also reflected in the epithet of a goddess, ...kk nbt pt, on a block from Heracleopolis (J. Lopez, OrAnt 13 (1974), 306) and the local appellation of Osiris, hw w kk, A. Forgeau, BIFAO 84 (1984), I7I n. i. The plant called $q q$, attested only in two toponyms $P_{3-q q}$ (R. Faulkner, Wilbour Papyrus, iv (London, 1952), 90) and Tз-nt-šqq (ibid. 89) from the same general area, may be the same as $k k$, in which case the entries in $G$. Charpentier, Recueil de materiaux épigraphiques relatifs à la botanique de l'Egypte antique (Paris, 1981), nos. 1239 and II79 should be conflated. The determinative used in $P ;-q q$ is \& , not , customary with $k k$, but the scribes of P. Wilbour were not consistent in their usage in this respect, e.g. ' $r$ ( n . k below), which normally has $\ell$, is once determined by (Faulkner, op. cit. 56). Since the castor plant is, in any case, the size of a small tree, there is no difficulty (Brent Sandy, CdE 62, 49, 51). W. Helck, Die Beziehungen Agyptens zu Vorderasien (2nd edn., Wiesbaden, 1971), 522, no. 238, connects $q q$ with Rizinicus, though not with $k k$. On the convergence of $k$ and $q$, see C. Evrard-Derriks and J. Quaegebeur, CdE 54 (1979), 47 n. 5; H. De Meulenaere and J. Yoyotte, BIFAO 83 (i983), i 15 ; M. Chauveau, $R d E 37$ (1986), 39 n. 48; in words of foreign origin, M. Görg, $\mathscr{F} E A 63$ (1977), 178-80.
(e) For the sense of $\underline{h} r \boldsymbol{h} b s$, see Leahy, $G M 49$ (1981), 37-46, esp. 44 n. i i. To Meeks' list of donations relating to lamps in State and Temple Economy, 650 n. 204, should be added Moscow, Pushkin I. I.a.5645, published by S. Hodjash and O. Berlev, The Egyptian Reliefs and Stelae in the Pushkin Museum of Fine Arts, Moscow (Leningrad, 1982), 170, 173 (nature of donation misunderstood by editors).
(f) The writing of the name is notable for the use of $\otimes={ }^{\circ} n h$; cf. A. Fakhry, Bahria Oasis, I (Cairo, 1942), 49.
(g) Just enough is visible of the two ends of $\_$to make this reading, rather than Pi-n-sst, certain.
(h) As a description of the limits of the donation on stelae, rsy $n$-imw is a rare, late alternative to the usual $p ; y . f \mid p ; y . w r s y$, for which see R. el-Sayed, Documents relatifs à Sais (Cairo, 1975), $66(\mathrm{k})$ and Leahy, $R d E 34(1982-3), 88 \mathrm{n} . \mathrm{n}$. It is found in demotic papyri from about the same date onwards, e.g. P. Louvre E. 10935, lines 9-10 (M. Malinine, Choix de textes juridiques, I (Paris, 1953), 125-31; i1 (Cairo, 1983), 77, pls. xviii-xix.
(i) The identity of the bird and the reading of the name are problematic.
(j) For $h n w$ in the sense of 'neighbour', see $W b$. II, 494, 4; cf. Meeks, in Hommages à la memoire de Serge Sauneron, I (Cairo, 1979), 252 (62). The ${ }^{*}$ determinative is evidently borrowed from hnw, 'jubilation' (Wb. i1, 493).
(k) The ' $r$ tree was another distinctive feature of the Heracleopolitan area and closely associated with Osiris. This is probably reflected in the Wilbour papyrus toponym $p ;{ }^{\prime} g{ }^{3} n^{\prime} r$ (contra Vernus, RdE i9 (1967), i69, who takes ' $r$ as a word for 'goat'), and the epithet of a local form of Osiris, hnt ' $r$. It may also be incorporated in the name of the ancient shrine $N^{\top} r t$. For discussion of these terms, see now Valerie Billingham, 'The Geography of the Nome of Heracleopolis Magna from the Eighteenth to the Twenty-fifth Dynasty' (University of Birmingham Ph.D. thesis, 1987). The identity of the tree is not certain, cf. Germer, Arzneimittelpflanzen, 259 and Charpentier, Recueil, nos. 255-6, 258.
(1) The lacuna offers space for no more than iw [.fmn $r n h]$ h $\underline{d} t$, for which see Leahy, $R d E$ 34 (1982-3), 83 n. o).

## Commentary

The import of the stela is clear. It is a characteristically concise record of a donation ${ }^{3}$ of ten arourae of dry land in the district of Shakek to endow a lamp in the temple of Horus at Hutnesu. The administration of the gift is placed in the care of a temple official, and its location is described in terms of the adjoining plots of land. The provenance of the stela makes it one of the more southerly of such records in existence. ${ }^{4}$

[^110]
## The chronology of year one

Apart from its topographical information, the great interest of this stela lies in its date. It is one of eleven donation stelae known from the time of Amasis, ${ }^{5}$ of which three, perhaps four, date to year 1 . Of the other three, Berlin 14998 (probably from the western Delta) dates to III prt and Louvre C. 298 (from Pharbaithos) to IV šmw, I. Meeks lists the remaining stela, in a magazine at Karnak, as of 'An I(?) d'Amasis'. ${ }^{6}$ If the reading were certain, and the stela definitely Theban, it would be a valuable addition to the documentation, but a precise date within the year is apparently not given, and as the donation recorded is to Isis of Buto it may not be local at all. The only other monument to date to year I (II šmw), the Elephantine stela of Amasis (see below), is retrospective. The earliest papyri from his reign date to year 2 (see n. 36 below). BM 952 is thus by some five months the earliest record of Amasis. ${ }^{7}$

The stela is particularly valuable because it allows the accession of Amasis to be ascertained with an unusual degree of precision. This has been discussed recently by Spalinger, ${ }^{8}$ but is worth reviewing briefly. Gardiner showed long ago that, in the Saite period, 'year I' designated whatever was left of the civil year from the day of accession, so that 'year 2' began with the following New Year's Day. ${ }^{9}$ 'There would be no advantage for Amasis in deviating from this, so it may be assumed that he followed contemporary dynastic practice. On this assumption, the fact that II sht i falls in 'year i' means that Amasis must have claimed the throne in the first month of the civil year, and that his first regnal year occupied almost the whole of that year. It is now clear that Amasis' reign commenced in $570 \mathrm{BC} .{ }^{10}$ On the basis of Parker's calculations, ${ }^{11}$ I 3 ht i fell on 13 January 570 , so that the new king counted from some point between that day and i2 February, when II 3 ht began. Thirteenth January will also have marked the beginning of Apries' twentieth and final year, from which there are only two dated texts. One is a hieroglyphic inscription from a Hermopolis, which lacks a month and day. ${ }^{12}$ The other is an abnormal hieratic papyrus from Thebes, P . BM ioil3 (pl. XXVI, i), recording a loan contract made in year 20, II šmw io of $p r-{ }^{\prime} 3 W 3 h-i b-R^{c} .{ }^{13}$ Since papyri of the period always use the nomen in date formulae,

[^111]the king must be Apries rather than Psammetichus I, despite the high date. ${ }^{14}$ The figures are clearly preserved, and the possibility of scribal error is eliminated by two subsequent references in the text to year 2 I , IV $3 h t$, as the date by which the loan must be repaid. From these sources the following sequence for the first year of Amasis' reign can be established:

570 BC
13 January
12 February
12 July-io August
ı October-8 November

19 October
9 December

> Year 20 of Apries begins (still recognized at a Hermopolis at an unspecified date in this year).
> Amasis recognized at Sharuna (II ;ht i). Reign begun within the preceding month.
> Amasis recognized by this date (III $p r t$ ) in at least one place in the western Delta (Berlin 14998).
> Battle described in first section of Elephantine stela (II šmw). Amasis installed at Sais before the conflict (see below).
> The last reference to Apries as king (P. BM ioiri3, from Thebes, dated to II šmw io).
> Amasis acknowledged by this date (IV šmw i) at Pharbaithos (Louvre C. 298).

The significance of the British Museum papyrus in this context has not hitherto been noticed. ${ }^{15}$ It shows that Apries was still recognized at Thebes over eight months after the earliest extant record of Amasis as king. It is especially surprising that the last trace of allegiance to Apries should be Theban because it has always been assumed, on the basis of Herodotus and the Elephantine stela, that Apries drew his support largely from Greek mercenaries based in the Delta. This point will be pursued below; here, it must suffice to note the implication that acceptance of Amasis was not as rapid or as universal as has sometimes been assumed, and that many months of uncertainty should be envisaged. The nature of the two British Museum texts is important. Both are local products, routine legal creations following the practice of the day and place which produced them. They reflect the contemporary political situation only incidentally. ${ }^{16}$

The inevitable incompleteness of the record hinders a more precise reconstruction of the sequence of events. A minor complication is that we do not know from what point Amasis began to date-from his acclamation by the army (Herodotus II, i62), or from a subsequent, more formal coronation. The latter is the more likely, and is certainly implied by the full titulary which the new king is accorded on BM 952. ${ }^{17}$ If the official stela of the Apis which Vercoutter has persuasively argued to have been

[^112]born in year 12 of Apries, and to have died in year 5 of Amasis, had survived, ${ }^{18}$ giving the detailed information preserved on other Saite Serapeum stelae, it would presumably preserve the retrospective, official view of the chronology of the transition, implying the end of Apries' reign on the day before Amasis began his first regnal year.

## The events of the civil war

For the course of the usurpation, ${ }^{19}$ as distinct from the chronology, we are dependent on a consideration of Herodotus II, 162-9, Diodorus Siculus I, 68, 2-5, the Elephantine stela of Amasis, and a fragment of a Babylonian royal text. According to Herodotus, ${ }^{20}$ the defeat of an Egyptian army sent against Cyrene by Apries led to a rebellion. When Apries dispatched one of his officials, ${ }^{21}$ Amasis, to bring the soldiers to heel, the latter was proclaimed king by the rebels, and joined them, Apries alienating more of his subjects by the mutilation of an unfortunate courtier who brought the bad news. Apries advanced from Sais with 30,000 Carians and Ionians against the oncoming Amasis. The battle which followed at Momemphis resulted in a victory for Amasis, the capture of Apries and, after an unspecified time, the death of the latter at the hands of the populace to whom he had been unwillingly surrendered by the new king. He was, however, granted burial in the dynastic cemetery in the precinct of Neith at Sais.

Diodorus Siculus' more succinct account, written some four hundred years after Herodotus, differs on only two salient points. It records that Apries was forced to flee for safety to his mercenaries before any fighting occurred, and that the battle took place near the village of Marea. The modicum of independence which Diodorus demonstrates suggests that he was not, in this case, relying solely on Herodotus for his information. ${ }^{22}$ Part of the difference-the omission of Momemphis, which reappears elsewhere ( $\mathrm{I}, 66$, 12 ) as the place where Psammetichus I, with the help of Greek mercenaries, defeated his rivals-may be the result of confusion in his sources, but Marea is a likely location for an encounter between a king based in Sais and an army returning from Cyrene, and deserves to be considered seriously rather than rejected as a later, inferior, text. ${ }^{23}$

The Elephantine stela is the one extant Egyptian source to describe any facets of

[^113]the civil war explicitly. Although the text, known only from this exemplar, is dedicated to local gods, Elephantine does not figure in the narrative. A frontier was a standard location for such monumental commemoration, and the extant copy must be one of a number, based on a text composed at the capital by royal command, then adapted to local religious requirements. ${ }^{24}$ It is self-evidently a partial, retrospective account from the victor's standpoint, which predictably makes no reference to the manner in which he became king, but begins its narrative with Amasis already installed at Sais. As a royal inscription in the Königsnovelle tradition, it subordinates even the detail it does give to the ritual response of Pharaoh challenged. ${ }^{25}$ These considerations must influence interpretation of the text, but do not require total scepticism. In particular, there is no justification for supposing that the dates given are not those of the events described. ${ }^{26}$ The extreme difficulties in recovering a full text from the very worn stone are reflected by the fact that Daressy's pioneering effort remains the only published copy of the whole inscription. ${ }^{27}$ Misreading of the dates on the stela has undermined most previous discussions, but Edel has now established the sense of a substantial part of the text and, most importantly, shown that the correct readings of the two dates on the stela are 'year I' and 'year 4' respectively (collated). ${ }^{28}$ It is unusual in recording two events which, although related, took place nearly two and a half years apart. The essence of the two sections is as follows:

Year one, II šmw: Amasis, in his palace at Sais, was informed that Apries, accompanied by boats filled with Greeks (h;w-nbw) ${ }^{29}$ had reached Sht-mfkst (Kom Abu Billu?). Amasis set forth and routed the opposition at 'Im;w (Kom el-Hisn). Nothing is said of the fate of Apries, but measures were taken against his earlier base.

Year four, III ;ht 8: an Asiatic (sttiz) invasion of Egypt by land and sea was defeated at an unspecified place, probably near the eastern frontier. Apries, who apparently accompanied the foreign force, did not survive and was honourably buried.

[^114]The second phase has been elucidated by Edel in the light of a tantalizing cuneiform tablet fragment (BM 33041). ${ }^{30}$ This is an unusual kind of royal text, exhibiting a sudden transition from prayer to campaign record. Although it has long been recognized as a record of an attack on Egypt in year 37 of Nebuchadnezzar (which corresponds to year 4 of Amasis), the full significance of the passage has been clarified by three recent advances in understanding. One is the recognition that the toponyms listed-Putuiaman, the far-off areas in the midst of the sea, and parts of Egypt-are regions from which the Egyptian king raised troops, and not part of Nebuchadnezzar's conquests. ${ }^{31}$ The second is the identification of one of them, Putuiaman, as Cyrene. ${ }^{32}$ The third is Edel's incontrovertible equation of the events described with those in the second section of the Elephantine stela. The tablet is thus a record of an attack on Egypt by Nebuchadnezzar in his year 37, to which Amasis responded by raising forces from Cyrene, the Mediterranean, and Egypt itself. As far as it is preserved, it makes no reference to the outcome or to the presence of Apries. It is the Elephantine stela, with descriptions of events in both year 1 and year 4 , that provides the link between the otherwise apparently unrelated Greek and Babylonian evidence.

There is no trace of an attack from the east in Herodotus or Diodorus Siculus. This is presumably the result of ignorance, ${ }^{33}$ and suggests that tradition regarded the events of year 1 as decisive. There can be no doubt that it is those crucial, initial stages which Herodotus and Diodorus record, although the Greek accounts of the usurpation are not easily reconciled with that of the stela. On one broad aspect of the conflict - that Amasis had native support whereas Apries relied on Greek mercenary troops - there is agreement, as there is on the treatment accorded to Apries after his death. This apparent harmony is deceptive, reflecting the success of Amasis' propaganda (see below), rather than mutually independent confirmation. On other

[^115]points, they are at variance. There is discrepancy between Herodotus and Diodorus on the location of the decisive battle, and between Herodotus and the stela on the direction of the opposing forces. ${ }^{34}$ According to Herodotus, Apries was at Sais when the rebels advanced, whereas the stela places Amasis at Sais with his opponent moving north towards him.

The simplest solution is as follows. The rebellious troops led by Amasis advanced on Sais from some point in the north-western Delta. There was an encounter early in 570 near the capital (Diodorus' Marea) which resulted in the seizure of Sais by Amasis, and the discomfiture and retreat of Apries. The former dated his reign from that point and was recognized as far south as Sharuna within a very short space of time. After a lengthy period of consolidation and preparation, Apries advanced from the direction of Memphis on Sais, was met en route by Amasis and defeated at 'Imiw, which can probably be identified with Herodotus' Momemphis. ${ }^{35}$ Apries again escaped and this time fled abroad, to return only in year 4. This leaves Herodotus misunderstanding the direction of the two forces in the second conflict. The alternative of supposing that the battles at 'Imsw and Momemphis are distinct requires two encounters in the same general area. This is not impossible, given the strategic importance of the Nile arm between Memphis and Sais, but is perhaps less likely.

There are too many imponderables to allow a definitive conclusion. It is possible, for example, that Apries was resident at Memphis at the outbreak of hostilities, so that Amasis was able to take Sais without a struggle, and that Herodotus made a false assumption. Any schema must, however, start with the primary, non-partisan texts BM 952 and P . BM IOII 3 rather than the conflicting secondary sources. Sharuna is unlikely to have dated by Amasis before an upset of some sort had occurred, while Apries would not still have been acknowledged at Thebes eight months later if he had been decisively defeated before then.

After the second battle of year i, Apries escaped and must have gone abroad, ultimately to Babylonian territory. Only Amasis is attested in Egypt between then and year 4, by several papyri from el-Hibeh in years 2 and 3, and by a Theban papyrus and a donation stela from Bubastis in year $3,{ }^{36}$ and it may be assumed that overt support for Apries evaporated with his flight in October/November 570. ${ }^{37}$ The new king took immediate measures to guard against a return. The identification of Putuiaman as Cyrene, and an ally by year 4, suggests that Herodotus' story (iI, i87) of Amasis' Cyrenean marriage belongs early in his reign, ${ }^{38}$ and was designed to

[^116]nullify a potentially hostile element on his western frontier. The removal of the Greek garrison from the eastern Delta (Herodotus II, I 54; Diodorus I, 67, 2) should be dated to the same period and seen in the same light. If an attack from that direction was likely, Amasis would not want to rely on soldiers who might well go over to their previous master. ${ }^{39}$ When it did come, in 567 , Amasis was ready.

## The nature and location of Apries' support

The continuing recognition of Apries, and at Thebes, so long after Sharuna had begun to date by Amasis, raises important questions about the whereabouts of Apries during that time, and the extent of his support. In his brief summary of the contents of the inscription, Edel identified an 'island' ( $\sqsubset=i w$, 'die Insel'), mentioned twice in the first section of the text, as Cyprus. This interpretation apparently goes back to a paper read in 1952, but never published, and lies behind Helck's assertion that in Cyprus, in Apries' reign, 'die ägyptische Flotte Stützpunkte gebildet hatte', ${ }^{40}$ and Vandersleyen's that at the date in question 'Chypre était la base principale de la flotte égyptienne'. ${ }^{41}$ Vandersleyen refers to Helck as his authority, and the latter is avowedly dependent on Edel's unpublished paper.

The first passage (cols. 2-3) reads $H^{\text {ee }}-i b-R^{c}$ hnt.n.f iw.f kbnwt mh.ti $m$ hisw-nbw $n$ $r h . t w \underline{d} r . s n$. Edel's recent translation, 'Der Apries-die Insel ( = Cypern) setzt für ihn Seeschiffe über gefüllt mit $\mathrm{H}_{3} \mathrm{w}-\mathrm{nbw}$ (= griechischen Söldnern), deren Zahl man nicht kennt', does not acknowledge the suffix after $i w$, read by other scholars, ${ }^{42}$ and confirmed by personal collation. Edel does not elaborate on his version but Helck's interpretation of the 1952 paper is that Apries had actually fled to Cyprus after an initial defeat and returned with reinforcements. The second passage (col. 13) reads rdit ḥm.f sn.tw iw ḥr wst nb, which Edel translates 'Dann liess Seine Majestät [i.e. Amasis] die Insel (= Cypern) auf jeder Seite einschliessen(?)'. The verb rendered 'einschliessen(?)' is $s n$ rather than $\check{s n}$, and alternative translations such as 'open up', or 'cut off' conform more closely to its recognized meanings, ${ }^{43}$ but it may be regarded as common ground that action against the source of support for Apries mentioned earlier in the text is described. Since Edel simply asserts that this was Cyprus, and since the consequences are by no means negligible, the background is worth some scrutiny.

The Egyptian name for Cyprus at the time of the Saite kings is not known, despite evidence for relatively intense contact of various kinds. The form used in the

[^117]Canopus decree of Ptolemy III ( $U r k$, II, I3 1, 9), ( $t ; m ; y(n) S(3) l m y n s$ in demotic, hieroglyphic probably $i w S(3) l m y n$, after the main city of the island, Salamis), may already have replaced the usual New Kingdom form, irs = Alashiya. ${ }^{44}$ If $i w . f$ is correct, the term cannot be an abbreviation of the fuller form, and must be intended to characterize, rather than designate, the place in question. If, with Edel and for the sake of argument, the suffix is omitted, it could be an abbreviation but in either case, it would be a curiously oblique reference to a place well known to Egyptians of the period. Furthermore, the term implies a closeness of association inappropriate for any relationship Apries is known to have had with Cyprus.

The patchy picture given by classical and biblical sources of the situation in the eastern Mediterranean in the early sixth century bC does not suggest that Cyprus was either a vassal or an ally of Apries. ${ }^{45}$ Herodotus is explicit in his assertion (II, i82) that Amasis was 'the first man to take Cyprus and compel it to pay tribute'. Despite palpable inaccuracy, ${ }^{46}$ this must surely exclude any earlier Egyptian king. Although Diodorus Siculus ( $\mathrm{I}, 68$, 1 ) records that Apries 'made a campaign with strong land and sea forces against Cyprus and Phoenicia . . . he also defeated the Phoenicians and Cyprians in a great sea-battle and returned to Egypt with much booty', he makes no mention of conquest being achieved. Indeed, he too notes that Amasis 'reduced the cities of Cyprus' ( $1,68,6$ ). Apries' campaigns are difficult to date. They have usually been placed at the beginning of his reign, before the fall of Jerusalem to the Babylonians in 586, but on no firm grounds. ${ }^{47}$ Since the bulk of Apries' reign falls after 586 , a respectable case can be made for dating them to his last years. ${ }^{48}$ Whatever their date, they would scarcely have been likely to assure him of willing Cypriot assistance in his subsequent troubles. It is possible, moreover, that intervention in areas regarded by Nebuchadnezzar as within his sphere of interest provoked a Babylonian attack on Egypt itself late in Apries' reign. The evidence is not conclusive, but a motley collection of texts preserves a tradition to that effect, and there is no reason to confuse the episode with the certain invasion in year 4 of Amasis. ${ }^{49}$ It is perfectly feasible that there were two separate Babylonian attacks within a short space of time, especially if Egypt were perceived to be internally weak.

The stela's statement that Apries approached from the direction of Memphis does not necessarily militate against Cyprus as his base. A fleet starting from the island might well, depending on intelligence reports, have preferred not to make a direct attack on Sais via the western branch of the Nile, but instead to enter Egypt by way

[^118]of the eastern. The forfeiture of surprise might be outweighed by the rallying of supporters (especially Greek mercenaries?), to Apries, and the aim might have been to secure Memphis before moving on Sais.

The identification of $i w$ as Cyprus is, however, doubly inconsistent with the situation in Egypt. First, Thebes is unlikely to have continued to acknowledge Apries if he had left the country. Secondly, it is impractical. At the end of the first section of the Elephantine stela, Amasis is said to act against the iw. Edel sees Amasis' conquest of Cyprus as retribution for the support it had afforded Apries. Although the classical sources do not date the event within Amasis' reign, the archaeological evidence from Cyprus has been used to argue for the earliest date possible. ${ }^{50}$ While some point in the first decade is likely, the Egyptian king's motive could equally well have been economic or strategic, and the archaeological evidence is not sensitive enough to distinguish between strong economic/cultural influence and political/military control. ${ }^{51}$ It is improbable in the extreme that one of Amasis' first acts as a still insecure victor was to blockade Cyprus, an enterprise of some moment. Indeed, it is doubtful whether he could have, since a substantial part of his potential navy was scattered or unreliable, having just fought for an opponent who had not been finally defeated and was presumably still at large. ${ }^{52}$ It would be essential, however, for him to seek to reduce a camp which had sheltered Apries in Egypt itself. This would also explain why the reference on the Elephantine stela is so unilluminating-Amasis would not be disposed to broadcast the fact that any part of Egypt had been against him.

An alternative to Cyprus is therefore desirable. It is well known that $i w$ has a wider range of meaning than 'island' in the narrow sense of land permanently surrounded by water. It can refer to high-lying areas of whatever kind and is, for that reason, often confused with $i 3 t$, 'mound, kom', in Late Period writings. ${ }^{53}$ It could appropriately describe an elevated or isolated base of Apries within Egypt. There are no compelling clues to the location of such a site. Apries' approach from the direction of Memphis, is compatible with a starting-point in Upper Egypt, the Eastern Delta, or even abroad, as noted above. The word $i w$ occurs in a number of Delta toponyms, such as $P_{3-i w-n-' I m n^{54}}$ and a Greek mercenary garrison like that at Tell Defenneh would provide a good defensive position, allowing reinforcement from abroad or escape from Egypt as necessary. It would, however, have ceded

[^119]Memphis and Upper Egypt to Amasis, and an eastern Delta stronghold might not have been enough to ensure continuing Theban recognition.

If BM 952 were evidence for universal acceptance of Amasis at least as far south as Sharuna, then Apries would have to have been based in Middle or Upper Egypt. However, a single stela cannot justify this assumption. The pattern of recognition may have been erratic, with pockets of support for both parties, and, in the part of Egypt in question, the Bahr Yussuf provides an alternative to the Nile as a transport and communications artery between Memphis and Upper Egypt. ${ }^{55}$

This allows another possibility, namely that Apries was at Memphis, where a remarkable fortified palace still stands high above the surrounding cultivation in the corner of a military enclosure. ${ }^{56}$ The palace has been ascribed to him on the basis of cartouches on columns in situ, and there is no reason to suppose that it was begun before his reign. A recent survey has confirmed that the height of the palace mound represents a single phase of artificial construction, ${ }^{57}$ rather than centuries of occupation debris, as has sometimes been thought. The only inscription found by Petrie from earlier in the Twenty-sixth Dynasty is a bronze doorpiece. ${ }^{58}$ Since it was discovered in the fosse and had been usurped by Psammetichus II from a Twenty-fifth Dynasty ruler, it is at best evidence for a structure of some sort somewhere in the vicinity. The association of the palace reliefs, and hence its construction, with Necho II, on the basis of a brief hieratic graffito in the Step-Pyramid enclosure, is unconvincing. ${ }^{59}$ The exact date of the structure within Apries' reign is unclear, but the fact that the cartouches on the reliefs were left blank may indicate that the decoration at least was overtaken by the civil war. ${ }^{60}$

The palace is impressive for its height (the mound is 12.5 m high) and its fortifications, which include a ditch $c .6 \mathrm{~m}$ deep. It stood in the corner of an area covering some thirty acres, enclosed by a huge mud-brick wall I o m thick at the base. There is, at present, no evidence for the date of this wall or its relationship to the palace, so it is not certainly part of the defences of the latter. ${ }^{61}$ None the less, the impression is of a citadel designed to withstand a siege. In the absence of comparative evidence for Egyptian palace construction in the first millennium BC , it is hard to say whether Apries' palace was abnormally fortified. Toponyms of the type $P_{3}$-sbty- $x$-X had proliferated in the Libyan period, ${ }^{62}$ and the Piye stela shows that several towns, including Memphis, ${ }^{63}$ were sufficiently well defended to be able to resist assaults for some time. The choice of $i w / i s t$ rather than a military term, ${ }^{64}$ to

[^120]describe the palace site might reflect a physical reality-the moat, a perennial waterway or the inundation situation ${ }^{65}$ - or might be metaphorical, characterizing its, or Apries', isolation. ${ }^{66} \mathrm{iw} . f$ would be appropriate in such a case, as would Amasis' reaction in immediately moving against it. It is not at present possible to prove any direct association between the palace and the civil war, ${ }^{67}$ but the former does provide a retreat ideally placed to play a role in a prolonged struggle, one which would have allowed Apries to remain in Egypt, with access to all parts of the country, while regrouping his forces for the attack on Amasis at Sais. ${ }^{68}$

The final point raised by the Theban provenance of P. BM IOII3 is the attitude of the native population. The impact of the civil war on Egypt as a whole is difficult to gauge. Traces of accompanying or resulting disorder have been seen in some private autobiographical inscriptions datable to the early years of Amasis, ${ }^{69}$ but none is explicit and a causal connection remains uncertain. ${ }^{70}$ Herodotus' statement that the Egyptians went over to Amasis en masse, leaving Apries with only the support of Greek mercenaries, has generally been accepted, especially as the Elephantine stela seems to confirm the ethnic division. Yet there is no reason to assume that the two sources have independent value on this point. Amasis had over forty years to disseminate his version of events, and his propaganda will inevitably have coloured the information available to Herodotus. The fact that Thebes still recognized Apries so long after the outbreak of hostilities plainly refutes Herodotus' version. It may even suggest that the perception of Apries' support as essentially Greek was not a universal contemporary one, but the consequence of a vigorous and effective publicity campaign by his victorious opponent.

At the least, Thebes maintained a prudently conservative neutrality, presaging the inactivity of Upper Egypt during the Delta rebellions against the Persians in the fifth century. If Apries still held the traditional capital, and thus a central position within the country, while Amasis was ensconcing himself at Sais, it would be natural for Thebes to preserve the status quo, continuing to recognize the legitimate and better-established of the two contenders until his defeat was apparent. The effect of

[^121]the reunification of Egypt on Thebes had probably been relatively slight. The Twenty-sixth Dynasty kings had made little effort to popularize themselves, and it may be guessed that the local inhabitants had accepted northern rule unenthusiastically. However, there is nothing to suggest opposition to the dynasty or to Apries. The mutiny of the Elephantine garrison in his reign was merely a mercenary revolt, one of the hazards inherent in the employment of such troops. Its causes are unknown, but it was probably a minor, local affair which did not involve the native population. ${ }^{71}$ It tells us nothing about the popularity of the king or his policies.

The key to harmonious relations was the institution of God's Wife of Amun, which installed a Saite princess as head of the ancient Theban cult. By the sixth century, the Chief Stewards of the God's Wife and their families had come to dominate the Theban aristocracy. ${ }^{72}$ Their ties to the dynasty through the God's Wife would certainly have been conducive to loyalty, even if it were tinged with pragmatism. If their possession of titles such as 'Overseer of Upper Egypt' implies real influence, their response would probably have been decisive in determining that of local officials as far north as Hermopolis.

There may be indirect evidence for a pro-Apries stance. Two changes at Thebes in Amasis reign were the introduction of the demotic script, implying an administrative reorganization, and an apparent reduction in the powers of the Chief Stewards. ${ }^{73}$ These might be interpreted as a gradual assertion of his authority as a consequence of Theban support for Apries. A pointer to more widespread sympathy for Apries is Amasis' treatment of his dead opponent. 'The appropriate conclusion to draw from Herodotus' repetition of his claim that Apries was buried with due honour is that Amasis deliberately emphasized it. This implicit acknowledgement of Apries' legitimacy is confirmed by the general absence of evidence for erasure of his monuments, ${ }^{74}$ which is in marked contrast to the subsequent fate of Amasis himself. Such an admission was not the usual conclusion to a civil war in ancient Egypt, and suggests a strong desire to reconcile a significant body of opinion. ${ }^{75}$

Much of this is evidently hypothetical. Historians of the Saite period inevitably look to Herodotus for a framework of events, and there is a strong temptation to regard agreement in an Egyptian source as proving the accuracy of Herodotus. ${ }^{76}$ In this case, at least, the latter is merely an eloquent witness to the efficacy of Amasis'

[^122]propaganda. In the attempt to look beyond that barrier, parochial texts such as BM 952 and P . BM Iori3 provide a valuable element of control on the more obviously 'historical' sources, and demand some reappraisal of the prevailing views of Apries' position. ${ }^{77}$
${ }^{77}$ A more general reconsideration may be desirable. The passionate and partisan voices of biblical prophets are still unduly influential in assessments of Apries' reign.


British Museum EA 952 (pp. 183-6)






 $+13-19 \mathrm{c}\left(1 f^{-7}\right.$ a
I. P. BM 10113 (p. 187)

THE EARLIEST DATED MONUMENT OF AMASS

2. The coffin in situ (p. 208)

COFFIN OF A DOG FROM BENI MASAN

# MUSEUM ACQUISITIONS 1986 <br> EGYPTIAN ANTIQUITIES ACQUIRED IN 1986 BY MUSEUMS IN THE UNITED KINGDOM 

Edited by JANINE BOURRIAU
The acquisitions of the Bristol Museum include objects acquired in 1984 and 1985.

## Predynastic

I. Red-polished pottery vase, British Museum 6984i. Ex Wellcome collection.

## First Intermediate Period

2. Wooden head from a male figure, with short wig, British Museum 69755 .

## Middle Kingdom

3. Thirty-four carnelian beads, British Museum 69748.
4. Haematite scarab inscribed with the title šmsw and a personal name, British Museum 69842.
5. Steatite segment of a magic rod with crocodile and a cat carved in relief, Fitzwilliam Museum E.2.1986 (pl. XXIV, i-2). Dynasty XII. Gift of Jack Ogden.
6. Blue anhydrite kohl pot with separate rim, Ashmolean Museum, 1986.47. Gift of Miss Marjorie Pritchard.
7. Six cosmetic vases and a lid, British Museum 69843-9. Middle Kingdom-New Kingdom.

## New Kingdom

8. Miscellaneous faience fragments, British Museum 69675-747. From el-Amarna.
9. Blue glazed composition finger ring with name of Amenophis III, British Museum 69752.
10. Steatite scarab with incised divine figure on upper surface, British Museum 69749.
II. Amulet with two crocodile figures on upper surface, British Museum 69753.
11. Group of faience vessel fragments, British Museum 69852-60.
12. Alabaster kohl pot with traces of kohl, Ashmolean Museum 1986.48. Gift of Miss Marjorie Pritchard.

## Third Intermediate Period

14. Fragment of the wooden coffin of an Amenemope, British Museum 6985 1. 15. Blue-glazed faience shabti of Djedkhonsefankh British Museum 6986ı.

## Late Period

i6. Bronze amuletic figure, British Museum 69750.
17. Bronze figure of Harpocrates, British Museum 6975 r.
18. Bronze standing figure of a bull-headed divinity (Mnevis) wearing disc and uraeus, wig and kilt, and carrying a sceptre that may not be original, Ashmolean Museum 1986.46.
19. Bronze statuette of Ptah with niello and fragmentary gold inlays, Ashmolean Museum 1986.50 (pl. XXIV, 3). Bequest of Miss M. R. Tomkinson. See Proceedings of the Society of Antiquaries of London, ser. 2, II (1887), 33 I ff.
20. Green-glazed faience shabti of Isis-ta-nefret, British Museum 69754.
21. Green-glazed faience shabti. of Psamtik, British Museum 69840.
22. Faience figurine of Sakhmet, Bristol Museum BRSMG Ha.7563. From Saqqara, Sacred Animal Necropolis. Gift of the Egypt Exploration Society.
23. Fragment of papyrus $c .350 \mathrm{BC}$, Bristol Museum BRSMG Ha.7564. Transferred from the Wells Museum.

## Ptolemaic Period

24. Bronze statuette of Horus of Leontopolis, Bristol Museum BRSMG Ha.7677. On indefinite loan.

## Roman Period

25-6. Two terracotta models of musical instruments, Royal Museum of Scotland, 1986.146-7. First century BC-AD.

## Coptic Period

27. Pottery lamps, vessels, and sherds, chiefly of the Coptic period, British Museum 69757-838. From el-Ashmunein.
28. Pilgrim flask with representations of St Menas and St Thecla, British Museum 69839 .
29. Pottery bowl, Bristol Museum BRSMG Ha.7566. From Qaṣr Îbrim, house LCZ-2 64/28. Gift of the Egypt Exploration Society.
30. Conical glass lamp with applied dots of deep blue glass, Fitzwilliam Museum E.i.ig86 (pl. XXIV, 4).


Steatite segment of a magic rod, Fitzwilliam E.2.I 986 (no. 5)

4. Glass lamp, Fitzwilliam E.i. 1986 (no. 30)

## BRIEF COMMUNICATIONS

## A Protocol of Dress: The Royal and Private Fold of the Kilt

In statues of the Old Kingdom, the kilts of kings and courtiers are usually folded in opposite directions.
In Egyptian statuary there appears to be a rule, not evidently recognized, in respect to the manner of folding the short wrap-around kilt and the more formal shendyt with a central tab hanging down (Mittelstückschurz). ${ }^{1}$ The king wraps the kilt left over right, or clockwise from the point of view of the wearer, whereas the official in the Old Kingdom wraps his kilt in contrary fashion, right over left or counter-clockwise. Royal statues throughout Egyptian history follow this basic method: left over right. As might be expected, the royal fold is soon emulated by private officials, perhaps as early as the end of the Old Kingdom. Thus the 'royal' fold curiously corresponds with that used for garments now intended for men and the 'private' fold for shirts, jackets, etc., made for women today. The rule for the private fold has been indirectly addressed by Fischer in his study of the pair statue Berlin $12547 .{ }^{2}$ Fischer notes the anomaly of dress in the male of the pair, whose kilt is folded left over right instead of the 'correct' right over left, suggesting on this and other grounds that the statue is a modern forgery (evidently in part based on a photograph).

It might be expected that statues of gods originally followed the royal fashion. But an instructive case for the rigour with which the differentiation is applied is the triad of Mycerinus with the Theban nome from the king's Valley Temple at Giza. Mycerinus wears the kilt in the standard royal fashion, while the nome personification, evidently not a god, follows the non-royal fashion. ${ }^{3}$ That this is not merely fortuitous or dictated by symmetry is emphasized by the dyad of Sahure and the Koptite nome personification in New York: here too the king and nome personification fold the kilt in opposite directions. ${ }^{4}$ It would be instructive to determine the date at which the rule was first broken by officials copying the royal fold in statuary and the corresponding wearing apparel. The broken rule is already exemplified in private statuary of the early Eleventh Dynasty, a good example being the seated statue in the British Museum of the steward Meri with his hands crossed. ${ }^{5}$ The adoption of the royal fold becomes frequent in the Twelfth Dynasty, ${ }^{6}$ and in the Second Intermediate Period is almost the rule. ${ }^{7}$ Examples of the 'private' fold in royal statues appear

[^123]to me to be very rare indeed: an example is a statue of Amenhotep II in Cairo. ${ }^{1}$ Certainly other exceptions will come to light.

The 'rule' presented in this communication is obviously a general one, subject to exceptions, and restricted to the two types of kilt cited above. The longer, over-the-shoulder mantles and other garments show a preference for a right-over-left fold from the Khasekhem statues from Hierakonpolis, the Djoser serdab statue from the Step Pyramid, and through the many Middle Kingdom private statues. Two-dimensional representations, in painting and relief, are more complex and to a great extent reflect the direction in which the figures face. ${ }^{2}$ The subject cannot be taken up here.

It is logical to assume that the method represented in statuary reflects the actual mode of dress in 'real life'.

William Kelly Simpson

## Bemerkungen zur Stele des Merer in Krakau

Discussion of some of the textual problems of the stele of Merer in the Cracow Museum, first published by Cerný in $\mathcal{Y} E A_{47}$ (1961). This important document for the history of the First Intermediate Period contains the earliest attestation of the image of the balance in the Judgement of the Dead.

Die Stele des Mrr in Krakau ${ }^{3}$ ist von J. Černý in Band 47 (1961) dieser Zeitschrift (pp. 5-9; pl. i) veröffentlicht worden. Seitdem ist die Inschrift mehrfach behandelt und kommentiert worden. ${ }^{4}$ Trotzdem sind einige Passagen in ihr dunkel geblieben. Der folgende Artikel versucht sie etwas zu erhellen.

1. Große Schwierigkeiten bereitet haben die Sätze in der ersten Hälfte von Z.4. Die bisherigen Übersetzungen:
Černý: ${ }^{5}$ 'I did not spit in the eyes of a good man, of one who spoke or of one who knew, of one who . . . or of one who bent (his) arm to me.'
Schenkel: ${ }^{6}$ 'Ich habe nicht in die Augen gespieen, dem, der mit mir sprach, zu Gefallen, da ich mir des Verletzenden bewußt war und (lieber) den Arm beugte.'
Groll: ' 'I was not spat upon in my eyes because of the quality of my speaking and because of my knowledge of one who bent (his) arm to me.'
Lichtheim: ${ }^{8}$ 'I was not spat in the eyes, owing to the worth of my speech, the competence of my counsel, and the bending of my arm.'
${ }^{1}$ CG 42077: Aldred, New Kingdom Art in Ancient Egypt, no. 49.
${ }^{2}$ The 'standard' direction, based on the original direction of Egyptian hieroglyphic and hieratic writing is the right-facing figure: Bonnet, OLZ 27 (1924), 554, with many other discussions. Thus in the Hesyre panels the 'private' right-over-left fold is represented in the right-facing figures. On the Khaibausokar false door the right-facing figure similarly has the expected right-over-left fold while the corresponding left-facing figure exhibits the opposite left-over-right fold: cf. for both illustrations: E. L. B. Terrace and Henry G. Fischer, Treasures of Egyptian Art from the Cairo Museum (London, 1970), 35, 39. The subsequent development of these conventions is complex and beyond the scope of this communication.
${ }^{3}$ Muzeum Narodowe MNK-XI-999.
${ }^{4}$ Vollständige Neuübersetzungen: W. Schenkel, Memphis, Herakleopolis, Theben (Wiesbaden, 1965), 62-4, Nr. 42; M. Lichtheim, Ancient Egyptian Literature I (Berkeley, 1973), 87-8. Teilkommentare: H. G. Fischer, Kush 10 (1962), 333-4 [zu Z.5-6; 10; 12]; Schenkel, $Z \ddot{A} S 92$ (1965), 63 [zu Z.5; 12]; A. Roccati, $R S O 42$ (1967), 70-1 [zu Z.8-13]; M. Gilula, RdE 20 (1968), 55-6 n. 6 [zu Z.4]; Schenkel, Die Bewässerungsrevolution im Alten Ägypten (Mainz, 1978), 36 [zu Z.9-1 3]; H. G. Fischer, in Studies in Ancient Egypt, the Aegean, and the Sudan. Studies in honor of Dows Dunham eds. W. K. Simpson and W. M. Davis, (Boston, i98ı), 66(e) [zu Z.io]; D. Franke, Altägyptische Verwandtschaftsbezeichnungen im Mittleren Reich (Hamburg, 1983), 301 [zu Z.5]; 2 I 5 [zu Z.io-ir].
${ }^{5}$ Op. cit. 6. ${ }^{6}$ Memphis, Herakleopolis, Theben, 63.
${ }^{7}$ Bei Gilula, $R d E 20$ (1968), 55-6 n. 6.
[^124]Die ersten beiden Vorschläge sind zweifellos inhaltlich unbefriedigend, aber auch Grolls Übersetzung kann nicht überzeugen; besonders die Wiedergabe des zweiten Teils als $n r h$ $n n k n$ him $n \cdot j$ rmn 'because of my knowledge of one who bent (his) arm to me' ist sehr gezwungen und entspricht kaum der Phraseologie dieser Texte. Überdies ist die angenommene Konstruktion mit $n n k$ hier äußerst zweifelhaft: Man sollte in Parallele zu $n$ $\underline{d} d(\cdot j)$ doch $n r h(\cdot j)$ erwarten, zumal der Possessivausdruck der ersten Person in keiner Weise hervorgehoben ist. Auch andere Belege für nnk nach Infinitiv ${ }^{1}$ sind nicht völlig zweifelsfrei: Der von Gardiner (Egyptian Grammar ${ }^{3}$, 225, 309) zitierte Fall könnte auch $n$ $r w \underline{d} n n k\left((3 \cdot j) h r j b \cdot f\right.$ zu verstehen sein. ${ }^{2}$ Der einzige sichere Beleg bei Gilula (op. cit.) scheint mir CT III, 224 c zu sein: Hier dient $n n k$ (in Variation mit $n \cdot k$-jmjjt) klar der Hervorhebung des Possessivverhältnisses. ${ }^{3}$ Lichtheims Übersetzung hört sich zweifellos am besten an. Sie wäre noch besser, wenn man das etwas gewaltsam wirkende 'and the bending of my arm' mit ' $z u$, gegenüber einem, der mir den Arm beugte ( $=$ mich respektierte)' wiedergäbe. Lichtheim übersetzt allerdings nicht nur-wie Groll—n psg(w) mjrtj passivisch, sondern auch das vorhergehende $n j w z(\cdot j) .{ }^{4} \mathrm{Daß}$ dies einen besseren Sinn macht und es für einen Beamten 'rather pointless' wäre, zu erklären, daß er nicht geraubt habe, stimmt aber nun wirklich nicht. Est ist im Gegenteil für jemanden, der für das Opferfleisch zuständig war, höchst angebracht zu versichern, daß er nichts unterschlagen hatte.

Ich glaube aber, daß auch der erste Teil bei Lichtheim nicht richtig ist. Mein Vorschlag ist, jeweils das $n$ nach $n f r$ und nach $r h$ als Negation zu verstehen. ${ }^{5}$ Im Zusammenhang: '(Ich stahl nicht,) ich spuckte nicht in die Augen eines Guten, ich sprach nicht (belehrend) zu einem Wissenden, ich verletzte nicht einen, der mir den Arm beugte. ${ }^{6}$ Diese Deutung scheint mir vor allem deshalb besser, weil dann eine perfekte Parallelität zwischen $n p s g(\cdot j)$ $m j r t j n n f r$ und $n n k n(\cdot j) h ; m n(\cdot j) r m n$ besteht.
2. Das Wort $f^{\infty}$ in $Z .5$ ist von Cerný ${ }^{7}$ als $s m s y(w)$ 'Genossen' verstanden worden. Die Schreibung $\ddagger$ erklärt er als von smyt 'Wüste' entlehnt. Schenkel und Lichtheim haben sich der Übersetzung angeschlossen. ${ }^{8}$ Es bietet sich aber eine viel zwanglosere Erklärung an. Zunächst stimmt es nicht, daß der Vogel eher ein ${ }^{3}$ als ein tjw sei, wie Černý meint, er unterscheidet sich im Gegenteil deutlich vom Alif-Zeichen (in Z.3; 4; 8; 10; 12; 13), sowohl in Größe als auch in Kopf- und Rückenform (und ebenso von $w$ ). Es kann nur ein $t j w$-Vogel sein. Auch die Entlehnung des f von $z m j t$ (das laut $W b$. erst im NR mit diesem Zeichen geschrieben wird) bzw. eine Verderbnis aus dem Hieratischen scheinen mir nicht sehr überzeugend. Es wird statt dessen $s p 3 t j w$ ' Gaubewohner' zu lesen sein, analog etwa zu $n w t$ 'Stadt' - nwtjw 'Städter'. ${ }^{9}$ Die Aufrechtstellung sonst nur liegend geschriebener Zeichen (entgegen ihrer bildlichen Bedeutung) findet sich gerade in der ersten Zwischenzeit und im frühen MR. ${ }^{10}$
3. Die größte Crux der ganzen Inschrift ist der Satz zu Beginn von Z.6. Seit Fischer die

[^125]
Fischer: ${ }^{2}$ 'My forehead and feather nodded assent.'
Schenkel: ${ }^{3}$ 'Weiter habe ich meine Feder nach vorn geneigt(?).'4
Lichtheim: ${ }^{5}$ 'I have bowed brow and feather.'
Diese Übersetzungen basieren alle auf Fischers (zurückhaltendem) Vorschlag, daß hier an die Feder als Zeichen der Friedfertigkeit gedacht sein könnte. Er verweist dafür auf eine Bemerkung von Clère, ${ }^{6}$ der gezeigt hat, daß die (Straußen) Feder (in den Händen besiegter Feinde) ein Zeichen der Unterwerfung sein kann ebenso wie (in den Händen von Boten) ein Zeichen friedlicher Absichten. ${ }^{7}$ Auf unsere Stelle übertragen hieße das, Mrr habe in seinem sozialen Verhalten dauernd 'die weiße Fahne gezeigt', also Friedfertigkeit, wenn nicht gar Unterwerfung signalisiert. Dieser Gedanke widerspricht allem, was wir von der Phraseologie ägyptischer Biographien und ägyptischer Ethik überhaupt wissen. Friedfertigkeit und soziales Wohlverhalten wird dort immer nur aus einer Position der Stärke heraus (lobend) beschrieben. Ganz abgesehen davon läßt sich das angebliche h3st 'Stirn' (Fischer und Lichtheim) bzw. 'Vorderseite' (Schenkel) mit šwt kaum in sinnvoller Weise verbinden. ${ }^{8}$ Man wird daher nach einer anderen Lösung suchen müssen.

Mein Vorschlag geht davon aus, daß 9 hier für $h 3 t j$ oder genauer $h 3 t j(\cdot j)$ 'mein Herz' steht, eine determinativlose Schreibung, die ich weiter leider nicht belegen kann. ${ }^{9}$ Im Zusammenhang hieße die Stelle dann: 'Mein Herz neigte ( = ließ sinken) die Feder.' Das kann sich nur auf die Szenerie des Totengerichts beziehen, wo das Herz gegen die Maatfeder abgewogen wird. ${ }^{10}$ Weiter läßt sich daraus schließen, daß bei diesem Wiegevorgang nicht die guten Taten gewogen werden (und 'schwer' wiegen sollen), sondern im Gegenteil die Sünden, das Herz mithin im Idealfall leicht, 'unbelastet' ist. ${ }^{11}$

Dies ist in der Tat auch das Bild, daß die wenigen Texte bieten, die sich etwas deutlicher zu diesem Punkt äußern, wie die Untersuchung durch Clère ergeben hat. ${ }^{12}$ Sein Ergebnis ist durch Spiegel ${ }^{13}$ dahingehend relativiert worden, daß der Wiegevorgang beim Totengericht aus mehreren Akten bestand, wobei sowohl die Sünden als auch die guten Taten gewogen wurden. ${ }^{14}$ Dem hat sich—wohl zu Recht—auch Seeber angeschlossen, ${ }^{15}$ obwohl zumindest in älterer Zeit das Abwiegen der guten Taten nicht durch textliche Aussagen nachgewiesen werden kann. Die erste Vorstellung-das Abwiegen der Sünden-wird in jedem Fall dominierend gewesen sein: dafür spricht ja auch die 'negative Konfession' und eben die Tatsache, daß das Herz in den Darstellungen (wie in dem hier besprochenen Text) gegen die Maatfeder abgewogen wird. Es wäre doch sehr verwunderlich, wenn eine Feder nicht zugleich auch als Zeichen der Leichtigkeit verstanden worden wäre.

[^126]Die Richtigkeit dieser Deutung vorausgesetzt，wäre diese Stelle der älteste Beleg für den Wiegevorgang im Totengericht，${ }^{1}$ und für ihre Richtigkeit spricht schließlich auch der Zusammenhang mit dem Vorhergehenden：Der Satz folgt auf jw zbj•n（ $\cdot j$ ）r jmih＇ich erreichte den $j m ; h$－Status＇．

Dennoch möchte ich diesen Vorschlag nur mit einiger Zurückhaltung vorbringen： Die Schreibung des angeblichen $h^{3} t j(\cdot j)$ ohne Herz－Determinativ ist－wie erwähnt－ ebensowenig belegt wie die Bezeichnung des Gegengewichts auf der Waage schlicht als šz $t$ ＇die Feder＇statt durch＇$m$ ； r ＇．

4．Nachdem $M r r$ in Z．I－7 zunächst von seiner Tätigkeit als Schlachtervorsteher und dann von seinem Charakter und seinem tadellosen sozialen Verhalten gesprochen hat， beginnt in Z． 7 mit jwgrt der zweite Abschnitt der Biographie，der（sehr viel konkreter）seine Taten für Stadt und Mitbürger schildert．Der Beginn dieses Abschnittes ist folgender－ maßen übersetzt worden：
Černý（op．cit．）：＇I also feared to become a $k t$ swt of this town．＇
Schenkel（op．cit．）：＇Weiter aber war Furcht entstanden in einer anderen（Stadt），mich aber rühmte diese Stadt．＇
Lichtheim（op．cit．）：＇And when fear had arisen in another town，this town was praised．＇${ }^{2}$
Auf Černýs Deutung（von ihm selbst nur sehr zweifelnd vorgebracht）braucht man wohl nicht weiter einzugehen．Schenkel und Lichtheim betrachten beide $\uparrow$ als das nur einmal belegte angebliche $s t w$＇bewundern，preisen＇，das vom $W b .{ }^{3}$ wohl richtig zu stwt＇rühmen＇ gestellt，vorsichtshalber aber als eigenes Wort angeführt wird．Die Hauptschwäche ihrer Übersetzung（abgesehen von syntaktischen Problemen in Lichtheims Version）sehe ich darin，daß das（bezugslose）kjtj im ersten Teilsatz steht，worauf dann erst nwt tn folgen soll， also genau umgekehrt der zu erwartenden，logischen Anordnung．Außerdem ist der Sinn dieser Übersetzungen alles andere als befriedigend；der Gegensatz＇Furcht＇und＇rühmen， preisen＇ist nicht sehr naheliegend．

Auch hier läßt sich eine völlig andere Deutung geben：Ich lese die Stelle jw grt sndw ${ }^{\underline{d}}(\cdot j)$
 zu machen diese（meine）Stadt＇．In dem von Schenkel und Lichtheim als stw verstandenen Verb sehe ich den Infinitiv von swtj＇groß，mächtig machen＇．${ }^{4}$ Die Gruppe 盆忩 ist entweder als ganze $h p r(w)$ zu lesen：${ }^{5}$ dann wäre ein durch Haplographie ausgefallenes $r$ zu ergänzen． In dieser Zeit ist allerdings auch die Schreibung 合厽 für hpr belegt；${ }^{6}$ so wäre nicht einmal diese kleine Ergänzung nötig．

Karl Jansen－Winkeln

## Coffin of a dog from Beni Hasan

A small coffin in the Fitzwilliam Museum E．47．1902，discovered by Garstang at Beni Hasan bears the htp－di－nsw formula for its owner，called $H b$ ．The coffin had held the body of an animal identified by Garstang as a jackal，but which was more probably that of a dog．The coffin and name are of late Eleventh－Dynasty date and the name $H b$ is otherwise unattested for a dog．

In the reserve collection at the Fitzwilliam Museum，Cambridge ${ }^{7}$ is a small wooden coffin from Beni Hasan tomb 17，E．47．1902（pl．XXVII，1－2）．It is 70 cm long， 27 cm high，and

[^127]20 cm broad. It is constructed from eight pieces of wood, with mitred corners, and is held together with dowels. The floor is entirely missing, whilst the lid, originally made of three pieces of wood, now has a gap down the centre. This middle part appears to have been lost in antiquity, as the field photograph (pl. XXVI, 2) shows. ${ }^{1}$ The outer surface of the coffin shows traces of a thin layer of stucco painted yellow and a single line of hieroglyphs in blue round its upper edge and off centre down the lid as follows:


The owner of the coffin was called $H b$, the name appearing five times, often in a space too small to accommodate it. The tomb register in Burial Customs of Ancient Egypt ${ }^{2}$ gives the entry for tomb 17 thus-Object: Plain wooden coffin containing remains of a jackal. Pottery: Type 45, and seven pottery dishes. It is hard to believe that Garstang failed to notice the inscription. The field photograph, taken from the right side of the coffin, shows quite clearly a single horizontal line of text.

The field photograph also shows that what is called tomb 17 was little more than a pit dug into the slope of the hill. The cemetery plan ${ }^{3}$ indicates two tomb shafts numbered 16 . It is possible that one of these, situated below the rock tomb XVII of $\underline{H} t y$, was in fact our tomb 17. The field photograph shows no pottery so that the relationship between the pottery and the coffin is unknown.

The htp-di-nsw formula conforms to that in use during the Sixth to Thirteenth Dynasties. ${ }^{4}$ The name of Anubis is spelt as in the Eleventh Dynasty ${ }^{5}$ and that of Osiris has the seated god determinative, whilst that of Khenty-Imentiu is without determinative, suggesting an Eleventh to early Twelfth Dynasty date. ${ }^{6}$ The place-name $\underline{D} d w$ is spelt with - ; several ways of spelling $D d w$ are known from Middle Kingdom contexts. ${ }^{7}$ The writing of $t p y-\underline{d} w \cdot f$ corresponds to that in use during the mid-Eleventh to early Twelfth Dynasties. ${ }^{8}$

[^128]The sign hnt appears, in one example, to have side strings which hang short of the base line, which occurs in the early Eleventh Dynasty. ${ }^{1}$ The retention of the initial yod and the substitution of $-y$ for $-w$ in imihy also point to a date within the Eleventh and Twelfth Dynasties. ${ }^{2}$

The text is written in a semi-cursive form of hieroglyph popular during the Middle Kingdom. ${ }^{3}$ Included in Fischer's table of such forms ${ }^{4}$ is the $h$-sign 3 a, 8 the coiled rope with pendant ends joined by a horizontal line, which is very similar to those on the Beni Hasan coffin. One sign in the epithet of Anubis, hnty-sh-ntr, appears to be a local variation of the word $s h, \sqrt{\square}$. This word was represented in several ways during the Middle Kingdom:


The coffins from Beni Hasan show at least six ways of writing the word $s h$


The last sign most closely resembles our example. The arrangement of the texts into a prayer to Osiris on the left side, a prayer to Anubis on the right side and possibly on the lid is also analogous with other Beni Hasan coffins, which term Anubis as 'Inpw nb sp;. ${ }^{16}$

The pottery apparently found with the coffin consisted of dishes which are not described or illustrated by Garstang, and one large globular jar with neck, rim, and stringing around its broadest part. ${ }^{17}$ A similar jar is Fitzwilliam E.94.1902, from Hu, dated to the reigns of Senwosret I and Amenemhat II. ${ }^{18}$ Further north at El-Tarif similar jars were in use during the Eleventh and Twelfth Dynasties, and in Lower Egypt in the Twelfth Dynasty. ${ }^{19}$

On the basis of palaeography and pottery form it is proposed that the coffin dates to the late Eleventh Dynasty.

The occupant of the coffin was, according to Garstang, a jackal. In the art of the First Intermediate Period and Middle Kingdom dogs became an increasingly popular motif on stelae and in tomb scenes. For instance, stelae from the Gebelein area, belonging to Nubian mercenaries, often depict dogs ${ }^{20}$ and of course there is the famous Hound Stela of Wah-ankh Intef II from El-Tarif. ${ }^{21}$ The nomarchs' tombs at Beni Hasan depict a variety of different

[^129]breeds, including: (a) pointed-eared and curly tailed dogs ( tsm); (b) pointed-eared and straight-tailed dogs; (c) flat-eared and curly tailed dogs; (d) Dachshund dogs. These dogs are often seen in hunting and battle settings and the majority of them are shown wearing collars. Those depicted with the tomb owner tend not to wear collars and may be watch-dogs or pets. ${ }^{1}$ Unfortunately, the remains of the animal buried in this coffin were not saved, so precise identification is impossible. It is tempting to suggest that, since Garstang understood the remains to be those of a jackal, it was in fact a $\underline{t s m}$-dog.

Apart from the popular depiction of dogs, during the Middle Kingdom figures of them are found in cemetery contexts as part of the funerary assemblage. Amongst these is a painted limestone group of a man playing with a dog, from tomb XXIII-XXV at Edfu. ${ }^{2}$ A painted limestone figure was found in tomb 22 of $\underline{D} h w t y-n h t$ at Bershah. ${ }^{3}$ A painted unbaked clay group of a man playing with a dog, similar to that from Edfu, was found in tomb 487 of Snbw at Beni Hasan. ${ }^{4}$ A pottery dog came from tomb 390 at Sedment. ${ }^{5}$ From the pyramid field of Senwosret I at Lisht one tomb yielded a couchant faience puppy figure. ${ }^{6}$ Fragments of at least two faience dogs came from tomb 416 at Abydos $^{7}$ and a painted limestone figure from the same tomb. ${ }^{8}$ A faience dog figure was found in tomb Ei at Abydos. ${ }^{9}$ Finally, a group of three faience animal figures, found in the tomb of $H n i$ at Meir and described by the excavator as hyenas may also be dog figures. ${ }^{10}$ The popularity of dogs in the Middle Kingdom is also reflected in the appearance of the game 'Hounds and Jackals', which comprises a board with ten pins, five with flat-eared dog heads and five with pointed-eared jackal heads. ${ }^{11}$ The best example of this game came from tomb 25 of Rn-snbi, at Thebes. ${ }^{12}$

Burials of dogs are not uncommon, particularly in the Ptolemaic Period, when they were mummified and buried at Saqqara, Asyut, and Abydos as animals sacred to Anubis, Wepwawet, and Khenty-Imentiu. ${ }^{13}$ This type of burial is quite different from that under discussion here, the burial of individual animals in their own right. As noted by Janssen and Fischer, ${ }^{14}$ the burial of dogs in coffins, containers, and specially made tombs with their own stelae is a phenomenon beginning with the First Dynasty. For example, a dog was found buried as a guard in the tomb entrance of Her-Neith at Saqqara. ${ }^{15}$ Another received its own tomb at Giza as a reward for being in the royal bodyguard of Khufu. ${ }^{16}$

One dog buried during the Middle Kingdom received a finely carved wooden coffin bearing its name. ${ }^{17}$ Whilst individual burials of dogs are not plentiful, they are surprisingly frequent. Those known to the author include, from Edfu, the bones of a dog in association with a pottery dish on a coffin lid in tomb XXX, ${ }^{18}$ the bones of a dog inside a large jar in tomb

[^130]





 $+13-19 \mathrm{c}\left(1 f^{-7}\right.$ a
I. P. BM 10113 (p. 187)

THE EARLIEST DATED MONUMENT OF AMASS

2. The coffin in situ (p. 208)

COFFIN OF A DOG FROM BENI MASAN

3. Liverpool Museum $\mathbf{5 6 . 2 2 . 1 4 1}$ (p. 213) (courtesy of the Liverpool Museum)

TWO ROYAL RELIEFS FROM DEIR EL-BAHARI

XIII, ${ }^{1}$ and the bones of a dog inside a ring base dish on the lid of a coffin in tomb Xb , associated with wooden sticks and cereal grains. ${ }^{2}$ One dog has been wrapped in linen and placed in a large jar at the entrance to tomb Xe. ${ }^{3}$ It is known that the Egyptians bred a type of hyena called $h \underline{t} t t$ for its meat. It is possible that the remains found in the dishes were food offerings of hyena meat. ${ }^{4}$ The Saff el-Baqar tomb of Intef III contained subsidiary burials, including one of a dog. The dog was placed in a red and black painted wooden coffin, on its right side, head east, facing south and the coffin was surrounded with stones. ${ }^{5}$ Parts of the body of a dog were found in tomb Ai28 at Harageh. ${ }^{6}$ Petrie reported finding at Hu two circular Pan-grave burials, one of which contained dog skulls and bones to a depth of $12 \mathrm{in} .{ }^{7}$ That some of these burials are those of beloved companions and valued guardians is illustrated by the fact that Hwi from Asyut tomb 8 chose to depict his dog Mniw-pw on the side of his coffin. ${ }^{8}$

To date there are seventy-seven known dogs' names, ${ }^{9}$ none of which are similar to our example, which is read as $H b$. The name in all cases is without a human or animal determinative. ${ }^{10}$ Instances of similar names are known: $H b \cdot f, H \cdot t, H b \cdot i, H b \cdot y$, and $H b \cdot w .{ }^{11}$ The first is dated to the Eighteenth Dynasty, the second and third to the Old Kingdom, and the final two to the Middle Kingdom. The name $H b$ in its form here is otherwise unattested. ${ }^{12}$ Since all the other evidence for the date of the coffin points to the Eleventh Dynasty, this name may also be taken as being of the same period.

Angela M. J. Tooley

## Two corrections to $P$. Reisner IV, sections $F$ and G

An error in transcription and an error in grammatical interpretation corrected.
During the course of a seminar at Yale University in the autumn of i986, Professor Pascal Vernus commented upon two passages in $P$. Reisner iv. I agree with his suggestions, which he modestly qualified as tentative, and hereby present them as improvements to my edition of the papyrus.

In Section G, line 2, Vernus suggested that the term transcribed by me as $\square$ 会 should be read $\square \rightleftharpoons \underset{\text { 今 }}{ }$ or the like (Gardiner Sign List F 46; Möller, Hier. Pal. i, i83), with the sense 'turning around, circling back', or similar, although $W b$. I, 544-7, does not provide a strictly parallel intransitive use of $p \underline{h} r$. The new reading, however, makes excellent sense in the context of the cloth distribution account of Section G:

1. Given to the overseer of sealers Rey when he went north to $\operatorname{Pr}-\mathcal{F} h(h) \ldots$
2. Given to him in going south in circulating back the next day . .

In Section $\mathrm{F}_{3}-5,12,13,16$, and $\mathrm{I}_{7}$, the lines begin with the accounting term $\AA_{\text {a }}$ - 44. I was at a loss to explain this, finding it an unlikely writing or graphic simplification of the perfective passive participle $\AA \hat{1} \hat{Q}^{\prime} \circ$. Vernus tentatively suggested that the writing includes

[^131]the prepositional adverb ny (Gardiner, $E G^{3}$, §205; Edel, Altägyptische Grammatic, §751a ('dadurch'), and idem, $Z \ddot{A} S 84$ (1959), 20-5). Although the adverb is generally familiar
 (1939), 217). The $P$. Reisner IV instances are thus probably to be interpreted as $j n(y) t n y$, 'brought therefor', or 'brought for it', followed by $m$ and place-name or $m-r$ and personal name. This is the equivalent of 'that which one brought'.

William Kelly Simpson

## Two royal reliefs from the temple of Deir el-Bahari

Two pieces of relief from Hatshepsut's temple were presented to Norwich Museum in 1843 , one now being in Liverpool. They probably represent Tuthmosis I and his wife Ahmose, and are traced respectively to the Shrine of Anubis and the south wall of the main barque shrine.

In 1843 the Castle Museum at Norwich received, through the generosity of one P. E. Wodehouse, ${ }^{1}$ two fine pieces of limestone bas-relief from 'Thebes, temple walls'. ${ }^{2}$ Here they remained, under the number 15.43 , until 1956, when a considerable part of the museum's Egyptian collection was sold to the Liverpool Museum. Among the material retained in Norwich ${ }^{3}$ was one of the relief fragments; 24 cm high $\times 28 \mathrm{~cm}$ wide, it depicts a queen wearing the vulture headdress (pl. XXVIII, i). Her flesh retains areas of yellow colouring, the hair being painted a reddish brown. Traces of red survive on the head of the vulture, while the fore-part of its wings, together with the first two rows of feathers, are blue. The trailing feathers are green and the tail feathers blue-green. The intervening area is white. Of the broad collar, traces of green, red, and white survive.

The quality of carving is extremely fine, the treatment of the ear being particularly good. Altogether, the piece is an excellent example of the best work of earlier Tuthmoside times, and typical of the kind of sculpture found in the temple of Hatshepsut at Deir el-Bahari. According to museum records, the same conclusions were reached by Nina Davies in 1952. In the hope of confirming the provenance of the piece, a colour slide was conveyed to Janusz Karkowski of the Polish Centre for Mediterranean Archaeology, currently engaged upon restoration work at Deir el-Bahari. ${ }^{4}$ I am most grateful to him for the information that the relief seems to have come from the Barque Sanctuary, on the axis of the temple, specifically from the south wall of its main chamber. ${ }^{5}$

The two long walls of this room were originally effective mirror images of one another. From the eastern end, Hatshepsut, ${ }^{6}$ with the Princess Neferure behind her, offered to the barque of Amun, behind which were carved the Princess Neferubity, Tuthmosis I, Queen Ahmose, and Tuthmosis II. The south wall was copied by Champollion and Rosellini in

[^132]1828/9. The former published a drawing of the whole wall, minus the barque, ${ }^{1}$ while both scholars produced a detail of Ahmose's head. ${ }^{2}$ However, by the time that Lepsius examined the wall in $1844 / 5$, the latter sculpture had gone-Wodehouse's gift to Norwich Castle. In his copy of the accompanying texts, ${ }^{3}$ one can see the damage done to them when the head was hacked from the wall. The queen's body, however, remained in place, and is now in store on site. ${ }^{4}$

Further vandalism had occurred by the time that Edouard Naville arrived at the temple in 1893. Indeed, it would seem that the western end of the present wall, which had formerly contained the Norwich head, was deemed unworthy of copying, Naville merely noting that 'since [the time of Champollion and Lepsius the wall] has suffered much at the hands of travellers; many fragments have been cut out and sold: for instance the interesting representations of Thothmes II. ${ }^{5}$ Among the pieces removed was the head of Neferure, identified by Kitchen as Dundee 67.244. ${ }^{6}$

The second Wodehouse relief was among the objects sold to Liverpool, where it was accessioned as 56.22 .14 I ( pl . XXVII, 3 ). $c .35 \mathrm{~cm}$ high, it represents a king, wearing the khat wig-cover and facing right; above his head is the bottom of his cartouche, with terminal $k ;$-sign, flanked by a circular hieroglyph without internal markings and the very end of a low, broad, sign. The area below the neck is of particular interest: it is clear that the king's right arm was originally raised, probably in the act of offering a $n w$-pot, with the largely lost left arm in a similar position. However, the former limb has been entirely erased above the level of his left shoulder, and two grooves cut to outline a 'new' arm, angled downwards. The delineation of a new left arm was started, but only one unfinished cut is visible. Here we have a clear example of a change in plan during the final finishing of the relief; a layer of plaster would have been laid over the altered parts and a new surface carved, all previous traces being concealed in the final painting. Vestiges of plaster may be visible on the left shoulder.

Small traces of reddish-brown paint can be seen at the lower edge of the king's neck, the corner of his mouth, in the ear, and in the grooves of his new right arm. Apart from this, the relief is devoid of colour, save a few small areas of black, probably of modern origin. The workmanship is somewhat less fine than that on the Ahmose relief, but the stylistic similarities are real, and that it is a representation of Tuthmosis I from Deir el-Bahari seems difficult to doubt, particularly since it came to England in company with the former relief sculpture. ${ }^{7}$

It does not seem possible to identify it with any copy made before its removal in the 1840 . However, it may have come from the end wall of the hall of the Anubis Chapel on the Middle
${ }^{1}$ Monuments de l'Égypte et de la Nubie, II (Paris, i845), pl. cxcii, 3, 5.
${ }^{2}$ Ibid., pl. cxcii, 4; I. Rosellini, Monumenti dell'Egitto e della Nubia: Monumenti Storici (Pisa, 1832), pl. i, 4.
${ }^{3} \mathrm{~L} D T$ III, II3. It is perhaps instructive to note the discrepancies between the different copies of Ahmose's

on the same plate (pl. cxcii, 4 and 3), respectively. Lepsius (and Rosellini) read

clearly correctly on the basis of E. Naville, The Temple of Deir el Bahari, v (London, 1906), pl. cxlv, the corresponding scene on the north wall.
${ }^{4}$ Information courtesy of Dr Karkowski.
${ }^{5}$ Naville, op. cit. 9.
${ }^{6}$ FEA 49 (1963), 38-40.
7 The lack of mutilation of the figure would preclude restoring the cartouche as Hatshepsut's prenomen, and also perhaps the piece's physiognomy.

3. Liverpool Museum $\mathbf{5 6 . 2 2 . 1 4 1}$ (p. 213) (courtesy of the Liverpool Museum)

TWO ROYAL RELIEFS FROM DEIR EL-BAHARI

Plate XXVIII

I. Norwich Castle Museum 15.43 (p. 212) (courtesy of the Norfolk Museums Service)

TWO ROYAL RELIEFS FROM DEIR EL-BAHARI

2. Chicago OI 17370 (pp. 217-20)

3. British Museum EA 1516 (p. 219)

Terrace. ${ }^{1}$ Today, all that remains on this wall is the fetish of Anubis, and to the left, a large empty area which once contained its worshipper(s). ${ }^{2}$

Schott, ${ }^{3}$ following a communication from Kayser, proposed that the missing figures included Hildesheim, Pelizaeus $4538,{ }^{4}$ the upper part of a male figure wearing an elaborate headdress with horns, uraeii, sun disc, and double feathers. An in situ photograph of this piece of relief had been published as at Deir el-Bahari by Steindorff, and captioned 'Der gott Amun', ${ }^{5}$ but Schott proposed that it represented Tuthmosis I, in spite of the lack of any traces of his cartouche. To the writer, there seems little justification for such an identification, particularly since such a representation of the king is without parallel in the temple. ${ }^{6}$ Additionally, the position of the figure's right arm suggests a god, holding 'life' to the king's nostrils, rather than a king in an act of worship.

Leaving aside the question of the location of the Hildesheim relief, a clue to the original appearance of the wall may be obtained from the small chapel leading off the north side of the Altar Court on the Upper Terrace, sometimes dubbed a chapel of Anubis ${ }^{7}$ or of Tuthmosis I. ${ }^{8}$ Here, a totally destroyed figure, doubtless Hatshepsut, and Tuthmosis I stand before an erased Anubis fetish. ${ }^{9}$ The similarities between Tuthmosis' representation and the Liverpool fragment are considerable; stylistically, they are almost identical, the main differences being in the position of the arms and possibly the form of the beard. Additionally, the two reliefs face in opposite directions, reflecting the mirror imaging of their respective walls. Their texts appear to differ slightly, the Altar Court image being labelled $n \underline{t r} n f r$ ir ht ( $(3-h p r-k z-R \subset)$ [. . . . . .] si-Rc [. . . . . .], and the Liverpool relief
 unlikely that the Liverpool piece came from the Anubis Chapel; at the very least, it is a far better candidate for the location than the Hildesheim piece.

The Wodehouse reliefs provide a good example of the fate suffered by many such monuments in the nineteenth century, torn from their proper place, to be left in obscurity for decades until recognized and restored, if only on paper. The walls of Deir el-Bahari suffered particularly in this respect, and doubtless many more pieces still remain lost in museums and private collections, awaiting rediscovery. ${ }^{10}$

Aidan Dodson

## A recipe for offering loaves?

A reappraisal of the baking scene in the Theban tomb of Rekhmire. The principal ingredient in the making of offering loaves in this scene, previously classed as a grain or bean, has recently been identified as the tubers of Cyperus esculentus. The processes in the preparation of the loaves or cakes are described and interpreted with reference to experimental use of this as the staple ingredient in recipes.

Among the domestic scenes in the tomb of the Eighteenth Dynasty vizier Rekhmire is a detailed picture of the preparation of offering loaves. All the necessary processes are shown,

[^133]from the grinding of the grain to the delivery of the freshly baked loaves to the Treasury of the Temple of Amun. Failing the discovery of a pharaonic cookery book, this is the closest thing to an ancient Egyptian recipe that is likely to be found. ${ }^{1}$

The major ingredient of the distinctive triangular loaves is a 'grain', O wrh, delivered in baskets under the supervision of scribes (pl. LI). Breasted ${ }^{2}$ made no attempt to identify the type of grain depicted, while Newberry ${ }^{3}$ translated wrh as durrah where it appears in other scenes in the same tomb. Davies ${ }^{4}$ established that the circular, red-brown grains were in fact a type of bean. Both Gardiner and Faulkner translated wrh as carob beans. ${ }^{5}$ However, a recent find at Qubbet el-Hawa of a jar complete with contents and label has led to the identification of wrh as the rhizomes of Cyperus esculentus. ${ }^{6}$ This is a member of the sedge family Cyperaceae which includes papyrus and some of the house plants popularly known as 'umbrella plants'. The edible parts are the small, ovoid rhizomes which form on a fibrous root system. These are about the size of a peanut with a brown ridged skin. They are rich in protein, starch, and natural sugars and have a pleasant nutty texture. Darby et al. ${ }^{7}$ claim that these 'earth almonds', ${ }^{8}$ more commonly 'tiger nuts', constituted one of the most ancient of Egyptian foodstuffs, next to wheat and barley. The plant, which grew extensively along the Nile Valley, could have been harvested from early times by hunter-gatherers. Specimens from various periods are on display at the Dokki Agriculture Museum in Cairo where they are labelled 'rush nuts' and are described as being 'much esteemed by the ancient Egyptians and found in tombs of all ages. It was used as a dessert dish and also boiled in barley drinks to render these a sweet taste.' These nuts are widely cultivated throughout Africa and are particularly popular for sweetmeats, having a taste and texture not unlike coconut. One of the commonest preparations is a 'milk' or jelly-like confection made by boiling together wheat flour, sugar, and the oily sap drained from finely ground nuts. In Ghana this is called atadwe and is considered there, as elsewhere in Africa, to promote lactation in women. ${ }^{9}$

Spain and Portugal are the major producers of this crop for the European market. In Spanish the nuts are called chufas and there is a popular chilled drink called horchata de chufas which is an infusion of the ground nuts. A similar cooling beverage is drunk in modern Egypt under the name of soubia. ${ }^{10}$ In Arabic the rhizomes are called habb el-aziz or 'precious grains', while in Britain they are more readily recognized as tiger nuts. It seems that they were cultivated in Italy as well as Egypt for their oil, which is sweetish and edible and suitable for cooking. It was also used in the production of soap. ${ }^{11}$ Ground tiger nuts have been used in Egypt in more recent times of shortage, to adulterate coffee and chocolate and are frequently substituted for almonds in confectionery and baking. ${ }^{12}$

Among the taxable commodities shown being received by Rekhmire from towns and regions under his jurisdiction, wrh occurs several times, and always in close proximity to honey. Together with honey and fruit such as dates and figs, tiger nuts must be considered as

[^134]an important sweet ingredient in ancient Egyptian bakery and confectionery. The servants who handle the delivery of $w<h$ are designated $h m w n w r t$-bnrt, 'slaves of the department of dates'. Presumably this is what led Margaret Murray ${ }^{1}$ to identify the flour they produced by pounding and sieving the wrh ( $\mathrm{pl} . \mathrm{L}$ ) as 'date flour'. Faulkner ${ }^{2}$ gives an alternative translation for ct-bnrt, namely 'the cake room'. This would fit the situation nicely; we see the part of the kitchen where sweet cakes and biscuits are made, rather than the everyday bread bakery.

The 'flour' produced by pounding tiger nuts in the primitive way shown in Rekhmire's tomb would be coarse even after sieving, with a texture similar to roughly ground almonds. As such, it cannot really be called a flour. It contains no gluten and has proved totally unsuitable for making bread without the addition of another flour, such as wheat or barley. Two servants prepare the dough for the offering loaves in a large trough set on a tripod (pl. L). One man pours on a liquid while the other stirs the mixture with a wooden paddle or spatula. The nature of the liquid added to mix the dough is uncertain, as the inscription is damaged, but it could be water, milk, oil, or melted fat or a combination of any of these. 'White fat for cakes' appears several times among donations to the major temples in the Great Harris Papyrus. ${ }^{3}$ Although no kneading is shown in the Rekhmire scene, it is clear that the mixture results in a malleable dough. Several servants are shown shaping the loaves by hand on stone slabs or boards. A bowl containing a white substance associated with the dough-mixing scene is labelled but the docket is damaged. Davies ${ }^{4}$ tentatively translates it as 'cooking the cakes' but comments that this seems to refer to a process which is not illustrated. A more reasonable interpretation might be 'warming the dough', indicating a period of rest or proving. In the case of a yeast-risen dough, this allows the yeast to start working and 'proves' that it is a live culture. Even an unleavened dough benefits from a period of rest in a constant warm temperature, as the action of warmth and moisture on the gluten in the flour makes it more digestible and the dough more elastic. Another possible interpretation of this bowl is that it contains wheat or barley flour to be mixed with the ground nuts. This would seem to be necessary to produce a dough or paste which can be shaped into loaves without cracking or crumbling. The damaged inscription therefore could refer to the ingredients needed to 'cook the cakes'.

The indications are that the loaves or cakes being made in Rekhmire's bakery were unleavened. No bread moulds are shown and the only oven is standing idle. The cakes are cooked in a wok-shaped pan over a brick-built brazier (pl. xlix). Fat is added to the pan; the docket reads 'adding fat and cooking the $\check{s} r t$ cakes'. Although it is possible to make leavened bread similar to lightly risen scones, cooked over the heat source rather than in an oven, the shape of the pan shown is unsuitable for such cakes. Leavened cakes or flat meal-cakes cook better on a heavy-based flat pan or bakestone. The šr $t$ cakes are clearly triangular and, when cooked are flat enough to be stacked. $\check{r}\ulcorner t$ seems to be a descriptive term, perhaps meaning 'sweet cake' or indicating the use of a particular ingredient, such as the ground tiger nuts. The loaf labelled $\check{s} \stackrel{\iota}{r}$ in another bakery scene from the same tomb ${ }^{5}$ is shaped like a papyrus flower, so the term would seem not to describe the shape of the bread. The apparent pyramidal or conical shape of these offering loaves is probably an aspect of the Egyptian convention for showing an object in plan when the elevation does not adequately define the object.

Experiments with breads made with ground tiger nuts as a major ingredient have proved interesting and palatable. A dough made with equal quantities of ground nuts and wholemeal semolina, mixed with oil and water, resulted in cakes which could be shallow fried and had a texture similar to oatcakes or a coarse shortbread. The recipe used was based

[^135]on the sweetened semolina cakes prepared in the Lebanon and other Middle Eastern countries where honey and nuts are commonly included in such confections. This sort of cake would be better if baked in an oven. A dough made with equal quantities of ground tiger nuts and wholemeal flour, enriched with melted fat and mixed with water, was more versatile and could be shaped, rolled, and turned like a pastry. The results of shallow frying flattened triangles of this paste were very successful. The bread puffs up and bubbles attractively and is coloured a deep golden brown speckled with darker brown. Some of the finished loaves shown in Rekhmire's bakery have crinkled outlines and are coloured yellow with red edges (pl. xLIX).

Another important ingredient delivered to the Treasury of the Temple with the wrh is honey. On the far left of this scene is a rare depiction of ancient Egyptian apiculture. The hives (pl. Xlviir) are formed from a stack of pottery tubes or jars; such pottery has been identified at Kahun, ${ }^{1}$ and similar hives were in use in Egypt at least as recently as $1974 .{ }^{2} \mathrm{~A}$ large four-handled amphora of honey is prominent beside the last pair of cooks. One man reaches into a jar while his partner stirs the contents of a cooking pan (pl. xlix). Above them is a pile of dates but the accompanying docket is badly damaged; indeed, Newberry ${ }^{3}$ does not record the presence of any inscription in this part of the scene. It appears that the cooks are preparing a syrup or puree of dates and honey. It is tempting to think that the cakes or pastries were served like American breakfast pancakes or waffles, with a generous portion of syrup poured over them. A pastry called atayef is used in a similar way in modern Egypt. It is sold in 10 cm diameter rounds, already fried on one side. The $\frac{1}{2} \mathrm{~cm}$ thick discs are folded in half over a filling of sweetened ground nuts before being fried in oil or brushed with melted butter and baked. These pastries are usually served saturated with syrup and are especially popular on festival occasions. ${ }^{4}$ Some Sephardic cakes, cooked at Passover, contain no flour but are made with ground almonds or coconut instead. However, the mixtures are of a batter-like consistency and must be cooked in pans in the oven. An accompaniment to the Passover feast is harosset, a jam or paste made with dates and raisins. Its colour is said to remind the Jews of the rich Nile mud. ${ }^{5}$ Sweetmeats, mixtures of ground almonds and sugar made into a paste with egg white, are common throughout the Middle East. A lightly baked variety, shaped like bracelets and called kakh bi koz are particularly served at wedding feasts. ${ }^{6}$

Piles of 'green' (i.e. fresh) loaves are delivered by a man carrying them in two baskets or nets suspended from a yoke (pl. xLix). Rekhmire oversees the whole business and it is his expressed desire that such loaves be made fresh every day as a suitable and highly acceptable offering to the god. It would seem that the god (or his priests?) had a sweet tooth, or at least a weakness for this nut-flavoured pâtisserie sweetened with honey and dates.

Hilary Wilson

## A relief of a 'Chief of the Gang' from Deir el-Medineh at Wheaton College, Illinois

Publication of Chicago OI ${ }_{1}$ 7370, a limestone relief fragment on indefinite loan to Wheaton College. The man depicted on it, whose name is only partly preserved, is identified by the author as Neferhotep the Younger, who was 'Chief of the Gang' from late in the reign of Ramesses II into that of Seti II.

In 1941 a collection of seventy-nine Egyptian objects came to Wheaton College from the Oriental Institute of the University of Chicago on 'indefinite loan' and they have been a part

[^136]of a small museum of the Archaeology Department ever since. Of special interest is a limestone relief fragment, probably from an offering stela, it bears the Oriental Institute (OI) registration number, 17370, but it came from the Art Institute of Chicago in 1941, the year its Egyptian wing was closed. ${ }^{1}$ The Art Institutes registry number, (19)24.579, is still preserved on the verso. Unfortunately, records from the Art Institute were unable to furnish any information on its provenance or who may have donated it. T. G. Allen's Handbook of the Egyptian Collection (of the Art Institute of Chicago) was published in 1923, a year before this relief was registered at the Art Institute in 1924, and thus it was not mentioned in that publication.

All we have, then, is the fragment itself which is 40 cm at its highest point and 23.7 cm at the widest part. It depicts a man whose upper torso, head, and right hand are well preserved (pl. XXVIII, 2). The left arm, between the elbow and shoulder, is covered by the garment, but the forearm and hand are completely lost. White paint is still clearly visible on the clothing, while traces of red can be seen on the face, arm, and hand. Over the figure, whose hand was raised in the typical gesture for worship or adoration, are five vertical lines of text, the outer two being virtually obliterated. The middle three columns, while containing lacunae, are for the most part legible. The starched, pleated garment, with its pointed, elbow-length sleeves, is characteristic of the Ramesside era. But the dating and provenance can be narrowed once the title and identity of the portrayed figure is established.

For the purpose of this discussion, we shall refer to the columns of the text as $1-5$ from right to left. The fifth, which is mostly obliterated, is where the name of the man is expected. The only sign that is at all clear is $\begin{aligned} & \text {, , and to the left of it a } \Delta \text { appears to be written. If this }\end{aligned}$ reading is correct, then, in all likelihood, the partially preserved name is Neferhotep. ${ }^{2}$

In the fourth column the man's title is clear: hry iswt, 'Chief of the Gang'. ${ }^{3}$ A horizontal register line is visible over the second and third columns, indicating that the title would have continued at the top of the fifth. In this lacuna, under the proper lighting, one can just make out the lower portion of a rectangular sign with $\Delta$ under it. This looks like $\S$, which almost certainly would make the missing sign to the left of the first group the vertical $\beta_{\text {over a }} \quad-s t$ $m \gg t$ which would have been preceded by $\Longleftarrow$. Thus, the full title would be 'Chief of the Gang in the Place of Truth'. The preceding columns ( $1-3$ ), despite the lacunae, suggest that an offering formula is inscribed here: (I) //\|s(ht)p; (2) \|ik;sn; (3)rcnbn; (4) //k; n $h r(y) w$ iswt; (5) [ $m s] t[m ;\ulcorner t] n f r[h] t[p m ; r] h r w]$.

In his study of the expression st m $\boldsymbol{m}^{〔} t$, Černy $\dot{y}^{4}$ concluded that it referred to the tomb of the living Pharaoh that was under construction. This restriction of the meaning to the Valley of the Kings differs from other views. For instance, Caminos ${ }^{5}$ thought that it included Drac abu'l Naga, Qurna, and the area near the Ramesseum. Most recently, Ventura ${ }^{6}$ has undertaken a thorough study of the expressions st m; ${ }^{\circ} t$ and $p^{3} h r$. He argues that $p^{3} h r$ is the tomb of the king, whereas st m3>t refers to the Theban necropolis itself. ${ }^{7}$ Ventura suggests that the origin of st m>>t might be traced to the goddess Maat who is associated with the Theban necropolis and the great peak that overlooked the entire area. ${ }^{8}$ It would appear, then, that 'the Place of Truth' refers to a broader region than Černý had thought. Finally,

[^137]since st mirt replaces the Eighteenth Dynasty counterpart 'Great Place', this ties this expression to the Ramesside era. ${ }^{1}$

The title ḥry iswt m st mı厄t is only held by two men at one time and Černý has identified thirty-one holders of this office from the Nineteenth through Twenty-first Dynasties. ${ }^{2}$ Only two bear the name Neferhotep. In tomb 216 at Deir el-Medineh the genealogy of these two is established: Neferhotep (the elder) was the father of Neb-Nefer, who was the father of Neferhotep (the younger). ${ }^{3}$ Tomb 216 , described by Bierbrier as 'by far the largest and most splendid in the workmen's village although now sadly ruined', ${ }^{4}$ is the tomb of Neferhotep the younger; the elder Neferhotep was buried in tomb 6 at Deir el-Medineh. ${ }^{5}$ The extant inscribed objects of the senior Neferhotep are few in number, occupying only two pages in Kitchen's Ramesside Inscriptions ( $\mathrm{I}, 380$ and iII, 576). The epigraphic remains of his grandson, on the other hand, occupy sixteen pages in Ramesside Inscriptions (III, 587-98; IV, 177-9 and 238-9).

Neferhotep I was the Chief of the Gang from the days of Horemheb to at least Year 5 of Ramesses II. ${ }^{6}$ Nebnefer succeeded his father and held the office through around the Year 40 of Ramesses II, based on evidence tying him to the viziership of Paser and Khay. ${ }^{7}$ Neferhotep II followed his father during the final decades of Ramesses II's reign and beyond. ${ }^{8}$ The junior Neferhotep's name is found on ostraca dated to Years 3, 4, and 5 of Merneptah, and an ostracon at the Metropolitan Museum (New York), which mentions him, also refers to the accession of Seti II. ${ }^{9}$ Paneb had become the next 'Chief of the Gang' by the fifth year of Seti II, ${ }^{10}$ so Neferhotep II was in his seventies when he died. ${ }^{11}$

Which of the two is depicted on the Wheaton piece is not easy to decide. Since the younger has far more inscribed objects attributed to him, one might be inclined to attribute it to him on the grounds of mathematical probability. But that alone is not compelling. It is, however, supported by the similarity of execution of this piece to other representations of Neferhotep II, especially the small stela, BM ${ }_{5} 16$ (pl. XXVIII, 3 ) which exhibits the same dress, hair style, and treatment of the right hand. There are noticeable differences in the facial features; the British Museum figure has a pudgy face and no beard. However, the same puffy facial features are in evidence on King Amenhotep I and Queen Ahmes-Nefertari who are portrayed in the upper register. The variation between the British Museum stela and the Wheaton fragment might be attributed to different craftsmen.

If this is a portrayal of Neferhotep II, then we are looking at a man who had a long career and would have supervised the work on the tombs of Ramesses II (at least its completion) and Merneptah, and may have started work on Seti II's tomb. On the personal side, Neferhotep and his wife Webkhet were childless and so reared a foster son, Paneb. ${ }^{12}$ Paneb turned out to be a churlish individual who threatened to kill the foreman Hay, as well as his own foster father. ${ }^{13}$ Paneb's hateful treatment of Neferhotep led the benevolent 'Chief of the Gang' to direct his affections to another boy, Hesynebef, who started out as a household slave, ${ }^{14}$ but was later elevated to the position of 'royal workman' and depicted in Neferhotep's tomb in the main hall of the chapel. ${ }^{15}$

A final point of some importance concerning Neferhotep II is the manner of his death. P. Salt (recto I, 2) contains the report of Neferhotep's brother, to the effect that the 'Chief of the Gang' had been killed by 'the enemy' ( $p ; h r(w) y$ ), with no name given. ${ }^{16}$ While Černy

[^138]Plate XXVIII

I. Norwich Castle Museum 15.43 (p. 212) (courtesy of the Norfolk Museums Service)

TWO ROYAL RELIEFS FROM DEIR EL-BAHARI

2. Chicago OI 17370 (pp. 217-20)

3. British Museum EA 1516 (p. 219)
mused over the possibility that Paneb himself was responsible, he opts for 'the enemy' being the usurper Amenmesses and Neferhotep being killed in the fighting that occurred when Seti II was reclaiming Thebes from the renegade. ${ }^{1}$ This interpretation has been more recently endorsed by Bierbrier who thinks that Paneb took advantage of the confusion surrounding the civil strife, paid baksheesh (five of Neferhotep's slaves!) to the vizier Seti, and received the office of his stepfather. ${ }^{2}$

This scenario is certainly plausible, but one wonders how Neferhotep, a man in his seventies and a political threat to no one, could have been killed in the insurrection. Perhaps we should still entertain the possibility that Paneb made good his earlier threat and killed the old man at the time of confusion for the purpose of seizing the office of 'the Chief of the Gang'. He may have extended his vendetta against Neferhotep by vandalizing his tomb (216), which we have already noted is badly damaged.

If the Wheaton relief is Neferhotep the younger, then we have another depiction of a man whose life at Deir el-Medineh is well documented and most intriguing.

James K. Hoffmeier

## A new look at the Adoption Papyrus

Since the publication of the Adoption Papyrus (P. Ashmolean Museum 1945.96), commentators have mistakenly understood that Nebnefer, the husband of Rennefer, was deceased when the text was written. The author argues that Nebnefer was alive for all the proceedings. This eliminates the untenable earlier assumption that a deceased individual was an active party to a contract. A new translation of the text with some commentary is given.

Since its editio princeps by Sir Alan Gardiner in this fournal, ${ }^{3}$ the Adoption Papyrus has elicited a great deal of discussion ${ }^{4}$ because of its importance for our understanding of the practice of adoption in ancient Egypt. The text has two sections; the first details the 'adoption' of Nanefer by her husband, Nebnefer, and the second section, written seventeen years later, refers, according to Gardiner, to the emancipation of three children of a slave that Rennefer (apparently another name for Nanefer) and Nebnefer had purchased. The eldest female child, Taymenniut, was then married to Padiu, Rennefer's younger brother, and Padiu adopted as heir and guardian for the three children. ${ }^{5}$

Recently I had the opportunity to look again at this text in detail, ${ }^{6}$ and discovered one glaring inconsistency not addressed by any scholar. Gardiner (and all who followed) argued that, in the second section of the text, dated to Year 18 of Ramesses XI, Nebnefer was deceased and his widow, Rennefer, was the party in charge of carrying out the procedures mentioned in the text. He cites verso 9-1 I as proof for his arguments. ${ }^{7}$

And as for these matters of which I have spoken, they are entrusted in their entirety to Padiu, this son of mine who dealt well with me while I was a widow and when my husband had died.

[^139]Acceptance of this translation has caused the mistaken view that a deceased person could be party to a legal contract in ancient Egypt. ${ }^{1}$ By the very nature of contracts, this is clearly an illogical and impossible situation. How do we deal with this text, then? A possible solution is to take the section translated by Gardiner as having prospective meaning:

As for these matters of which I have spoken in their entirety (above), they are passed on (handed over) to Padiu, this my son, that good might be done for me, ${ }^{2}$ when I am a widow, when my husband is dead.
This translation would imply that Nebnefer was not dead at the time of writing. Rather, he is listed as one of the two parties in this text. With Nebnefer alive and taking an active role in the affairs described, it would make sense for the initial phrase of the second section to read 'we purchased'. The following phrase 'I took'. would thus refer to Nebnefer, while 'she said' would clearly refer to Rennefer. My interpretation of the entire text is as follows:
I. Lines $1-7$, a copy of a document written in the first year of Ramesses XI. In this section Nanefer states that her husband, Nebnefer, has made a document in which he states that all his property which they had acquired while married either now belongs to her or will belong to her after his death. ${ }^{3}$
2. Lines 7-12, list of witnesses to the document, including a statement by Nebnefer that he handed over this property in the presence of his sister.
3. Lines $13-17$, protocol of second section of the document dated to regnal Year 18 of Ramesses XI, followed by a statement of Nebnefer ${ }^{4}$ and his wife Rennefer in which they recount the purchase of a female slave who subsequently had three children, presumably fathered by Nebnefer, though this is not stated.
4. Lines I $^{7}$-verso I , continuation of statement by Nebnefer (pronouns change to first person singular) noting the raising of these three children. He states that his younger brother, Padiu, married the eldest child of the slave. Nebnefer emancipates this child and declares that any children she bears will be free. Nebnefer finally adopts his younger brother as his son.
5. Verso i-I i, statement by Rennefer ( $d d \cdot s$, 'she said'), who proceeds to emancipate and adopt the three children of their slave and swears an oath protecting them from counterclaim made on them by any relative of their mother (the slave) or their father (presumably Nebnefer). Therein she also mentions that Padiu is now her son. She declares that all her property is to be divided equally among her four children. Lastly she appoints Padiu as executor, with the desire that he take care of her when she becomes a widow.
6. Verso in-i3, list of witnesses to entire text.

My understanding of the text is that Nebnefer and Rennefer acted in concert to care for the children of the slave, as well as to emancipate them. ${ }^{5}$ In contrast to P. Louvre 7832, ${ }^{6}$
${ }^{1}$ Ibid. 25.
${ }^{2}$ Reading $i r \cdot t(w) n \cdot i n f r$, and not as a past participle as did Gardiner. Groll, op. cit. 49, does not note this example of a non-initial prospective $s d m \cdot t w \cdot f$. See J. Černý and S. Groll, Late Egyptian Grammar (Rome, 1975), 462, ch. 47. The two following circumstantial first present constructions (ibid., ch. 19.13) thus refer to the future circumstance of becoming a widow.
${ }^{3}$ The text of the first section ends abruptly in mid sentence and then follows the witnesses to the text. My understanding of this is that the scribe who wrote the entire document in Year 18 accidentally miscopied the text of the original document from which he was reading. See the comments of Allam, op. cit. 260, no. I2 and Theodorides, RIDA 12 (1965), 83, no. 21.
${ }^{4}$ Ibid. 12 (1965), 85 , no. 25 and 104 -9, goes to the extent in his translation and commentary of deleting Nebnefer's active role in this portion of the text.
${ }^{5}$ P. Pestman, Marriage and Matrimonial Property in Ancient Egypt (Leiden, 1961), 153, no. io.
${ }^{6}$ See M. Malinine, AHDO 5 (1950/1), 76-7; F. Griffith, Rylands III, 57; Allam, OrAnt 11 (1972), 284-9.
where an individual is adopted by a man alone, our text by necessity must have statements by both the 'father' Nebnefer because he is declaring someone as his heir, as well as by Rennefer, their 'mother', because of the transaction that had taken place in Year 1 of Ramesses XI. Since Rennefer already had a major claim upon the property of her husband, no transfer of that property could legally be made without her consent. It is clear that this document was written as it was because of the complex circumstances involved with the original transfer of property, the emancipation of the children of the slave, and their adoption and designation as heirs, with the added twist of designating the younger brother of Nebnefer as co-heir and executor of the estate. ${ }^{1}$ With these comments in mind, I would like to offer this new literal translation of the text:

Regnal Year $\mathbf{1}$, third month of summer, day 20, under the majesty of the king Ramesses-appearing-in-Thebes, 1.p.h., beloved of Amun, the god, ruler of Heliopolis, 1.p.h., given life forever and ever. Today the proclamation of the appearance in glory of this august god to Amun when he stands up and appears, offering to Amun. Then Nebnefer, my husband, made a document for me, the chantress of Seth, Nanefer, whereupon he adopted (me) as his child. ${ }^{2}$ whereupon he wrote for me all his property, for there was no (5) son or daughter of his apart from me. 'All of the profits ${ }^{3}$ that I made with her, I will pass them on to Nanefer, my wife. If these my siblings stand and make claim on her at my death tomorrow or thereafter, and he says: "Let the share of my brother be given (to me)" (text omitted).'

In the presence of a great many witnesses: the stable-master Rer, the stable-master Kairsu, the stable-master Beniryerduanefer; in the presence of the stable-master Nebnefer, son of Anerkaia; in the presence of the Sherden Pakamen; (io) in the presence of the Sherden Satameniu and his wife Adjedaa. Now, it is in the presence of Huiriumu, my sister, that I have made a passing over to Rennefer, my wife today.

Regnal Year i8, first month of inundation, day io, under the majesty of the king, lord of the two lands, Menmaatre-setepenptah, l.p.h., the son of Re, lord of appearances, Ramesses-appearing-in-Thebes, beloved of Amun, the god, ruler of Heliopolis, given life forever and ever. On this day, ( 15 ) that which the stable-master Nebnefer, together with his wife, the chantress of Seth of Sepermeru ${ }^{4}$ Rennefer, said: 'We purchased a female slave, Dinihetiri, and she bore these three children, one male and two female, total: three. I took them, I nourished them and I caused them to grow up. I have reached today with them. They have not done evil against me, rather they have acted well towards me, while there is not my son or daughter (20) except ${ }^{5}$ them. Then the stable-master Padiu entered my house and he took Taamenniut, their eldest sister, as wife, he being related to me, ${ }^{6}$ he being my

[^140]younger brother. I accepted him for her and he is with her today. ${ }^{1}$ And now I have made her a freewoman of the land of Pharaoh, l.p.h. If she bears either a son or a daughter, they will be freemen of the land of Pharaoh, l.p.h., in the very exact likeness. They (the wife and future children) are with ${ }^{2}$ the stable-master Padiu, (25) my younger brother, whereas the younger ones (the siblings of the wife) will be with their elder sister in the house of Padiu, the stable-master, my younger brother. I adopt ${ }^{3}$ him (verso i) as my son today in the exact manner as them.'

She (Rennefer) said: 'As Amun endures and as the Ruler, 1.p.h., endures, I manumit these individuals. It is as freemen of the land of Pharaoh that I register them. ${ }^{4}$ Should a son, a daughter, a brother or a sister of their mother or their father dispute with them ${ }^{5}$ except Padiu, my son, whereas (verso 5) they are not with him as slaves by any means, rather they are with him as siblings and children, they being freemen of the land, may a donkey sodomize him, may a donkey sodomize his wife, the one who will say 'slave' to one among them. If there belong to me fields in the countryside, or if there belongs to me any property of the land, or if there belongs to me merchandise, ${ }^{6}$ they will be divided among my four children, Padiu being one of them. As for these matters of which (verso ro) I have spoken in their entirety, they are passed on (handed over) to ${ }^{7}$ Padiu, this my son, that good might be done for me, when I am a widow, when my husband is dead.'

In the presence of many witnesses: the stable-master Setiemheb; the chantress of Seth, Taiuhery; the farmer Suawiamun; in the presence of Taimutnefer; the chantress of Anty, ${ }^{8}$ Tanetnephthys.

Eugene Cruz-Uribe

## A casket fragment of Ramesses IX in the Museum of Archaeology and Anthropology, Cambridge

Publication of an ivory panel in Cambridge which originally formed part of the box Cairo JE 2627I from the Deir el-Bahri royal cache.

The fragment which forms the subject of the present note bears the accession number 1948.2744 in the Cambridge University Museum of Archaeology and Anthropology. ${ }^{9}$ The

[^141]piece consists of a strip of wood ${ }^{1} 16 \mathrm{~cm}$ long, 2.4 cm wide and approximately 1.0 cm deep, to which is attached a veneer of ivory ${ }^{2}$ ( 0.2 cm thick), fairly coarsely incised with the names and titulary of Ramesses IX (pl. XXIX, 2). The surface of this veneer is somewhat discoloured, and its upper edge damaged. Remains of tenons are in evidence at either end of the wooden strip ( $\mathrm{pl} . \mathrm{XXX}, \mathrm{r}$ ), whilst two holes located 9.3 cm apart on the lower edge still contain broken dowels ( pl . XXX, 2). The upper edge of the veneer projects approximately 0.1 cm above the top of the wood and is mitred to abut another strip of veneer, now lost. Traces of the glue employed to fix the latter in place are still visible.

The Cambridge fragment was acquired in 1948 with the residue of the collection formed by Joseph John Acworth, ${ }^{3}$ the bulk of which had been retained by the British Museum. ${ }^{4}$ Acworth had acquired the panel for the princely sum of £3. ios. at the Meux sale in 1911, ${ }^{5}$ where it was described as follows:

Portion of a frame of a box, covered with ivory, upon which are inscribed the prenomen and nomen and titles of Ramesses X., ${ }^{6}$ King of Egypt, about BC in 150 . The number of monuments inscribed with the name of Ramesses X . is small, and this fragment of a box is therefore of considerable interest. Length $6_{8}^{3}$ in. ${ }^{7}$

The fragment is mentioned in both editions of Budge's catalogue of the Meux collection, ${ }^{8}$ from which one may deduce that it had been acquired by Lady Meux in Egypt in $1882 .{ }^{9}$ Budge's description of the piece is essentially that reproduced in the sale catalogue, though with the addition of a transcription, transliteration, and translation of the hieroglyphic text. This text consists of the usual extracts from the king's formalized titulary, which may be rendered: . . . Strong Bull, Arisen in Thebes; King of Upper and Lower Egypt, Neferkare-setepenre; He of the Two Ladies, Mighty of Sword Who Sustains the Two Lands; Son of Re, Ramesses-khaemwast-mereramun; Golden Falcon, Rich of Years like . . . ${ }^{10}$

The interest of this fragment lies in the fact that the box to which it had once been attached can be identified as a compartmented casket of Ramesses IX discovered with the king's mummy in the DB 320 royal cache in July, i88I. ${ }^{11}$ In a number of pieces when found, this casket (Cairo JE 26271), ${ }^{12}$ constructed of wood overlaid with leather, decorated with ivory

[^142]

Fig. I
veneer and inlaid with ivory and coloured glass, was subsequently reassembled at Bulaq. ${ }^{1}$ Despite its quality, the box aroused surprisingly little interest at the time of its discovery; it has since received wider notice owing to its inclusion in the recent exhibition Nofret die Schöne/La Femme au temps des Pharaons. ${ }^{2}$

The coloured photograph reproduced in the catalogues of the Nofret/Femme exhibition would suggest that the Cairo casket is essentially intact. In fact, the box has suffered not inconsiderable damage, specifically to the right-hand side, which lacks the original,
${ }^{1}$ G. Maspero, Les Momies royales de Déir-el-Bahar̂̂ (Cairo, 1889), 584, $7^{\circ}$.
${ }^{2}$ Munich-Berlin-Hildesheim, Nofret-die Schöne (1984), 122 f., no. 56; Brussels, La Femme au temps des Pharaons (1985), 122 f., no. 56.

I. Cairo JE 2627 I (right side) (original photo courtesy Staatliche Sammlung Ägyptischer Kunst, Munich)

$\begin{array}{llllllllllllllllll}80 & 90 & 100 & 110 & 120 & 130 & 140 & 150 & 160 & 170 & 180 & 190 & 200 & 210 & 220 & 230 & 240 & 2\end{array}$

2. Museum of Archaeology and Anthropology, Cambridge 1948.2744 (front) (photo courtesy of the Museum)



## 2. Bottom edge

Cambridge, Museum of Archaeology and Anthrópology, 1948.2744 (photo courtesy of the Museum)
A CASKET FRAGMENT OF RAMESSES IX (pp. 223-6)

3. British Museum, EA 43070

A GLAZED COMPOSITION SISTRUM HANDLE (p. 232)
veneered, upper part of its frame. ${ }^{1}$ That the Cambridge fragment represents this missing section, which its dimensions, form, and decoration match precisely, ${ }^{2}$ is clear from a photograph (pl. XXIX, r). ${ }^{3}$ Moreover, the text incised upon the upper-edge panel of the chest's left end is identical in content and execution to that on the Cambridge fragment, with the significant exception that the hieroglyphs read in the opposite direction-to conform to the symmetry of the box's texts as a whole. Cf. fig. i. ${ }^{4}$

The circumstances and date of acquisition of the Cambridge fragment probably indicate that it originated in the Deir el-Bahri royal cache, like the box of which it forms a part, having been removed by the Abd el-Rassuls or pocketed by one of Émile Brugsch's workmen when the tomb was cleared in 188 I . It is perhaps less likely (though an alternative find-spot might be argued from the differential patination of the ivory of the box and the ivory of the panel) that the piece came from KV 6, ${ }^{5}$ the original burial-place of Ramesses IX, from which the DB 320 box had previously been salvaged in or about Year 7 of Siamun. ${ }^{6}$

## Aidan Dodson and C. Nicholas Reeves

## The wives of Pinudjem II-a topic for discussion

The allegedly indisputable point in the genealogy of the Twenty-first Dynasty that the High Priest Pinudjem II married first Nesikhons, and then, after Nesikhons's death in Year 5 of Siamun, Istemkheb is questioned. The point of departure is two sets of coffins prepared for Istemkheb. One was made about twenty years earlier than the other, although she is given the same titles on both coffins. During the lifetime of Istemkheb, at the beginning of Siamun's reign, Nesikhons appeared beside Pinudjem as his principal wife. A number of atypical decrees of Amun were issued for her, and she was buried in the usurped, earlier set of coffins of Istemkheb. The reconstruction of events proposed here involves a case of divorce between Pinudjem and Istemkheb, connected with a deprivation of the latter of all her honorary titles and privileges, in favour of Nesikhons. After the premature and suspicious death of young Nesikhons, Istemkheb apparently regained her position.

The progress of research into the Twenty-first Dynasty involves continuous reappraisal of some of the genealogical and chronological assumptions once held. Sometimes, although long accepted, these no longer appear certain when reconsidered. One such apparent constant is the view that Nesikhons was the first and principal wife of the High Priest Pinudjem II, while Istemkheb was his second wife, whom he married only after Nesikhons's death. This article submits this assumption to examination.

After Maspero ${ }^{7}$ published the text and a translation of the famous decree of Amun in favour of Nesikhons, a discussion began on the reason for this atypical oracle, and on the real

[^143]nature of the personal relations between Nesikhons and Pinudjem. Maspero has translated two fragments of the decree as follows: 'J'ai observé Nsikhonsou, et elle n'a rien fait de mal contre Pinot'mou', ${ }^{1}$ and 'J'ai été cause qu'elle $n$ 'a jamais cherché à aire contre Pinot' mou, le fils d'Isimkhobiou aucun maléfice'. ${ }^{2}$ Later, the same passages were given a prospective aspect when translated by Gunn and Edwards: ${ }^{3}$ (section III) 'I will cause Neskhons will save Pinudjem, my servant, from any accusation of wrong/. . . / and no wrong shall be done to Neskhons', (section IV) 'I will turn the heart of Neskhons, and she shall not do anything evil to Pinudjem', and (section V) '. . . nothing evil will befall Pinudjem, and that it will not befall his wives or his children, or his brethren, or Itawi, or Nestanebtashru, or Mesehret or Tjanufer, the children of Neskhons'. Here grammatical interpretation plays an important role. The first version implies an earthly activity on the part of Nesikhons towards Pinudjem, the second one, her actions from the hereafter. One thing seems certain: the relations between Pinudjem and Neskhons in the period directly preceding the death of the latter (i.e. during the first regnal years of Siamun) were curiously complicated. Spiegelberg, ${ }^{4}$ and Kees, have concluded that '. . . dahinter ein berechtigtes Schuldgefühl des überlebenden Ehemannes stecken könnte, besonders da er eine zweite Frau, nahe Verwandte der Neskhons geheiratet hatte! Zudem war der Gatte bei der Grabausstattung der Neskhons recht knausrig verfahren'. ${ }^{5}$

The two statements in italics seem to be most controversial. In charging Pinudjem with 'stinginess' in equipping Nesikhons with her funeral furniture, Kees was undoubtedly influenced by the fact that a set of coffins which had been prepared for someone else was used for her. This conclusion is mistaken, however, because members of the Twenty-first Dynasty high priests' family were quite often buried in reused coffins. One can cite, for example, Nany (the daughter of Herihor), ${ }^{6}$ Ankhefenmut (the son of Menkheperre), ${ }^{7}$ or Maatkare (the daughter of Pinudjem II). ${ }^{8}$ The adaptation of a coffin for Nesikhons is not exceptional. Much more important is the question, for whom was the coffin previously prepared?

Some years ago I expressed an opinion ${ }^{9}$ that Istemkheb, the original possessor of the coffin used for Nesikhons, was a person other than Pinudjem's wife, a namesake of that lady, whose coffins were also found in the royal cache. I was wrong-on both sets of coffins inscriptions give the distinct filiation: Istemkheb, daughter of the High Priest Menkheperre. I was able to verify this during my last stay in Cairo Museum. I was previously deceived by the great difference in style between the two sets of coffins. The one used for Nesikhons (Cairo CG 6iO30) is without any doubt much earlier in style, and was presumably executed in the early pontificate of Pinudjem II. The coffin that contained the body of Istemkheb (Cairo CG 6rio3i) dates from the very late Twenty-first Dynasty, and is some twenty years later than the other one. Nevertheless, both sets of coffins were prepared for the same Istemkheb-daughter of the High Priest Menkheperre and wife (probably also sister) of Pinudjem II.

This was the Istemkheb who had borne the honourable title of First Lady in Thebes ص 5 of Siamun. The main celebrant in the burial ceremonies both of Nesikhons and Pinudjem II was Djedkhonsefankh, son of Pinudjem II and deputy High Priest in Thebes, although

[^144]without the title. ${ }^{1}$ Another son of Pinudjem II, Psusennes, who took the office of High Priest from his father, was not mentioned in the dockets from the royal cache, because he was probably absent from Thebes and held a post of importance at Tanis beside King Siamun. This was Psusennes who united the titles of King and High Priest of Thebes after Siamun's death. This implies a Tanite activity by Psusennes, perhaps in the function of High Priest in Tanis, before he became king. In any case, in Year 5 of Siamun, i.e. at the time of Nesikhons's death, both sons of Pinudjem II, Psusennes and Djedkhonsefankh, were already adult enough to hold, in the near future, two crucial posts. These adult children of Pinudjem II must, therefore, have been born by Istemkheb, long Pinudjem's wife, as the inscriptions on the coffin usurped for Nesikhons prove. The decree quoted above does not mention Psusennes nor Djedkhonsefankh among the named children of Nesikhons, and it would be hard to understand why Nesikhons did not have her own coffin, if she had been Pinudjem's wife for many years. In conclusion, the widely accepted assumption that Istemkheb was the second wife of Pinudjem, after Nesikhons, seems unlikely.

Moreover, Nesikhons is never called, expressis verbis, wife of Pinudjem II. This is only a hypothesis based on a number of premisses, primarily on Pinudjem's generosity in providing Nesikhons with funeral equipment. One should mention the magnificent funerary papyrus (Cairo JE 26230), the rich ensemble of ushebti, the unique set of decrees on papyrus and wooden tablets, ${ }^{2}$ the Karnak decree guaranteeing her personal property, ${ }^{3}$ the fact of deification of Nesikhons by the oracle of Amun, ${ }^{4}$ and finally the long list of her honorary titles (among others the title of First Great Favourite of Amun-Re), undoubtedly bringing material profit. Pinudjem II undoubtedly possessed a harem, as is hinted at by the term n;y•f hmwt in the decree in favour of Nesikhons. It is, however, difficult to imagine that he had two principal wives at the same time, as would have to be concluded from the identical titles of Istemkheb and Nesikhons. ${ }^{5}$

A more plausible hypothesis would assume that, in fact, the only principal wife of Pinudjem II, and the mother of his two eldest sons, was the First Chief of the Harem of Amun, Istemkheb, daughter of Menkheperre and sister of Pinudjem. For some unknown reason, perhaps of a personal, even intimate, nature, perhaps having some connection with the troubles in the Theban administration at the beginning of Siamun's reign, ${ }^{6}$ Pinudjem's niece Nesikhons appeared beside him with numerous privileges and titles. Since these titles are identical with those enumerated on the coffin (the older, usurped one) of Istemkheb, and since the possession of the same high honourable titles by two different women at the same time is hardly imaginable, the only explanation seems to be a temporary deprivation of Istemkheb of the privileges for the benefit of Nesikhons, the new favourite of the High Priest Pinudjem II. In Year 5 of Siamun, on the occasion of the feast of the New Year, an oracle of Amun was given, concerning the personal property of the family of Nesikhons. Several months later Nesikhons died. Although we know nothing about the cause of Nesikhons's decease, the premature death of that young ${ }^{7}$ woman is somewhat surprising, and can, I
${ }^{1}$ Idem, BES 5, 83-6.
${ }^{2}$ Papyrus Cairo CG 58032: W. Golénischeff, Papyrus hiératiques . .., 169-96; wooden tablet Cairo JE 46891: cf. p. 227 and n. 3; wooden tablet in Louvre (so-called Rogers's tablet): Maspero, $R T 2$ (1880), 13-18; Černý, BIFAO 4I (1942), ro5-18; wooden tablet in British Museum (so-called MacCallum's tablet): Birch, PSBA ( 1883 ), 76-80; Černý, loc. cit.
${ }^{3}$ Inscription on the tenth pylon at Karnak, cf. A. Gardiner, $7 E A 48$ (1962), 57-69.
${ }^{4}$ The decree on the wooden tablet in Cairo. A similar deification decree for Pinudjem himself has been found on a papyrus on his mummy, Cairo CG 58033, cf. Golénischeff, op. cit. 196-209; Daressy, RT 32 (1910), 175-86.
${ }^{5}$ K. A. Kitchen, The Third Intermediate Period in Egypt (Warminster, 1972/86), 275: 'The reigning pontiff (Pinudjem II) had two principal wives-his sister, Istemkheb D and his niece, Nesikhons A.'
${ }^{6}{ }^{6}$ Ibid. 277; E. Naville, Inscription historique de Pinodjem III (Paris, 1883), passim.
${ }^{7}$ Nesikhons, as one can conclude from the physical anthropologist's description, was young and pretty at her
think, be considered suspicious. From the short period of intimate relations between Pinudjem and Nesikhons four children, enumerated in the above quoted decree (Itawy, Nesitanebetasheru, Masaharta, and Tjanefer), seem to have originated. Only Nesitanebetasheru is known to us through her burial equipment, found in the royal cache. ${ }^{1}$

If the above reconstruction is correct, after the premature death of Nesikhons the personal situation of the aged Pinudjem became extremely difficult. This explains rather well the series of somewhat strange decrees. Such oracles, before they were recorded on the tablets and papyri, had been most probably expressed 'by the God himself' in public. It is therefore feasible that the real purpose of the decrees lay in an actual earthly protection of Pinudjem and his minor children, as well as in a post-mortem safeguarding of Nesikhons against the expected vengeance of somebody unnamed (Istemkheb?). Although Amun himself decided that '. . . Nesikhons will save Pinudjem from any accusation of wrong/ . . / and no wrong shall be done to Nesikhons', ${ }^{2}$ it seems that the fear of Pinudjem was justifiable. Istemkheb appears to have dominated Thebes, and sometime after the death of Nesikhons she recovered her lost position with all her titles. We have evidence for this in the inscriptions on her second set of coffins, made some twenty years after the first set (used for Nesikhons) had been prepared. Istemkheb may also have kept this pivotal position in Thebes during the reign of her son Psusennes, while her second son (Djedkhonsefankh) seems to have acted as his brother's deputy in the function of High Priest in Thebes. Several Theban funerary objects from the very end of the Twenty-first Dynasty bear inscriptions in which reference is made to Istemkheb. One such is the mummy-bandage of Nesitanebetasheru with the text: '. . . linen/. . ./ made by the Leading Lady and Chief of the Harem, Istemkheb, in Year 13 , ${ }^{3}$ Harweben, on her papyrus is named 'daughter of Istemkheb, daughter of Menkheperre', ${ }^{4}$ with no mention of Pinudjem II. Perhaps here, too, one can see the grounds for the practice, attested several times, of referring to Pinudjem I, and not Pinudjem II in the genealogies of the latter's sons Psusennes and Djedkhonsefankh. ${ }^{5}$

The above considerations lead to an alteration to a genealogical table published some years ago. ${ }^{6}$ It should look as follows:

death. G. Elliot Smith, The Royal Mummies (Cairo, 1912), wrote on pp. 107-9 (CG 61095): 'There is nothing to give any definite indication of her age; but she has no grey hairs. The face is of a graceful, narrow, elliptical form and the light colour of the skin suggests that it must have been very fair originally./. ../ The long, dark brown hair hangs down as far as the front of the chest.' The mummy of Istemkheb has, unfortunately, never been examined, because . . 'The wrappings of this mummy were so complete and perfect in every way that M. Maspero decided not to disturb it' (ibid. 106, CG 61093).
${ }^{1}$ The coffin of Nesitanebetasheru (Cairo JE 26202, CG 61033) exhibits the characteristic features of the style of the late Twenty-first Dynasty. The burial of Nesitanebetasheru, however, took place under the early Twenty-second Dynasty. The coffin has been covered with a black coat of bitumen, reflecting a custom in use during the Twenty-second Dynasty, as a number of coffins and cartonages of this period prove. The inscriptions on her coffin call Nesitanebetasheru daughter of a High Priest, and there is little room for doubt that Pinudjem II is involved. Nesitanebetasheru was probably wife of Djedptahefankh who died in Year in of Sheshonq I. Therefore, one can conclude that she was one generation younger than the children of Pinudjem and Istemkheb.
${ }^{2}$ Cf. above, and p. 227 n. 3
${ }^{3}$ Kitchen, op. cit. 64.
${ }^{4}$ Papyrus of Harweben, cf. A. Piankoff and N. Rambova, Mythological Papyri (New York, 1957), 72 (no. i).
${ }_{5}$ Niwiński, $B E S{ }_{5}, 8_{3-6 .} \quad{ }^{6}$ Idem, $\mathcal{F} A R C E$ 16, 66-7.

The broken line joining Nesikhons and Pinudjem signifies that official relations between them existed only during a short period of about four or five years, during which Nesikhons bore four children named in the decree. Istemkheb, the first wife of Pinudjem was still alive at that time (the beginning of Siamun's reign), and died many years later, certainly after Year 13 of Psusennes, as the text on the mummy-bandage of Nesitanebetasheru proves. We are probably dealing with a case of divorce of Pinudjem II and Istemkheb at the time of Nesikhons's introduction into the High Priest's palace. The titles of Istemkheb on her second coffin, however, show her back in the position she had held during her marriage with Pinudjem.

Andrzej Niwiński

## A daughter of King Harsiese

The name of a daughter of the pharaoh Harsiese, incompletely preserved on a wooden fragment from Abydos (Philadelphia, Pennsylvania University Museum E.i6I86), is tentatively restored as Ti-di-t;-nbt-hn.

Among the discoveries made by Mace at Abydos was a small wooden fragment, apparently from a coffin, which bore the name of a daughter of the Twenty-second Dynasty 'king' Harsiese. ${ }^{1}$ Only the last portion of the daughter's name is preserved (fig. i) and no previous commentator has ventured to translate it. ${ }^{2}$ At the top of the fragment are the legs and feet of a bird, followed by the $n b$


Fig. i. After D. RandallMaciver and A. C. Mace, El Amrah and Abydos, pl. xli. hieroglyph and a sign which is a form of the box $h n$. This last is a very rare element in personal names. There is, however, one female name, attested during the Third Intermediate Period, which contains all the elements preserved on the Abydos fragment: $T 3-d i-(t 3-) n b(t)-h n .^{3}$

The name may be translated as 'The one whom the "Lady of the Chest" has given', ${ }^{4}$ and probably alludes to the goddess Nut. The literal meaning of the word $h n$ is 'chest' or 'box', ${ }^{5}$ but in the Third Intermediate Period and later it occurs with the meaning 'body, abdomen', and in the phrase $h n n N w t$ it signifies the body of the goddess as the place from which the morning sun issues forth. ${ }^{6}$ This figurative usage may explain the significance of $t 3 n b t h n$; alternatively the phrase may refer to Nut's well-known symbolic association with the coffin, since $h n$ sometimes occurs as a word for 'coffin' in the New Kingdom. ${ }^{7}$

The following list includes all the individuals of this name at present known to me:

1. $\int_{\text {是 }}$ mother of $H r-w d_{3}$, named on a stela from the Serapeum: M. Malinine, G. Posener and J. Vercoutter, Catalogue des stèles du Sérapeum de Memphis, i (Paris, 1968), 33-4 (no. 34), pl. xi. See also E. von Bergmann, RT 7 (i886), 194; Ranke, $P N_{\text {I, }}$ 373, 17.

[^145]2. Lady of the House $\circ$ 四 (varr. and mother of Nhm-sw-Mntw and Pi-di-'Imn, named on the coffins of her sons, from Thebes: Nḥm-sw-Mntw, Boulogne-sur-Mer 1, Grenoble Inv. 1995, 1984, 1989; PM i², 822, 826; G. Kueny and J. Yoyotte, Grenoble, Musée des Beaux-Arts. Collection Égyptienne (Paris, 1979), 100-4; Ranke, $P N_{\text {I, }}$ 373, 17 and 374, 15 . P3-di-'Imn, Liverpool 1953.72.1-2; PM i², 834; R. Moss, $\mathcal{Y} E A 54$ (1968), 173-4, pl. xxvi; P. H. K. Gray and D. Slow, Liverpool Bulletin. Museums Number, 15 (1968), 16-18.
 daughter of the Prophet of Amun, $h q^{3} b ; t \underline{T} ;-n-h s r t$, named on stela Manchester, 1898; J. Quibell, The Ramesseum (London, 1898), pls. v, xxi (ı); Kitchen, op. cit. 223, n. 128; Ranke, $P N_{\text {I, 373, }} 17$.
4. The
of Amun-Re in the fourth phyle [ 0 ] 品lin, named on a cartonnage fragment, London UC 38040; H. M. Stewart, Mummy Cases and Inscribed Funerary Cones (Warminster, 1986), 13-14, pl. 11 (no. 12). This piece probably came from the Ramesseum cemetery, along with similar cartonnage fragments in the Petrie Collection. ${ }^{1}$ In view of this, and taking into account the partially preserved title of the owner, it seems likely that this woman is identical with no. 3 .
 God's Father of Amun, Chief craftsman (?) of the estate of Amun P;y•s-dws (?)
 inner coffin from Thebes, now in the Bagshaw Museum, Batley, no number (unpublished). ${ }^{2}$

The Serapeum stela (no. i) has been dated to Year 37 of Shoshenq V, ${ }^{3}$ which would suggest that the $T_{3}-d i-(t z-) n b(t)-h n$ named there flourished around the early-middle eighth century BC. Number 2 can be assigned to $c .800-750 \mathrm{BC}$ on the style of the sons' coffins, which were probably made towards the end of the eighth century. ${ }^{4}$ The dates of nos. 3 and 4 are less certain, but it is clear from the style of the stela and the cartonnage fragment that they belong in the ninth or eighth centuries. ${ }^{5}$ On the evidence of the style of her coffin lid, no. 5 probably died around the middle of the seventh century bc. She is thus the latest attested individual with this name, but could easily have been born during the previous century.

Thus all the available evidence indicates that the name $T_{i}-d i-t 3-n b(t)-h n$ was typical of the period between $c .900$ and $c .700 \mathrm{BC}$, in the first half of which Harsiese's rule falls. ${ }^{6}$ Taking into account the rarity of names compounded on $h n$, it is a reasonable deduction that the name of Harsiese's daughter on the Abydos coffin fragment should be restored as [ $T ;-d i-t] ;-n b(t)-h n$. John H. Taylor

[^146]


## 2. Bottom edge

Cambridge, Museum of Archaeology and Anthrópology, 1948.2744 (photo courtesy of the Museum)
A CASKET FRAGMENT OF RAMESSES IX (pp. 223-6)

3. British Museum, EA 43070

A GLAZED COMPOSITION SISTRUM HANDLE (p. 232)

## A glazed composition sistrum handle inscribed for Amenrud



FIG. I

The royal name on a faience votive sistrum, BM 43070, is identified as that of 'Amenrud-Miamun, beloved of Thoth, lord of Ashmunein'.

Among the fragments of inscribed votive sistra in the collection of Egyptian Antiquities in the British Museum is a green-glazed composition handle acquired from the Revd Chauncy Murch in 1906, now numbered 43070. The surviving portion of this object is 13 cm high and the diameter is 4 cm . The glazed surface has partly darkened almost to black, especially at the top, and has been chipped away at both ends of the object. The form of the handle imitates a palm-column, with three bands around the top and surface decoration representing the rough texture of a palm-trunk. The upper part of the object is completely missing. On either side of the handle there is a vertical line of hieroglyphic inscription, reading identically and oriented in the same direction. The text is shown in fig. I and translates: 'The Good God, Lord of the Two Lands, Amenrud-Miamun, beloved of Thoth, Lord of Ashmunein, given life forever.' The details of the hieroglyphs are indistinct in places owing to the spreading of the glaze in manufacture, but there is no doubt about the rendering of the text. The royal name is certainly that of Amenrud, ${ }^{1}$ confirmed by careful examination of the cartouches under different lighting conditions and the use of impressions (see pl. XXX, 3). No provenance is recorded, but the dedication to Thoth of Ashmunein makes that site a likely source, perhaps one more illustration of the close association of the Twenty-Third Dynasty with Upper Egypt.

A. J. Spencer

## An altered royal head of the Twenty-sixth Dynasty ${ }^{2}$


#### Abstract

Publication of a late Saite head that clearly shows alteration from a royal to a private representation. It appears to be one of a group that can be attributed to Amasis, the fifth king of the Twenty-sixth Dynasty. Of particular interest is Walters Art Gallery no. 22.41 5, which had previously been considered Ptolemaic, and is of this group. The distinctive realism shown tends to disprove the widely held opinion that it was not until the Persian domination that idealism was replaced by a more naturalistic form. The usurpation by a private person of a royal portrait may offer an additional insight into the political situation at a time of transition to foreign rule.


The collection of ancient Egyptian sculpture began considerably before the development of archaeology and philology. As a consequence, much material is out of context. Furthermore, a great majority of the figurative art is fragmentary, with the owner's inscription lost or incomplete. The historian must then depend on the clues offered by iconography and style in order to establish authenticity and dating. A good example is a puzzling head I recently acquired at a New York art dealer (pl. XXXI, i). It is 6 cm high and made of dark-green schist. The distinctive face is well sculpted with plastic eyebrows, narrow almond-shaped eyes, and is very long and thin. These features suggest a late Twenty-sixth Dynasty date for the head. However, its overall appearance is oddly distorted. The eyes are much too close to the top of the head, and the wig is sharply angled from the crown of the head to where it joins the brow. These two points suggest that a wedge-like slice has been removed from the

[^147]front of the head. The obvious purpose would have been to erase a uraeus from the front quadrant of the head-dress. There is considerable additional evidence to show that this portrait originally wore a royal nemes head-dress and depicted a king of the late Twentysixth Dynasty, but was altered to suit a private representation. A close examination of pl. XXXI, 2 shows how this alteration attempted to disguise a royal origin by changing the nemes to a private bag wig.

First there is a band or frontlet across the forehead, whereas wigs worn by private persons are continuous from the brow upwards. ${ }^{1}$ Secondly, there are remains of hair tabs adjacent to the ears and coming from beneath the frontlet. ${ }^{2}$ Thirdly, and the most obvious anomaly, the front of the head-dress does not curve away from the sides of the head, but forms a right angle with the face, showing that it only could have been a nemes head-dress. A khat or a bag wig would have a continuous arc from front to back. Finally, the back of the wig shows another unusual aspect. The lower edge is distinctly curved inwards, and would not allow a smooth transition to a back pillar. Even if the latter stopped below the wig, there would still be a discontinuity between the wig and the torso. This would indicate another alteration; namely, the removal of a pigtail, which would normally extend from this lower edge of the nemes. Plate XXXI, 3 shows the head with the uraeus restored in clay along with the nemes. The proportions are taken from a photograph of E. Berlin in 864, a royal head of the late Twenty-sixth Dynasty. ${ }^{3}$

Royal usurpation of both monuments and statuary of earlier kings was common in Egypt. Usually a change of the inscription was sufficient. Usurpation by private individuals of royal representations is exceedingly rare, but not unknown. At least one other example has been noted recently, in an altered head of Sesostris III in the Metropolitan Museum of Art, published by Fischer. ${ }^{4}$ This shows very similar changes to the nemes. A Thirteenth Dynasty head in Boston may also have been altered from a royal to a private representation. The uraeus has been removed and the wig shows signs of changes to convert a khat to a private wig. ${ }^{5}$

The reason for a usurpation of a royal statue by a private person remains obscure. We know that this occurrence is rare, and we cannot be sure when such alterations were actually made. Two of the three examples cited were made for kings who came at the end of dynasties that were concluded by foreign invasions. Only the Sesostris III head differs in this respect. This is much too small a sample to be statistically valid. I can only offer the suggestion that a private person might salvage a statue about to be destroyed or discarded. Perhaps another example will surface, inscribed for its new owner, and offering evidence as to why and when this type of usurpation occurred.

I have alluded to a distinctive aspect of the face of the altered head. Plate XXXII, I is a royal head in the Walters Art Gallery. ${ }^{6}$ A comparison to the altered head shows an
${ }^{1}$ See, for example, B. V. Bothmer, Egyptian Sculpture of the Late Period (Brooklyn, 1960), figs, 60, 80, 84-5, I 16 - 17 .
${ }^{2}$ Private wigs have continuous hair-tabs, for example, Bothmer, op. cit. figs. 60, 80, i 16 , or none at all: ibid., figs. 58, 84-5.
${ }^{3}$ C. Aldred et al., L'Egypte du Crépuscule, ed. J. Leclant (Paris, 1980), 145, fig. 127. See plate XXXII, 4 and p. 234 n. 3 below.
${ }^{4}$ H. G. Fischer, $B M M A 22$ (1964), 235-8. Fischer, MM才 9 (i974), 7 n. I 3, also mentions a female head whose uraeus seems to have been removed.
${ }^{5}$ The Museum Year: 1983-84, Boston, 108, 24. B. V. Bothmer mentioned these apparent changes in the wig in private conversation in 1986.
${ }^{6}$ WAG 22.415. Quartzite, ht. 28 cm . G. Steindorff, Catalogue of the Egyptian Collection in the Walters Art Gallery (Baltimore, 1946), 70, no. 224, pl. xxxviii. Steindorff attributed it to the Ptolemaic Period. A dating in the Saite Period is my own conclusion, based primarily on the comparisons discussed in this article. I would like to thank Dr Ellen R. Williams, Curator of Ancient Art at the Walters Art Gallery for this photograph, and for her gracious permission to publish this head.
extraordinary resemblance. Both have very close-set eyes set high up in a long face and near the frontlet of the head-dress. The proportion of distance from eyes to mouth is identical. Both also have a full mouth with pendulous lower lips. The uraeus on the Walters head reaches high on its head-dress. Assuming that this was also true on the head in my collection, it would explain why there is such a long slant from the top of the skull to the brow. The two heads are not idealizing, but rather realistic. They show a man who could be described as 'horsy' looking.

The Walters head is approximately life-size and strikingly modelled. There is a bulge over the nose and up the forehead which causes the frontlet of the nemes to rise and fall across this feature. The drooping lower lip has a groove in the centre, and under the lip is a deep hollow further accentuating the mouth. Unfortunately, photographs do not do justice to this masterpiece of portraiture.

We must now consider whether any other portraits of this king exist. At least three additional heads show most of the characteristics discussed in the previous paragraph, and all are generally acknowledged to represent kings of the Twenty-sixth Dynasty. They are in Leningrad (pl. XXXII, 2), ${ }^{1}$ Paris (pl. XXXII, 3), ${ }^{2}$ and (East) Berlin (pl. XXXII, 4). ${ }^{3}$ The Louvre head has been published by Vandier, the Berlin example by Aldred; and both heads attributed to Amasis, the fifth king of the Twenty-sixth Dynasty. If these two identifications are correct, then certainly the Hermitage and Walters head, as well as the subject of this article, seem to represent this same pharaoh. Here we must introduce a caveat. Both Vandier and Aldred derive their identifications indirectly from Müller's interpretation of a partial name on a presumably earlier bust in Bologna. ${ }^{4}$ Müller notes that the name on this bust could be read as the Horus name of either Psamtik II or Apries. He knew that there was an inscribed portrait of Psamtik II in Paris, ${ }^{5}$ and believed that the Bologna bust was of a different man. He therefore chose to read the partial name as Apries, the fourth Saite king. ${ }^{6}$

Assuming that the five heads listed are indeed Amasis, I must call attention to the fact that they are not the only surviving examples of this king's statuary. A sphinx in Rome's Capitoline Museum ${ }^{7}$ and a bronze aegis head in Cairo ${ }^{8}$ are inscribed with Amasis' name.

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3
New York, private collection (photo by fack A. fosephson)
AN ALTERED ROYAL HEAD (pp. 232-5)

I. Baltimore WAG 22.415 (courtesy of the Walters Art Gallery)

3. Louvre E. 25480
(courtesy of the Brooklyn Museum, CLES)

2. Leningrad, Hermitage 735 (courtesy of the Brooklyn Museum, CLES)

4. (East) Berlin in 864 (courtesy of the Brooklyn Museum, CLES)

Neither of their faces share the distinctive features of the larger group, but seem to be more idealizing. ${ }^{1}$

The distinctive appearance of each of the five heads that I call Amasis is a strong argument that an individual is depicted. Aside from a physical resemblance, the extraordinary modelling of the Walters head is echoed by the Louvre head in at least one unique aspect-the displacement of the frontlet caused by the forehead bulge. Acceptance of the attributions made by Vandier and Aldred for two of the group, as well as iconographic evidence, strongly suggest that a late Twenty-sixth Dynasty dating is entirely reasonable. An inescapable conclusion is that this period of portraiture was creative, realistic and dynamic. The generally accepted thesis that blandness and idealism were the rule in portraits made between the wane of Kushite influence and the Persian conquest should be re-examined. ${ }^{2}$

Jack A. Josephson

## Postscript

After the completion of this article, two likely candidates for inclusion in this group have come to my attention. B. V. Bothmer generously gave me slides of Amsterdam B-8845, a green schist royal head in a nemes, 1 I .4 cm in height. I agree with Mr Bothmer that this represents Amasis and I am grateful for his advice.

On a recent visit to the Museo Archeologico in Florence, Dr Christina Guidotti allowed me carefully to examine and photograph Florence 5625, the upper part of a red quartzite statue, 73 cm high. I greatly appreciate her courtesy and assistance. Although H. W. Müller discussed this piece in detail, Studi in memoria di Ippolito Rosellini, II (Pisa, 1955) 183-22 I, he was reluctant to reach a conclusion as to whether it represented Apries or Amasis. From available photographs, I also was ambivalent and had omitted mention of it. The uncertainty that I felt has been resolved in my mind and I am confident that it is Amasis. Although the eyes are not as high in the face, nor as close-set as the other example, the heaviness of the jaw and the droop of the lower lip are remarkably similar to the Walters head in particular.

## Merib-ptah Psamtek-meryptah (Surnom no. 39)

Publication of an ushebti with additional prosopographical information concerning no. 39 of H. De Meulenaere's
Le Surnom égyptien à la Basse Epoque.
In $R d E 36$ (1985), i34-5, Michelle Thirion published additional information concerning H. De Meulenaere's Le Surnom égyptien à la Basse Epoque (Leiden, 1966), no. 39, from an ushebti in the possession of Michel Philippe in Paris. The upper part of another unprovenanced ushebti of the same Twenty-sixth Dynasty person belongs to Mr H. S. Russell of Malvern, Worcestershire, to whom I am grateful for permission to publish.

The mother is named stroke above the hawk. Thirion regards this as $\square$, the name of Buto, and reads $M r-H r-P-j t \cdot s$, but the Russell ushebti makes it clear that, at least in this case, it is just a common writing of Horus. A masculine parallel to the name exists in $M r-H r-j t \cdot f, P N$ i, i57, in.

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1. USHEBTI OF MERIB-PTAH PSAMTEK-MERYPTAH (pp. 235-6)

2. Newbury Museum i92ı.ioi (pp. 236-9)

MORE LIGHT ON A SAITE OFFICIAL


Fig. I

I append a hand copy of the text (fig. i), without any palaeographic pretensions, for completeness, but refer to photographs (pl. XXXIII, i) for a description. The faience ushebti is of light grey-green colour, with little surface glaze. It is $10.9 \mathrm{~cm} \mathrm{high}, 4.7 \mathrm{~cm}$ wide at the elbows, and 2.9 cm thick. The surface has flaked off in places.

Jaromir Malek

## More light on a Saite official of the God's Wife of Amun

Publication of a Twenty-sixth Dynasty painted wooden stela of Theban type in the Newbury Museum, belonging to an official of the God's Wife of Amun, Irtiertjai, with prosopographic discussion.

The stela discussed here (fig. 1 and pl. XXXIII, 2) was presented to the Newbury Museum by Dr A. Simmons, a local resident, in 1921, when it was given the number i921.ior. ${ }^{1}$ Nothing is known of the circumstances in which he acquired it. The stela is of the painted wooden type characteristic of Thebes in the first millennium bc, and can be dated, more specifically, to the later Twenty-sixth Dynasty. It belongs stylistically with the stelae classified by Munro as 'antithetisch-symmetrische', ${ }^{2}$ showing the dedicator offering to two deities, here Re-Harakhte and Atum, who stand back to back. The well-preserved colours are also those characteristic of the group-yellowish figures and winged disc, with red internal markings, on dark blue-green ground. The block borders are alternate red and bluegreen separated by thinner strips of cream-black-cream. The texts are in black on a cream ground, with red dividing lines, and traces of the first draft in red are occasionally visible.

The texts are straightforward, consisting of five iterations of the owner's name and titles in the top section, and another as part of the offering formula in the main text area. The owner is one 'Irty-r-t $\ddagger i{ }^{3}{ }^{3}$ son of $P 3-d i-H r-r s n t$ and ${ }^{\prime} n h-N t-i q r t$. Both men served in the household of the God's Wife of Amun, 'Irty-r-ții as sš imy-hnt $n d w s \underline{t}-n t r r$, his father as $s s^{r} r h$ $n s w$ imy-hnt dwst-ntr . These data suffice to establish a link with other monuments.

Graefe has recently discussed what is known of a sš imy-hnt dwit-ntr (var. imy-r imy-hnt

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FIG. I
$d w s t-n \underline{t r})$ Padihorresnet, son of an imy-r imy-hnt $d w s t-n \underline{t r} / r h n s w ~ I r t i e r t j a i ~ a n d ~ A h a m a a-~$ tirtbint, ${ }^{1}$ fragments of whose tomb reliefs were found reused in the fourth-century occupation of the tomb of Ankhhor, and who is also known from a recently discovered offering-table. ${ }^{2}$ The name Padihorresnet is not common, and the coincidence of titles with those on the Newbury stela suggests a family connection. Unfortunately, one cannot be certain whether the two men named Padihorresnet, or the two called Irtiertjai, are identical. Alternative explanations, equally economical, are:


A


B

The fact that the Irtiertjai of the Newbury stela is only imy-hnt dwst-ntr, whereas his namesake is imy-r imy-hnt dwst-ntr favours scheme A, without being decisive, as does the greater rarity of Padihorresnet as a personal name at Thebes.

Another painted wooden stela from Thebes probably belongs to the same family. This is Oxford, Ashmolean Museum 1974.171, ${ }^{3}$ which commemorates a he h hnwn'Imn Diesehebsed, daughter of a sš imy-hnt dwst-ntr Irtiertjai. Her mother ( $m w t \cdot s$ ) is called Wedjarenes. ${ }^{4}$ This does not necessarily preclude identification of her father with the elder Irtiertjai of scheme A, since he could have married twice, or, as Graefe has noted, Wedjarenes could have been her 'adoptive' mother. ${ }^{5}$ None the less, on grounds of title, the Irtiertjai of the Oxford stela may tentatively be identified with the younger of scheme A. This yields:


The name Diesehebsed is common to a surprisingly large number of women bearing the title hs $\underline{h} n w n$ 'Imn. Indeed, it is almost exclusive to them, the only example known to me outside the circle being a princess, sometimes said to be a daughter of Psammetichus I. ${ }^{6}$ None, alas, can be identified with the lady commemorated on the Oxford stela. ${ }^{7}$

[^151]Precise dating criteria for the family are not easily established. Ankhnitocris cannot, because of her name, ${ }^{1}$ have been born before $c .650 \mathrm{BC}$, but that provides only a terminus a quo. A similar starting-point is provided by the name Padihorresnet, which is in origin based on a Saite cult, probably brought south to Thebes in the entourage of Nitocris. ${ }^{2}$ Almost half the small number of known Theban examples were members of the household of the God's Wife of Amun. ${ }^{3}$ If the suggestion made by Bietak and Reiser-Haslauer, that the tomb fragments of Padihorresnet are sufficiently similar in style to the reliefs in the tomb of Ankhhor for them to have been contemporaries, ${ }^{4}$ is correct, it would date the former to the reign of Apries, perhaps $c .58 \mathrm{obc}$, and imply dates $c .555 \mathrm{BC}$ and $c .530$ BC for the Newbury and Oxford stelae respectively. This is generally compatible with Munro's stylistic dating of Theban stelae. The Oxford stela belongs to his 'Thebes II Reihung E', which he dates to the sixth century bc. ${ }^{5}$ The 'antithetisch-symmetrische' group of which the Newbury stela is an example were produced throughout the Twenty-sixth Dynasty, but the closest parallels for it also belong in the sixth century. ${ }^{6}$

## Anthony Leahy

Vizier Ankhhor. III. Theban tomb i28: W. Schenkel, MDAIK 3 I (1975), i46, pl. 50. Daughter of Patjenfy and Irtiru. IV. Brussels E.6253: Munro, op. cit. 196, pl. i8; PM i², 799. Daughter of Khaemamun. V. Chapel of Osiris-Onnophris hery-ib 'Ǐsd: PM $\mathrm{II}^{2}$, 202. Daughter of Nesptah and Istemkheb. VI. Cairo JE 43775 (bronze door-piece): G. Legrain, RT 36 (1914), 68; J. Leclant, Montouemhat (Cairo, 196i), 263, 265. Daughter of Montuemhat. VIa. Cairo CG 12 19: L. Borchardt, Statuen und Statuetten von Königen und Privatleuten iv (Berlin, i934), I I4; PM I ${ }^{2}, 786$ (identical with either V or VI on the basis of what survives of her father's titles). VII. Medinet Habu tomb: U. Hölscher, The Excavation of Medinet Habu, V; Post-Ramessid Remains (Chicago, 1954), 30, pl. 21 в, C; J.-F. and L. Aubert, Statuettes égyptiennes (Paris, 1974), i98, figs. I28, i30; since parentage is not given, there are no solid grounds for the identification as the daughter of Nesptah ( $\mathbf{V}$ above) made in PM i ${ }^{2}$, 772. VIII. Louvre E. 20267 (Ptah-Sokar-Osiris figure): Legrain, $R T$ I4 (i893), 65. IX. Coffin in Florence: ibid. $R T 34$ (1912), 174 n . I. The first six of these are all distinct individuals with different parents, but there is insufficient evidence to determine the identity of the last three.
${ }^{1}$ The name Ankhnitocris does not seem to be attested elsewhere (it is not in the files of the Topographical Bibliography, information courtesy of Dr J. Malek), but the same pattern occurs for earlier God's Wives: Ankhshepenwepet ( $\mathrm{PM} \mathrm{I}^{2}$, 628, 772; $\mathrm{PM}_{\mathrm{II}^{2}}$, 536; Graefe, Untersuchungen . . 53, 237-8), Ankhamenirdis ( $\mathrm{PM} \mathrm{I}^{2}$, 773).
${ }^{2}$ Graefe's suggestion, Untersuchungen . . . 80 , that the name does not occur before the Twenty-sixth Dynasty is correct on present evidence. R. el-Sayed, La Déesse Neith de Saïs, II (Cairo, 1982), 518-19, is too specific in crediting a particular individual with the bringing of the name, and his discussion is undermined by a false distinction between the owner of Theban tomb 196 and the dedicator of Cairo CG 38372. The earliest datable bearer of the name is not the well-known Majordomo, but his grandfather, the son of Ibi, whose family has recently been shown to be Theban (Graefe, $S A K$ I (1974), 20 Iff). He could have been named in honour of a newly introduced cult. Curiously, the name Padihorresnet is even less common in the north (see el-Sayed, Documents relatifs à Saïs (Cairo, 1975), 92, for one example, H. De Meulenaere, BIFAO 87 (1987), i 39 for another), where the dominant onomastic commemoration of this deity is 'Wedjahorresnet', rarely encountered in Upper Egypt!
${ }^{3}$ Five individuals of this name in the hierarchy of God's Wives officials are distinguishable (Graefe, Untersuchungen . ., p210-13, P29). Another fragment of statue Cairo CG 38372, in Macquarie University and belonging to the best known of these, the Majordomo of Theban tomb 196 , has just been published by B. Ockinga, $G M 98$ (i987) $67-78$. The name also occurs in a graffito at Karnak ( $\mathrm{PM} \mathrm{II}^{2}$, 85 ) and in a number of Theban papyri from the reigns of Amasis and Darius (Lüddeckens et al., op. cit. I, 333, to which add P. BM 10432 (G. Hughes, Saite Demotic Land Leases (Chicago, 1952), 9-17); P. Cairo 30657 and P. Louvre E. 7847 (Malinine, $M D A I K_{1} 6$ (1958), 229, n. 17); P. Louvre E. 7839 (Malinine, Choix de textes juridiques, 1 , 100-1; 11, 48, pl. xiii); P. Louvre E. 7840 bis (F. de Cenival, $R d E 37$ (1986), 13-29).
${ }^{4}$ Op. cit. II, 180.
${ }^{5}$ Op. cit. 38-40, 223-6. Vittmann, Orientalia 47 (1978), 3, describes the Oxford stela as 'aus der fortgescrittenen 26. dynastie'.
${ }^{6}$ For example, Turin 1539 : Munro, op. cit. 23-4, 207, fig. 25; Graefe, Untersuchungen . . . 55.


1. USHEBTI OF MERIB-PTAH PSAMTEK-MERYPTAH (pp. 235-6)

2. Newbury Museum i92ı.ioi (pp. 236-9)

MORE LIGHT ON A SAITE OFFICIAL

## An inscribed Hadra hydria in the Pelizaeus Museum, Hildesheim

Publication of Hildesheim PM I 190 , a hydria of Egyptian clay, which can be attributed to the Workshop of the Branchless Laurel. It bears an ink inscription naming an official Philon, here styled agorastes, who is known from texts dated to 243-233 BC

Objects relegated to museum storerooms can in time be forgotten. So, although the 1921 catalogue listed four Hadras in the Pelizaeus Museum, ${ }^{1}$ two of these were not brought to the attention of B. F. Cook during his visit, and came to light again only recently, during a more systematic search and organization of the museum's collection. The two which were accessible to Cook (PMir88 and PMir89) have recently been allocated by him to, respectively, his Group IV (the Thunderbolt Group) and Group III (the Two-line Group). ${ }^{2}$

It is hoped to produce soon a full publication of these Hadras, together with the remainder of the collection of Greek vases in Hildesheim. ${ }^{3}$ In the meantime it seems appropriate to draw attention to PM irgo (pl. XXXIV, i-3), a Hadra with an inscription, since, in the present state of our knowledge, it breaks new ground in several ways.

The hydria ${ }^{4}$ with, in particular, its pronouncedly ovoid body and extremely high pedestal foot, cannot easily be paralleled in published material. It should be noted, however, that the pale buff clay is gritty with a brown-red tinge, especially on the lip, neck, shoulders, and on the obverse to the bottom of the principal decorative zone, whose lower boundary can be made out just below the horizontal handles. The clay is clearly local Egyptian and so places the hydria with that group named recently by Enklaar as from the Workshop of the Branchless Laurel. ${ }^{5}$

Whatever the validity of the arguments of P . Callaghan that Hadras were made in Crete and imported; ${ }^{6}$ the vases in this Workshop were certainly made in Alexandria. The hydria Amsterdam $8723,{ }^{7}$ itself also from the Workshop of the Branchless Laurel, is close to PM irgo in some respects, such as the neck, the flattened spread of the foot, and the lateral handles, which are round in section and strongly turned up to vertical. However, Amsterdam 8723 has a shoulder which is slightly pronounced, unlike the steady, uninterrupted curve of the body of PM ingo from neck to foot. PM II90 does not have rotellae on the vertical handle but, like Amsterdam 8723, ${ }^{8}$ it has a dropped floor.

On PM ifio, the painted decoration has almost completely disappeared. However, beneath the lateral handles, the lower boundary of the principal decorative zone is clearly visible: a double band which circles the pot. ${ }^{9}$ Beside the left horizontal handle can be seen

[^152]the usual narrow vertical panel, criss-crossed by a wide net-pattern, with a long vertical line, decending from the bottom of it across the double band to the body below. From the middle of the vertical panel springs a fluid but simple rinceau with one volute downward, followed by two upward.

The inscription is inked on the body, a little below the double band and slightly to the right of the vertical panel near the left handle. It reads:

$$
\begin{aligned}
& \text { MHNIAOC CִПIN@[APOY] ПРЕСВEY[TOY] } \\
& \text { АПАРСINOHС ТНС Е[ППППАМ[ФҮАІАС] } \\
& \triangle I A \Phi I \Lambda \Omega N O C ~ А Г О Р А С[T O Y]
\end{aligned}
$$

The first half of each of the three lines is much clearer than the second half, presenting few problems. The last line is almost completely secure, the end of line i certain. The patronymic, Spintharos, was suggested to me by P. M. Fraser. The second half of the second line is particularly lacunose, but the clear indications of some letters combined with the toponym Arsinoe (though there are several towns of that name in the Greek world) suggest that the reference is to Arsinoe in Pamphylia, already the known birthplace of an official visitor to Alexandria. ${ }^{1}$ The very fragmentary letters above the name of the deceased could represent the Year 14 (as suggested by Fraser). The name of Philon, the agorastes, the official named in the inscription is beyond doubt. Forged inscriptions are not unknown, ${ }^{2}$ but this text, though the cursive is different from, for example, Breccia 104, appears to be genuine.

Although it is now commonly thought that no linear chronological development can be traced in the hydria shapes, it is nevertheless rather expected that such a slim hydria with a particularly high foot and tall neck would be late in the series. ${ }^{3}$ And yet Philon is the earliest of the four officials whose names appear on funerary hydriae. He flourished in the early years of Ptolemy III Euergetes and the inscriptions which bear his name can be dated, because the regnal year is included, to between 243 and 233 BC. ${ }^{4}$

The inscription departs from the known pattern of those containing the name Philon, for in them, $\triangle I A \Phi I \Lambda \Omega N O C$ is normally placed first, with the exception of Braunert no. 6, where it appears immediately after the patronymic. More importantly, Philon is here designated agorastes, a title which was previously known securely only on the later hydriae with the name of Theodotos, from 219 to $212 \mathrm{BC} .{ }^{5}$

The name of the deceased, M $\hat{\eta} \nu \iota s$ is found on a Delian inscription dated to mid-second century bc. ${ }^{6}$ Spintharos, too, is recorded as an Attic name, and is also known in Ptolemaic Egypt. ${ }^{7}$

Following the demonstration that the inscription on Amsterdam 8723 is not genuine, the class of hydriae made of Egyptian clay, to which PM 1190 belongs, was the only class of
${ }^{1}$ H. Braunert, $\mathfrak{F d l}$, 65-6, 1950-1, 235, no. 7. See the map in Enklaar, BA Besch, 60, 146, fig. 23.
${ }^{2}$ See now Enklaar, Vereniging . . .
${ }^{3}$ Cf., for example, P. Callaghan, BICS 30 (1983), 123, 125 : 'A late date is particularly implied by the high pedestal.' See also Enklaar, BA Besch, 60, in 7, who approves a similar opinion of Cook, at least for his Laurel Workshop, 'slender forms appeared suddenly in the 220 's'.
${ }^{4}$ See R. Pagenstecher, $A \mathcal{F} A$ I $_{3}$ (1909), 407, nos. 13, $18-20$, and p. 41 i for no. 13 as the earliest mention of Philon. See also Cook, Alessandria, ...796, no. 3; 797, nos. 16, 18-19; Enklaar, BA Besch, 6о, i i ; Braunert, $\mathcal{F} d l$, 65-6, 234, nos. 5-10; Cook, Inscribed Hadra Vases in the Metropolitan Museum (New York, 1966).
${ }^{5}$ Cf. Braunert, $\mathcal{f d l}, 65-6,235$, nos. 21, 23-6, and his comments on p. 238. For the office of agorastes, ibid. 23 I f. esp. 238 with n. 2; Cook, IHV 19; idem, Brooklyn Museum Annual, 10 (1968), 121 and n. II, 'it is not clear why an official so titled should be in charge of the burial of foreigners'.
${ }^{6}$ See J. Sundwall, supplement to J. Kirchner, Prosopographica Attica (repr. 1981), i27; P. Roussel, BCH 32 (1908), 350, no. 404. See also $178 / 7$ Meritt Agora XV 194.90 , and later, $S E G_{17}$. 698, 702, 723, 731, 736(?), 737, 740 (Mivıs).
${ }^{7}$ Kirchner, Prosopographica Attica II, 266, no. 1250 f.; W. Peremans and E. Van't Dack, Prosopographia Ptolemaica vi (Leuven, i975), i5242. The genitive may possibly be $\Sigma \pi \iota \nu \theta \hat{\eta} \rho o s$ from $\Sigma \pi \iota v \theta \dot{\eta} \rho$ (so P. M. Fraser).

## Plate XXXIV


3. Detail of inscription

Hadras without an inscribed exemplar, as Enklaar recently noted. ${ }^{1}$ This hydria, then, is also significant in that at least one inscription is now to be found on hydriae of the Workshop of the Branchless Laurel. Since the agorastes Sarapion was active from at least 233 BC, ${ }^{2}$ it might be reasonable to date the Hildesheim hydria to shortly before that date, say 234 BC , in order to bring it as close as possible to the flowering of the more slender hydriae which Enklaar dates to the 220 .

This date, however, will be difficult to use as a reference point within the Workshop of the Branchless Laurel, since the shape of the Hildesheim hydria is so different from the others attributable to the Workshop. It does nevertheless fit within 260-225 BC, the years proposed by Enklaar as the Workshop's principal period of activity. ${ }^{3}$

P. J. Connor

## A Latin papyrus with a recruit's request for service in the auxiliary cohorts

Publication of a papyrus from the later years of Trajan, found at Theadelphia, which preserves a draft letter in Latin from a recruit to the Prefect of Egypt. The writer asks to be enrolled in the auxiliary cohorts, which shows that probatio in the Roman army was for a specific branch, such as the legions, the alae, the cohorts, or the fleet. Letters of recommendation were required, even if written by the applicant himself.

In 1927, at Theadelphia in the Fayyum, fellahin found a trove of papyri that were afterwards brought to the Egyptian Museum in Cairo. One of these, a Latin letter from the later years of Trajan, is published here for the first time. ${ }^{4}$ Shown on pl. XXXVI, i in its original size, it was once 12 cm wide and 19 cm high, although it is now torn in two pieces that do not fully join. The lower left is lost, but since the writing covers only the upper half of the sheet, the whole letter is still there.

The text, neatly written in 'Old Roman Cursive', ${ }^{5}$ can be read as follows;

$$
\begin{aligned}
& \text { M. Rutilio Lup }[o] \text { praef(ecto) Aegypti } \\
& \text { ab C. Valerio Ș [a]turnino tirone. } \\
& \text { Rogo, domine, [dig]num me } \\
& \text { iudices ut pr }[\text { obe }] \text { s militem } \\
& \text { in cohorte u }[\text { t po]ssim bene- } \\
& \text { ficio tuo sub sig[ni]s imp(eratoris) } \\
& \text { domini n(ostri) mili[tar]e, genioque } \\
& \text { tuo gratias ag[am]. }
\end{aligned}
$$

To Marcus Rutilius Lupus, Prefect of Egypt, from Gaius Valerius Saturninus, recruit. I ask you, Sir, to judge me worthy to be enrolled in a cohort so that I may be able, by your favour, to serve under the standards of the Emperor, our Lord, and to thank your good spirit.
M. Rutilius Lupus is Trajan's well-known Prefect of Egypt from in 3 to 1 I $7 .{ }^{6} \mathrm{C}$. Valerius Saturninus, on the other hand, is new to our lists of soldiers in the Roman army of Egypt. ${ }^{7}$

[^153]His letter, such as we have it, is a draft that did not reach the Prefect, for the back is blank and there is no note showing receipt by the Prefect's office. Still, it is revealing about the inner workings of the Roman army, especially its enrolment procedures.

In joining the Roman army, recruits had to go through two stages. First, their qualifications for service had to be checked and approved by the governor; this ended with the probatio asked for here. The second stage included the military oath (sacramentum), the assignment to a particular unit, and finally, entry on that unit's rolls (in numeros referri), at which time one became a soldier with full rights and duties. ${ }^{1}$ Saturninus' letter shows for the first time clearly that the probatio was neither for military service in general nor for a particular unit, but for a branch of service-in this case the auxiliary cohorts. ${ }^{2}$ The branches of service (militiae) were ranked in this order: praetorians, legions, alae, cohorts, and fleets, each with its own requirements and rights. ${ }^{3}$ Transfer from one branch into another thus needed the fresh approval of the governor or even of the Emperor himself, ${ }^{4}$ and hence required another letter, as is clear from what a certain Claudius Terentianus wrote to his father, during the reign of Trajan: ${ }^{5}$
... Et si deus volueret spero me frugaliter $[v]$ iciturum et in cohortem [tra]nsferri. Hic a[ut]em sene aer $[e]$ [ni]hil fiet neque epistulae commandaticiae nihil val(eb)unt nesi si qui sibi aiutaveret...

The wording here is of interest for our letter, for it likewise uses the phrase in cohorte without further specification, which shows it to be the technical term for this branch of the army. ${ }^{6}$ The passage might also explain why Saturninus could write a letter of

[^154]\[

$$
\begin{aligned}
& \text { Oi } \mu \grave{\epsilon} \nu \gamma \dot{a} \rho \dot{v} \mu \hat{\omega} \nu \epsilon i \sigma \iota \nu \dot{\epsilon} \kappa \lambda \epsilon \gamma \iota \omega \prime \nu \omega \nu
\end{aligned}
$$
\]

$$
\begin{aligned}
& {[\ddot{\omega} \sigma \tau \epsilon \mu] \grave{\eta} \epsilon i v a \imath ~ \tau o ̀ ~ a v ̉ \tau o ̀ ~ \pi \alpha ́ v \tau \omega \nu ~ \delta \epsilon i ́ к а \iota o \nu, ~}
\end{aligned}
$$

Digest XLIX, 16, 5 (Arrius Menander): Qui in pace deseruit, eques gradu pellendus est, pedes, militiam mutat. See also Vegetius II, 3: Est et alia causa cur adtenuatae sint legiones: magnus in illis labor est militandi, graviora arma, plura munera, severior disciplina. Quod vitantes plerique in auxiliis festinant militiae sacramenta percipere, ubi et minor sudor et maturiora sunt praemia. During the first three centuries of the Empire auxiliaries served longer than legionaries, hence this last passage, with its maturiora praemia, seems to refer to Vegetius' own time, the later fourth century.
${ }^{4}$ See Hadrian's talk with a would-be recruit Dositheus, Sent. Hadr. 2 as quoted by M. Durry, Les Cohortes prétoriennes, (Paris, 1933), 261: Petente quodam ut militaret, Hadrianus dixit: 'Ubi vis militare?' Illo dicente 'in praetorio', Hadrianus interrogavit 'quam staturam habes?' Dicente illo 'quinque pedes et semis' Hadrianus dixit: 'Interim in urbana militia et, si bonus miles fueris, tertio stipendio poteris in praetorium transire'.
${ }^{5}$ P. Mich. VIII, $468=$ CPL 251 Daris, Documenti. 7 (cf. 8). See also BGU 696 ( $=$ Fink, 1971, 64) and BGU I, 142 ( = L. Mitteis and U. Wilcken, Grundzäge und Chrestomathie der Papyruskunde (Leipzig-Berlin, 1912), I/2, 455).
${ }^{6}$ See P. Fouad I, 2 I = Daris, 101 (cf. 102): $\grave{\epsilon} \kappa \sigma \pi \epsilon \iota \rho \hat{\omega}$; P. Yale inv. $1528=$ SB $8247=$ Daris, Documenti, 103 :
 see M. P. Speidel, $A N R W$ in, 8 (1977), 687-730 = Roman Army Studies, I (Amsterdam, 1984), 229-72 (=MAVORS I), esp. p. 692, pace Daris, Documenti, 43.
recommendation for himself; in some cases, it seems, such epistulae commandaticiae were worth only the money that went with them. ${ }^{1}$ To us, it is astonishing that a soldier could go directly to his army commander and ask for a boon like this or for a promotion. ${ }^{2}$ To a Roman, however, the turn beneficio tuo may have been meant seriously and the recruit may have offered to place himself under formal, personal obligation to the Prefect. ${ }^{3}$

Saturninus' phrase sub signis militare is both literary and camp speech, for it echoes a phrase of Livy as well as Dacian inscriptions. ${ }^{4}$ Moreover, it shows that Tacitus (Hist. ii. 14) used somewhat technical language when speaking of quingenti Pannonii nondum sub signis, i.e. Pannonian recruits not yet assigned to their units-even though the fully technical expression would have been probati sed nondum in numeros relati.

The phrase Genio tuo gratias ago is likewise used both in literature and in papyrus letters. ${ }^{5}$ The phrase ut possim beneficio tuo . . . militare finds a close parallel in a Vindolanda letter of Io3. ${ }^{6}$ By contrast, the expression dominus $n$ (oster) is not found anywhere else in the papyri of the time, especially not with the abbreviated N . It seems to be a combination of the emperors' title кv́pıos, used by the Greeks, with the title imp(erator) n(oster) preferred by soldiers and civil servants' ${ }^{7}$ Perhaps the formula $d$ (ominus) $n$ (oster), widely used in the third century, comes from this combination, which would make Saturninus' phrase an outstandingly early forerunner to that third-century practice.

Thus, while our letter may not be in a class with one written by Venus or Juno to Mars on behalf of a recruit searching for a desirable post in the army, ${ }^{8}$ it nevertheless helps us see how one joined the Roman army.

M. P. Speidel and R. Seider

${ }^{1}$ J. Vendrand-Voyer, Normes civiques et métier militaire à Rome sous le Principat (Clermont-Ferrand, 1963), 86, suggests that Augustus had originally asked for such letters to keep riff-raff out of the army. Or did they establish a recruit's literacy?
${ }^{2}$ Cf. P. Mich. VIII, 466:

$$
\begin{aligned}
& \delta \grave{\epsilon}[\alpha] \text { v̉ } \tau \circ \hat{v} \text { ö́ } \iota ~ \tau o ́ \pi o s ~ o v ̉ ~ \sigma \chi o \lambda a ́ \zeta[\iota], ~ \epsilon ̇ \nu ~
\end{aligned}
$$

$\pi о \iota \eta \sigma \omega$ '̀ $\phi$ ' $\bar{\epsilon} \lambda \pi i \delta \delta \omega \nu$

Published and unpublished letters found at Vindolanda likewise show the soldiers' initiative in writing to their commander for favours, and as Professor E. Birley points out to us, they use the same wording rogo, domine.
${ }^{3}$ See R. MacMullen, AYP 107 (1986), 512-24. As late as 325 it was still a beneficium to be assigned (deputari) by the Emperor to the legions or to the cohorts: Cod. Theod. XII, i, io.
${ }^{4}$ Livy XXIII, 42, 1 I : nostra iuventus . . sub signis militat tuis. CIL III, 6733 (Samum/Dacia): . . agens sub $\operatorname{sig}(n i s)$ Samum. . . AE 1957, 326 (Samum/Dacia) . . . agens Samo . . . sub seg(nis). For other such phrases, see Kubitschek, $R E$ II, A (1923), 2325-47.
${ }^{5}$ Petronius 57, io: Genio illius gratias! P. Berl. Inv. 21652, V $=$ ChLA XI, 467: et Genio tuo [gra]tias agam.
${ }^{6}$ Bowman and Thomas op. cit. 37, 22-4: ut beneficio tuo militiam [po]ssim iucundam experiri.
${ }^{7}$ For кv́pıos see P. Bureth, Les Titulatures, impériales dans les papyrus, les ostraca et les inscriptions d'Égypte (Brussels, 1964), passim. For imp(erator) n(oster) see A. and E. Bernand, Les Inscriptions grecques et latines du colosse de Memnon (Cairo, 1960), 2, 4 (Nero); 4, 5 (Vespasian); 6, 5 (Titus); 16, I and 48, 4 and SB 4282, 10 (Hadrian), and esp. P. Oxy. $1022=$ Fink (1971) $87=$ Daris, Documenti, 4 (Trajan), likewise a Latin army papyrus. The formula domini $n$ (ostri) is found again in ad 144 ( $B G U$ vil, $1692,14-15$ ) as R. Cavenaile reminds us.
${ }^{8}$ Juvenal, Satires 16, 2 ff.: . . . si subeuntur prospera castra, / me pavidum excipiat tironem porta secundo / sidere. plus etenim fati valet hora benigni | quam si nos Veneris commendet epistula Marti | et Samia genetrix quae delectatur harena.


THE REPRESENTATION OF POL YGONUM SENEGALENSE
MEISN. (pp. 248-52)
I. P. Theadelphia, inv. ${ }^{1}$

A LATIN PAPYRUS (pp. 242-4)

# The camel in the Nile Valley: new Radiocarbon Accelerator (AMS) dates from Qaṣr Ibrîm ${ }^{1}$ 

Radiocarbon Accelerator (AMS) dates from Qaṣr Ibrîm demonstrate that camels were present in Nubia in the early first millennium bс. Other early evidence for the camel in the Nile Valley is reviewed, and the significance of the Qaṣr Ibrîm finds for the cultural history of Nubia is discussed.

## Introduction

The origins and spread of the domestic camel are remarkably little known. One muchdiscussed aspect in need of further study is the date of its introduction into the Nile Valley. This short contribution presents evidence of camels in Egyptian Nubia in the earlier first millennium bc, discusses some of the other evidence for camels in Egypt, and considers some implications arising from this.

The site of Qaṣr Ibrîm lies on the east side of the Nile Valley some 40 km north-east of Abu Simbel, and $c .140 \mathrm{~km}$ south of Aswan. Excavations have been taking place since the early 196os ${ }^{2}$ Qaṣr Ibrîm was first occupied during or before the Napatan period (see below). Extensive later deposits overlie the Napatan layers. Rainfall at the site is virtually zero. This has led to the preservation of a wide range of organic materials not usually encountered on archaeological sites.

## The camel remains and their date

The camel remains from the Napatan period consist of (a) one fragment of mandible without teeth, and (b) a number of pellets of dessicated camel dung. The identification of the specimens as camel is not in doubt. This is not the first time that the presence of camels has been recognized by means of dung: similar finds come from the site of Shahr-i Sokhta in Iran, dating to the third millennium Bc. ${ }^{3}$

The mandible ( pl . XXXV, i) was recovered in 1984 from a Napatan context a few metres north-west of the Taharka Temple. ${ }^{4}$ The archaeological context was believed to be secure; however, as the area had been used as a dump in the Roman and Meroitic periods ${ }^{5}$ and was distrubed during the construction of the Meroitic Temple after ad ioo, a date for the specimen itself was desirable. Accordingly, it was submitted to the Radiocarbon Accelerator at Oxford; the result is: $2470 \pm 160 \mathrm{bp},=520 \mathrm{BC}$ uncalibrated (OxA 1060). When recalibrated, this unfortunately hits a plateau on the curve, so the absolute date range is rather wide. At one standard deviation ( 68 per cent confidence) the absolute date range is 810-390 bC, at two standard deviations ( 95 per cent confidence) 920-190 BC. ${ }^{6}$ The Accelerator date therefore places the specimen somewhere within the first millennium bc. This is too early for it to derive from Roman contexts, although at two standard deviations

[^155]the date could just fall within the early Meroitic period; since little cultural material from this part of the site can be referred to the later centuries BC , it is probable that the mandible fragment does indeed belong with the Napatan finds with which it was associated.

The pellets of dung ( pl . XXXV, 2) were recovered from a secure Napatan context in a sondage excavated by the author and P. J. Rose in 1986, below the Meroitic structure io00, north-west of the cathedral. ${ }^{1}$ Several undisturbed Napatan layers overlay the one which yielded the camel dung. The dung pellets were also submitted to the Oxford Radiocarbon Accelerator; the result is: $2690 \pm 90 \mathrm{bp},=740 \mathrm{BC}$ uncalibrated ( OxA 106 I ). The recalibration of this date is more straightforward. At one standard deviation ( 68 per cent confidence) the absolute date range is $920-800 \mathrm{BC}$, at two standard deviations ( 95 per cent confidence) 1040-770 BC.

This date is compatible with the early Napatan period, covering the later ninth and earlier eighth centuries bc. It is uncertain when Qaṣr Ibrîm was first occupied; the Taharka temple complex (early seventh century bc) postdates the original South Girdle Wall, which was already a ruin less than 2 m high when the temple was built. ${ }^{2}$ The date of the South Girdle Wall is not, however, known. Part of its structure is mud-brick, which contains much tempering material. This consists mainly of straw of barley. A sample of this (pl. XXXV, 3) was submitted to the Oxford Radiocarbon Accelerator; the result is: $2800 \pm 80 \mathrm{bp},=850 \mathrm{BC}$ uncalibrated ( OxA 1062). When recalibrated, the absolute range at one standard deviation ( 68 per cent confidence) is $1040-850 \mathrm{BC}$, at two standard deviations ( 95 per cent confidence) 1250-810 bс. This is believed to represent the earliest occupation of Qaṣr Ibrîm. The date range extends from the later New Kingdom to the early Napatan. It overlaps with that of the camel dung from Napatan deposits, however, and demonstrates (a) that the South Girdle wall need not be substantially older than the Napatan occupation, and (b) that camels were present at Qaṣr Ibrîm from close to the start of the occupation.

## The camel in Egypt and Nubia

The date of introduction of the camel into Egypt has been much discussed. Recent studies of both the spread of the domestic camel ${ }^{3}$ and of faunal remains in the Nile Valley ${ }^{4}$ have concluded that the evidence is now in favour of an introduction in the last couple of centuries bс, during the Ptolemaic period. Not all subscribe to this view, however. It has recently been argued that the domestic camel was known in Egypt throughout the Pharaonic period. ${ }^{5}$

Remains of the camels themselves are remarkably rare. The available evidence is discussed by Köhler, ${ }^{6}$ who concludes that there is no definite evidence prior to the Ptolemaic period. One commonly quoted claim is the fragment of cord from Umm es-Sawwan in the northern Fayum. This dates from the Third or early Fourth Dynasty; it is stated to be made of camel hair by Caton-Thompson, ${ }^{7}$ and quoted as such by Ripinski. ${ }^{8}$ A re-examination of the cord has, however, revealed that the fibres come from sheep. ${ }^{9}$

In the absence of satisfactory evidence of the camels themselves, or of their representation

[^156]in tomb-paintings, two classes of data have sometimes been put forward in support of an earlier introduction: ceramic and other models of camels, and rock engravings.

Objects in the first category must satisfy three requirements: (i) they must come from definitely dated archaeological contexts; (2) they must be of Egyptian manufacture; and (3) they must indubitably represent camels. Some objects have been put forward in support of the presence of camels in dynastic times, ${ }^{1}$ but a fuller survey of the pre-Ptolemaic claims ${ }^{2}$ has concluded that in virtually no instance are all three requirements satisfied. An example is the predynastic or First Dynasty statuette from Abusir el-Melek, ${ }^{3}$ which has been claimed as positive evidence, ${ }^{4}$ but remains doubtful on all three counts. First, some unease has been expressed about the date. ${ }^{5}$ Secondly, it may very well not be of Egyptian manufacture. ${ }^{6}$ Thirdly, it is uncertain that the statuette necessarily represents a camel. ${ }^{7}$ Neither the date, nor the origin, nor the identity of the Abusir el-Melek statuette thus necessarily support the presence of the camel in Egypt in the Dynastic period.

Rock engravings are sometimes said to provide relatively early evidence of camels, ${ }^{8}$ although this has been questioned. ${ }^{9}$ One case where stylistically primitive petroglyphs must be of quite late date is the numerous pecked representations of camels and other animals on the walls of the temples of Philae, Kalabsha, and Dakka (pl. XXXV, 4). These temples were not built till Ptolemaic and Roman times, ${ }^{10}$ so clearly the carvings cannot be earlier. One possibility is that the engravings were made by Blemmye nomads-it is known that they visited shrines of their god Mandoulis at Philae and Kalabsha regularly during the early centuries AD. ${ }^{11}$

## Conclusions

As discussed above, there are many uncertainties concerning the artistic representations of camels currently available from Egypt. It is therefore preferable to rely on archaeologically dated camel remains. The finds from Qaṣr Ibrîm presented here appear to be the earliest reliable ones from Egypt and Nubia, putting the date of the introduction of the camel back several centuries, to the early part of the first millennium Bc. The history of the camel will be better understood when a series of such dates, preferably on the specimens themselves, is available from south-west Asia and North Africa. ${ }^{12}$

The presence of camels at Qaṣr Ibrîm in the Napatan period is of significance for the cultural history of Nubia. It is sometimes stated that the acquisition of camels by the Blemmye nomads was an important factor in the retreat of the Roman and the collapse of the Meroitic Empires, because camels made the nomads militarily much more effective. ${ }^{13}$ Trigger states that 'the acquisition of these animals seems to have transformed their economy and society no less than the horse did that of the Plains Indians'. ${ }^{14}$ Camels would

[^157]
undoubtedly have enabled the Blemmyes to present a major potential threat to both empires. The new evidence from Qaṣr Ibrîm shows, however, that camels were present in Nubia at a much earlier date, and it is likely that the Blemmyes could have made use of them earlier than previously thought. This, in turn, suggests that the reasons for the upsurge of nomad attacks in the third and fourth centuries ad may have to be re-evaluated-it was not simply a result of the acquisition of camels by the nomads at this time.

Peter Rowley-Conwy

## The representation of Polygonum senegalense Meisn. in ancient Egyptian reliefs and paintings

A semi-aquatic plant known from Egyptian reliefs and paintings has previously been identified as Potamogeton lucens L. or P. crispus L. The habitat and appearance of the plant are inconsistent with this and Polygonum senegalense Meisn. is proposed as a more suitable alternative.

Among the aquatic or semi-aquatic flora depicted in ancient Egyptian reliefs and paintings, there is a plant often represented springing out of water, below the prow or the stern of a fishing boat. ${ }^{1}$ In fewer instances, it appears on land as a bush ( $\left.b s t n t n s^{3}\right),{ }^{2}$ but in an area which is not too far from water.

Muschler considered this plant to be the Potamogeton lucens L., ${ }^{3}$ and Keimer wrote three articles with more examples supporting this identification. ${ }^{4}$ However, he pointed out a few inaccurate features in the representation of the plant which, he believed, can be understood as stylization in accordance with the principles of Egyptian art. Thus, the stems projecting from water would have been represented in such a way as to fill the space left empty between the prow and the water, ${ }^{5}$ as well as because it is difficult to represent otherwise an aquatic plant the leaves of which are mostly submerged, with 'only the upper ones sometimes floating'. ${ }^{6}$ However, this explanation cannot apply to the bushy representations of the plant on the river side or in a field nearby. There, it would not be an aquatic plant but a semi-aquatic weed which is depicted.

Keimer also wrote that the lanceolate leaves, the thick stem, and the large nodes usually represented are not diagnostic of $P$. lucens, nor is the brown colour of the stem he once observed. ${ }^{7}$ Considering the habitat and the appearance of the plant depicted, it is therefore questionable that it is $P$. lucens.

Von Thomas, quoting Täckholm, identifies the plant with Phragmites australis (Cav.). Trin. ex Steud., ${ }^{8}$ but Germer rejects this. ${ }^{9}$ Indeed, that reed is common in water and moist places, and it can rise 'some five meters above the water', ${ }^{10}$ but the leaves are too long and the shape of the stem does not look like the plant represented in ancient Egyptian reliefs and paintings. Täckholm suggested later that it might be another Potamogeton species, namely P. crispus L. ${ }^{11}$ However this does not solve the problems mentioned above, since $P$. crispus is also an aquatic plant.

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Fig. . Representations of Polygonum senegalense Meisn. with opposite leaves and inflorescence at apex. Drawn from (a) Yon Busing, Die mastaba des Gemnikai, i (Berlin, 1905), pl. iv. (b) Macramallah, Le Mastaba d'Idout (Cairo, 1935), pl. v, fig. c. (c) Davies, Ancient Egyptian Paintings, I (Chicago, 1936), pl. iv.


Fig. 2. Representations of Polygonum senegalense Meisn. with alternate leaves. Drawn from (a) Wreszinski, Atlas zur Altaegyptischen Kulturgeschichte, I, pl. 40 I. (b) Wild, 'le tombeau de Ti', II, MIFAO 65 (Cairo, 1953), pl. cxx. (c) Blackman, The Rock Tombs of Meir, III (London, 1915), pl. 7.

Before proposing a new identification, let us summarize the features which characterize the representations of the plant. The stem is thick, reddish-brown, with vertical lines inscribed or engraved on internodes (see fig. 1). The nodes are often clearly outlined and painted in lighter colour than the stem (see fig. $3 b$ ). The leaves are usually lanceolate, with margins entire (see figs. $\mathbf{1}-2 a$ ), although in one instance, they are dentate (see fig. ac). In most cases, the petiole is attached to the node (see fig. i), but sometimes it looks like a leaf-sheath surrounding the node (see fig. aa, c). The leaves are either alternate (see fig. 2)
or opposite (see figs. 1-3). At the apex there are leaves (see fig. 3) or inflorescences with small red flowers (see fig. ic).

Polygonum senegalense Meisn. seems to meet all the criteria required for a proper identification of the plant. It appears in tropical Africa and Asia, in an area extending towards the south Mediterranean territories. ${ }^{1}$ In Egypt, it is very common in the Nile region, the Mediterranean coastal strip from el-Sollum to Rafah. ${ }^{2}$ The weed is attested in Egypt since at least the Ptolemaic-Roman Period, ${ }^{3}$ and it could have grown there in earlier times, as $P$. salicifolium Brouss. ex. Willd. apparently did. ${ }^{4}$


Fig. 3. Representations of Polygonum senegalense Meisn. with opposite leaves and leave buds at apex. Drawn from (a) Wreszinski, op. cit., pl. 102. (b) Relief 37977 at the British Museum.

The plant grows in moist places and, according to Täckholm, ${ }^{5}$ it is a 'dangerous weed in water channels as it increases rapidly'. It is found in the water itself, on river or canal banks, or several metres away from water, often in large clumps.

It can grow to 1.5 m high or more; ${ }^{6}$ it has a very thick swollen reddish-brown stem, and 'ochreae mostly longer than internodes, up to 4.5 cm ., membraneous, many-nerved' ${ }^{7}$ ( pl . XXXVI, 2 and fig. 4). These are what correspond to the vertical lines engraved on the internodes, or painted on the red stem (fig. i). The representations emphasize either the thickness of the nodes (fig. $\mathrm{I} c$ ) or the ochreae around them (fig. 2a, c), also indicated by a lighter colour on the nodes (fig. $3 b$ ). The red colour of the stem contrasts with the green of the leaves. These are large (up to 30 cm long), 'oblong-lanceolate, tapering at the base, long acuminate at the apex, and scabrous hispid at the margin' ${ }^{8}$ which may have once been depicted as dentate (fig. 2c). They are alternate, although this is seldom represented in Egyptian art (fig. 2). The inflorescences are 'spike-like, cylindrical, dense', with whitishpink flowers. ${ }^{9}$ There may be several axillary or terminal buds together; ${ }^{10}$ these are stylized in Egyptian art (figs. I-3).

No uses of the plant seem to be depicted in ancient Egyptian reliefs or paintings. It is only represented as part of the semi-aquatic flora, probably because of its abundance and possible interference with navigation.

Under the name of $n \breve{s}^{\prime}$, it may be mentioned several times in medical papyri for different

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Fig. 4. Polygonum senegalense Meisn. Reproduced from Zohary, Flora Palaestina, I, Plates (Jerusalem, 1966), pl. 64 .
usages, ${ }^{1}$ especially as a remedy for stiff limbs. ${ }^{2}$ Stiffness could correspond to rheumatic pains ${ }^{3}$ and this therapeutic use of $P$. senegalense in ancient Egypt may be compared with its use in tropical African medicine, for 'rheumatic and other swellings'. ${ }^{4}$

The semi-aquatic habitat and the shape, colour, position, and possibly the medical use of $P$. senegalense would support the contention, that it is indeed the plant so often represented in ancient Egyptian marshes. ${ }^{5}$


#### Abstract

Nathalie Beaux ${ }^{1}$ G. Charpentier, Recueil de matériaux épigraphiques relatifs à la botanique de l'Egypte antique (Paris, 1981), 414-15. Germer, Untersuchung Über Arzneimittelpflanzen im Alten Ägypten (Hamburg, Dissertation, 1979), 286-7. S. Aufrère, BIFAO 86 (1986), 26-9, has recently suggested identifying nš with Conyza squarrosa L . However, N. Baum, $V A_{3}(1987), 103^{-6}$, has shown that such an identification does not correspond to what is believed to represent $n \Sigma^{5}$. In fact, it is quite possible that $n \bar{s}^{\prime}$; does not refer specifically to Polygonum senegalense. It could be a generic term for some semi-aquatic flora. ${ }^{2}$ G. Reisner, The Hearst Medical Papyrus (Leipzig, 1905), 8, 11-12; Ebbell, The Papyrus Ebers (London, 1937), 83,$14 ; 85$, 12 . ${ }^{3}$ Stiffness of muscles and pain are often mentioned among the symptoms of rheumatism (see Ebbell, op. cit. 5I, 17). ${ }^{4}$ Dalziel, The Useful Plants of West Tropical Africa (London, 1937), 32. Another species of Polygonum, P. hydropiper L., is also used for rheumatism (see Flück, Medicinal Plants and Their Uses (London, 1976), 50). ${ }^{5}$ I wish to thank F. N. Hepper, researcher at Kew Herbarium, for his kindness in reviewing this article, and providing me with pl. I.




THE REPRESENTATION OF POL YGONUM SENEGALENSE
MEISN. (pp. 248-52)
I. P. Theadelphia, inv. ${ }^{1}$

A LATIN PAPYRUS (pp. 242-4)

## REVIEWS

Artibus Aegypti. Studia in honorem Bernardi V. Bothmer a collegis amicis discipulis conscripta. Edited by H. De Meulenaere et L. Limme. $270 \times 210 \mathrm{~mm}$. Pp. i79, numerous figs. Bruxelles/Brussel, Musées Royaux d'Art et d'Histoire/Koninklijke Musea voor Kunst en Geschiedenis, 1983. Price $£ 23.20$.

Ce qui explique qu'un musée de Bruxelles édite des Mélanges Bothmer, c'est que Jean Capart, jadis conservateur en chef de ce musée, fut aussi invité à s'occuper du musée de Brooklyn et que, plus près de nous, la fructueuse collaboration scientifique entre Bothmer et De Meulenaere s'est rapidement muée en une grande amitié entre Bernard et Herman. Les 15 contributions que contiennent ces Mélanges concernent le Nouvel Empire (6) et la Basse Epoque (9). En voici les résumés.
C. Aldred montre l'importance du culte d'Ahmès Néfertari sous Amenhotep III; elle est alors souvent représentée, tant en peinture qu'en ronde bosse, non seulement dans le style du temps, mais même sous les traits de Tiyi; je ne crois pourtant pas l'auteur quand il propose que des statues anépigraphes ressemblant à Tiyi soient attribuées à Ahmès Néfertari.
D. von Bothmer publie sous le titre 'Echoes from Egypt' quelques alabastres, deux en argent, un en terre cuite à figures noires et un en faïence, objets grecs dont la forme est originaire d'Egypte. Toutefois, celui qui est de faïence est à transférer de la section classique du MMA dans la section égyptienne: l'auteur a bien identifié les lotus du premier registre, mais contrairement à ce qu'il écrit ensuite, il n'y a pas 'triglyphes et métopes' dans la zone des anses, mais la bande décorative égyptienne à rectangles séparés par trois lignes; puis, non pas une 'étroite bande de pommes de pin', mais un alignement de pétales de lotus; puis viennent deux registres avec ibex et taureaux dont l'auteur note l'inspiration égyptienne; enfin tout en bas, il faut voir le décor typique du bas des colonnes papyriformes auquel la forme de l'alabastre fait penser. Cette pièce n'a donc que la forme en commun avec les trois autres.
J. J. Clère publie une statue fragmentaire de Bakenrenef, vizir de Psammétique Ier, vue dans le commerce, première statue identifiée à ce jour de ce puissant personnage; la pose-agenouillée-est ici étudiée. Notons que ce fragment est aujourd hui à Brooklyn (inv. 82. 23) et que la partie supérieure de la statue a été identifiée dans les collections de Bruxelles (MRAH E7049).
H. De Meulenaere reconstitue la généalogie d'une famille de hauts dignitaires saïtes en rapprochant des fragments dispersés dans plusieurs musées; il montre qu'elle est contemporaine de Psammétique II et que le célèbre Psammétique-Seneb du Vatican appartient très probablement à cette famille.
M. Dewachter reconstitue, en tirant parti de rares descriptions, l'aspect que devait avoir un bloc ptolémaïque aujourd'hui disparu, du Musée de Boulogne, et qui représentait Evergète II.
R. Fazzini publie un bloc portant une double scène de la divine adoratrive Nitocris devant Amon et Mout, bloc mis au jour dans le temple de Mout à Karnak il y a une soixantaine d'années et retrouvé au cours des fouilles menées par l'auteur à cet endroit.

Brigitte Gratien fait connaître une partie de la céramique trouvée au cours de fouilles de l'IFAO dans un village fortifié à Ouadi es-Seboua Est, à savoir la céramique grossière à décor figuré, provenant d'un habitat du groupe C.

Emma Swan Hall énumère quelques exemples romains et médiévaux de scènes où un personnage en frappe un autre de son arme; elle y voit la continuation du thème égyptien du roi massacrant ses ennemis. Ce n'est pas du tout convaincant.
L. Limme présente trois 'Livres des Morts' ptolémaïques illustrés du Musée de Bruxelles, en mettant l'accent sur l'intérêt des vignettes, notamment pour leurs rapports avec le texte et pour la mise en page.

Kl. Parlasca publie une belle statuette d'Harpocrate en stéatite, acquise pour le musée de Brooklyn
par B. V. Bothmer et provenant d'Afghanistan; l'auteur cherche des parallèles parmi les oeuvres hellénistiques de même origine et de même matière. Aucun de ces parallèles n'est satisfaisant. A mon avis, il ne s'agit pas d'une oeuvre importée d'occident, mais plutôt d'un travail local, de l'école indo-grecque du Gandhara, florissante au 2 e siècle de notre ère: tête peu hellénique, physique plus 'soufflé' que musclé, plis du vêtement schématiques.
J. Quaegebeur, dans la lancée de ses recherches sur Arsinoë II, étudie trois statues de femme d'époque ptolémaïque-et bien d'autres à leur propos-donnant la première moitié du 3 e siècle comme période pivot de l'ensemble du groupe.
J. Romano publie un fragment de relief conservé à Brooklyn, provenant d'el-Amarna et représentant un jeune archer en char; il y voyait une figuration de Toutankhaton enfant; un article récent de Hellmut Brunner ( $G M$ 78, 49-50) a montré qu'il s'agit en fait du dieu Shed.

Edna R. Russmann s'occupe du monument d'un exceptionnel intérêt et pourtant tout à fait négligé qu'est la tombe d'Haroua, majordome d'Aménardis, sous la 25 e dynastie; elle en a étudié les fragments dans les musées et le monument lui-même in situ et montre à quel point il annonce la tombe de Mentouemhat.

Victoria Solia examine une tête en granit rose conservée à Dallas, tête d'homme, non-royale; l'auteur examine à son propos la ronde-bosse royale post-amarnienne jusqu'à Ramsès II, pour tenter de situer l'oeuvre, mais elle ne conclut pas.

Enfin, R. Tefnin soumet à une analyse minutieuse un fragment de relief du musée de Bruxelles, d'origine inconnue, figurant un profil de roi coiffé de la khepresh. Des statistiques sur les caractéristiques formelles de la tête, mises en parallèle avec celles d'autres visages royaux du Nouvel Empire, et un quadrillage très fin de ces divers visages permettent à l'auteur d'identifier cette tête avec sureté à Touthmosis III, et d'en déterminer l'origine: Deir el-Bahari.

Claude Vandersleyen

Sundries in Honour of Torgny Säve-Söderbergh. By Several Authors. Acta Universitatis Upsaliensis: Boreas 13, 1984. $265 \times 188 \mathrm{~mm}$. Pp. 133, pls. 8, figs. 19. ISBN 915541589 X. Price SEK 83.00.

Volume 13 of the Uppsala journal Boreas is a Festschrift for the distinguished Swedish Egyptologist Torgny Säve-Söderbergh, and as such (and unlike a journal) is a candidate for a review. But as Festschriften are normally a heterogeneous collection of unrelated papers, short descriptions of the contents, for the guidance of potential readers, are perhaps all that is necessary.

William Y. Adams writes forcefully about the arrogance of many 'new archaeologists', particularly where they assert 'that we should engage in nothing that does not serve the interests of our own scholarly disciplines, however narrowly these may be defined'. Adams points out that this is ethically abhorent, as the 'scientific' investigations and results so desired by the purists of the 'new archaeology' preclude the wider spheres of study of 'old archaeologists', historians, prehistorians, art historians, and other humanists, and take no notice of public interest and awareness. To deplore the fact, for example, that an excavation has yielded objects of aesthetic value is a denial of the huge variety of the human story.

Greetings, prayer, prostration, adoration, in Egyptian, Christian, and Muslim art and literature, are discussed by Jan Bergmann as an offering of congratulations to Säve-Söderbergh.

A stela from Deir el-Medina, now in Glasgow Museum, is described, translated, and commented upon by Morris L. Bierbrier and Herman de Meulenaere. It bears a hymn to the hippopotamusgoddess Thoueris, shown in human form, worshipped by one Penbuy and his family. Other Ramesside monuments bearing the names of Penbuy's family are discussed.

Bengt Birkstam writes on the relationship, in the Eighteenth Dynasty, of the King and the sun-god Re, and the fact that on many monuments there is complete identification of the divine ruler of Egypt and the deity of the sun. Amun and Amen-Re are mentioned, but these Theban sun-gods seem to be less identified with the King than does the Heliopolitan Re.

The contrast between the distorted side-cum-frontal human figures in Pharaonic two-dimensional art and the frontality of the figures in Coptic paintings, which may derive their frontality from Pharaonic sculpture in the round, is the theme of a paper by Gun Björkman.

The multiplicity of meanings of the word sht as used in the Pyramid Texts is discussed by Gertie

Englund. In the solar cycle, not only can it mean the horizon, or the source of light, but also, amongst other things (see the final sentence in the paper), the division of, or passage between, the static and dynamic, the One and the Many.

Christoffer H. Ericsson describes the impressive Nilotic mosaic pavement found in the late sixteenth century at Palestrina, near Rome, and gives details of its chequered history. He is rightly equivocal about its makers and source: imported from the Greek East?; made by mosaicists coming from the Greek East, possibly specifically Alexandria?; made by Italian mosaicists? This reviewer would see the last as most likely, as the concept of Alexandrian Art (as distinct from Hellenistic Art) as a source of inspiration for the Mediterranean world seems to him to be greatly exaggerated by art historians.

The city of Heliopolis and its development and expansion during the later Old Kingdom as the major centre for the worship of deities connected with the sun is the subject of the article by Wolfgang Helck.

Three ruined tombs at Khōkha in the Theban necropolis, largely destroyed by use as modern dwellings, and now again inaccessible, were planned, drawn, and photographed during short visits in 1979 and 1980 by Rostislav Holthoer, who presents the results of his work in this publication. The damage sustained since the first documentation of the tombs by de Garis Davies is considerable.

The extraordinarily convoluted story, based on detective work, hearsay evidence, widespread travel, and persistent questioning of likely and unlikely participants, of the finding and marketing of the Nag Hammadi Codices and the Bodmer Papyri, is told by James M. Robinson.

Jean Vercoutter divides the huge area of the Sudan into four archaeological zones and describes the history of their investigation. He gives a brief coverage of the archaeology of the Nilotic area and its relationship with Egypt, from prehistoric to medieval times and suggests further fields of study.

Six demotic ostraca of Ptolemaic and early Roman date, together with a Roman mummy-ticket, in the Victoria Museum at Uppsala, are presented by Sten V. Wångstedt, with illustrations, transcriptions, translations, and comments.

The scope of these papers in honour of Säve-Söderbergh reflects the wideness of his interests and the diverse nature of his academic work over many decades.

D. M. Bailey

Les figurines funeraires égyptiennes du Musée d'Art et d'Histoire et de quelques collections privées. Aegyptiaca Helvetica, io. By Jean-Luc Chappaz. $297 \times 213 \mathrm{~mm}$. Pp. v+i77. Many photographs and facsimiles, indexes. Geneva, Musée d'Art et d'Histoire, 1984. ISBN 283060004 5. Price not stated.

This volume is a succinct, well-printed, and well-researched catalogue of the shabtis in the Musée d'Art et d'Histoire, Geneva, incorporating also two figurines in the Musée Cantonal des Beaux-Arts, Lausanne, and thirty-one pieces in Swiss private collections. Almost all are unprovenanced, and they range in date from the end of the Second Intermediate Period to the Ptolemaic era. Some have been in Geneva since the nineteenth century, many are recent purchases. The catalogue is preceded by a general introduction on funerary figurines, with bibliographical references updating those in the fundamental studies of Schneider and Aubert and Aubert. Next follows a comment on shabtis, organized chronologically, and remarks on the shabti text (BD chap. VI). The author then gives information about the Egyptian collection in Geneva.

As regards the catalogue entries themselves, Chappaz assuredly provides scholars with all that they need: a full museological description utilizing the typology of Schneider, photographs of all four aspects of each piece, facsimiles of the texts and translations of the same, a commentary, dating, and bibliography (where appropriate). The photographs are on the whole quite adequate, but it is not always possible to check the facsimiles against the objects themselves. The author, in assigning approximate dates to the shabtis, is commendably cautious. In other catalogues, shabtis are often dated stylistically (though not necessarily inaccurately thereby), but Chappaz prefers a more prudent approach especially, as he points out, because the work of local ateliers is little known.

Most of the shabtis are of no great artistic merit, and the same can be said for the mass of such objects in Egyptological museums, especially in the smaller collections. All the more commendable,
therefore, that the present material is made available to scholarship in a definitive form, which could well be emulated by other curators. Shabtis, after suffering a long period of neglect along with other categories of funerary material, are again attracting attention. Rightly so, as they have plenty of information to yield, not least prosopographical information available from no other source. The author of the present catalogue places the figurines in context wherever possible, by citing other known specimens of a given shabti and by attempting to identify the owners from other monuments. Another edition, with a different cover, and outside the series Aegyptiaca Helvetica, is available for sale at the Musée d'Art et d'Histoire.

Geoffrey T. Martin

Die heiligen Seen ägyptischer Tempeln. Ein Beitrag zur Deutung sakraler Baukunst im alten Ägypten. By Beatrix Gessler-Löhr. Hildesheimer Ägyptologische Studien $21.235 \times 170 \mathrm{~mm}$. Pp. xvii +504 , 88 figs., 9 tables. Hildesheim, 1983 . ISBN 380678080 3. Price DM 59.
Diese umfassend angelegte Dissertation (bei W. Barta München) über die den ägyptischen Tempeln als Nebenanlagen zugeordneten heiligen Seen versteht sich als 'Beitrag zur Deutung sakraler Baukunst im alten Ägypten'. Das der Arbeit vorangestellte Inhaltsverzeichnis gibt bereits eine übersichtliche Gliederung des recht umfangreichen Materials über die durch Inschriften, Darstellungen und archäologische Reste belegten heiligen Seen bei königlichen Totentempeln und anderen funerären Heiligtümern vom Alten bis zum Neuen Reich (Kap. II, pp. 57-125) und bei Göttertempeln von der Frühzeit bis zur Römerzeit (Kap. III, pp. 127-351).

Zur Erschließung der vielfältigen Bauformen wählte die Verf. anstelle einer topographischen oder typologischen eine chronologische Ordnung des Materials. Bei den Seen der Göttertempel, deren zeitliche Einordnung weniger genau faßbar wird, ist diese zugunsten einer gruppenmäßig geordneten Darstellung 'inhaltlich’ zusammengehörender Tempelseen ('Kampfseen' des Sonnengottes, Stätten der Priesterreinigung, Schauplatz von Feierlichkeiten an Festtagen u.a.) bis zu einem gewissen Grad vernachlässigt. Das ziemlich umfangreiche Kapitel III endet mit einer knappen Darstellung der nur archäologisch faßbaren heiligen Seen (III H, pp. 353-78) und der Aufführung einiger übriger, weniger gut belegbarer und zum Teil tatsächlich zweifelhafter Beispiele (Brunnenschacht von Deir el-Medineh) (III J, 379-90). Auf eine Betrachtung von Beispielen aus Nubien (Ausnahmen Kalabsha und Kawa), den Oasen und anderen Randgebieten wurde wegen der dürftigen Quellenlage verzichtet, obwohl sicherlich auch der große See vor dem Amuntempel in Hibis (H. E. Winlock, The Temple of Hibis, I (New York, 1941), 5 Taf. I, A. 29) und das $20 \times 50 \mathrm{~m}$ messende Bassin vor dem Amuntempel in Soleb (M. Schiff Giorgini, Kush 10 (1962), 156 Abb. if.) eine kultische Funktion hatten.

Von diesem Gliederungsschema blieben zwei sich typologisch und funktional vom Gesamtmaterial unterscheidende Sonderformen ausgenommen: das Nilmesserbecken des Chnumtempels von Elephantine und die hufeisenförmigen Ischeru-Gewässer (IV A, pp. 391-400 bzw. IV B, pp. 401-24). Die Arbeit schließt ab mit zwei separaten Komplexen, die die mit der Osirisverehrung zusammenhängenden und dem Aufenthalt von Tieren vorbehaltenen Gewässer (IV C, pp. 425-67 bzw. IV D, pp. 469-88) abhandeln.

Der Untersuchung sind ausführliche, auf das Thema der Arbeit abgestimmte Indizes nachgestellt. Die hieran anschließenden Verzeichnisse der Abbildungen und Tafeln sind aber eigentlich nur Bildnachweise. Schon bei der Textdurchsicht vermißt man wenigstens knappe, anderenorts übliche und der Kurzinformation dienliche Abbildungsunterschriften. Zu bemängeln wäre auch das häufige Fehlen von Angaben zur Nordrichtung bei den abgebildeten Lageplänen und Grundrissen sowie zu den Maßverhältnissen der Abbildungen.

Teil A der in zwei Abschnitte untergliederten Einleitung (pp. 1-9) macht den Leser mit den Problemen der Untersuchung und dem Objekt der vorliegenden Arbeit bekannt, nämlich, die 'vielfältigen kultischen Funktionen und mythologischen Aspekte der Tempelseen' sowie deren formale Gestaltung und deren Bezeichnungen anhand der archäologisch und inschriftlich nachgewiesenen Beispiele aufzuzeigen und eine generell brauchbare Nomenklatur herauszuarbeiten. Die Verf. grenzt die zahlenmäßig nicht unbedeutende Gruppe ähnlicher architektonischer Formen von Tempelgewässern, darunter wiederum vor allem die in vielfältiger Bauform vorkommenden
heiligen Seen, gegen andere Formen wie Kanäle und Brunnen ab. Dabei ist eine genaue Zuweisung der einen oder anderen Form der Tempelgewässer nicht immer sicher. Vor allem ist es häufig schwierig, zwischen $\check{s} j$ und $m r$ zu unterscheiden, was eine genaue Untersuchung der textlichen Zeugnisse unerläßlich macht.

Mit einer Rückschau auf den bisherigen Stand der Forschung (Teil B der Einleitung) und der Rechtfertigung für die unternommene Untersuchung leitet die Verf. auf das in die Thematik einführende Kapitel I (pp. i 1 -55), nämlich das Studium der archäologischen (A) und textlichen (B) Quellen und die hieraus abzuleitenden Definitionen, über. Erstmals wird hier für die zahlreichen, in unterschiedlicher Form ausgeführten, doch in der Literatur allgemein als 'Heiliger See' zusammengefaßten Gewässer ägyptischer Tempel eine generelle Unterteilung in Heiliger See $\check{s} j$ $n t r j$ (als Prototyp der See des Denderatempels), Tempelteich, Kanalteich, Ischeru-Gewässer und Ringteich eingeführt. Zur genaueren Interpretation der Textzeugnisse werden auch archäologische Kontexte, Darstellungen in Gräbern und sogar Modelle, desgleichen Opferbecken in Form von Heiligen Seen herangezogen.

Dabei wird der Terminus 'Kanalteich', hergeleitet aus der formalen Kombination eines querrechteckigen Teichs mit einem axial daraufzulaufenden, doch verkürzt dargestellten Kanal sowie von der Bezeichnung $m r$ für gleichartig geformte Opferbecken, für die sogenannten T-förmigen Teiche (p. I3 f.) gewählt. Doch scheint die Anwendung dieses Terminus' dort fraglich, wo es sich bei einer schiffbaren Verbindung zwischen Tempel und Nil in dem 'rechteckigen Querarm' eines solchen Kanalteichs eigentlich nicht mehr um einen 'Teich' handelt, sondern, wie die Verf. zum Beispiel für den Tempel Sethos' I. in Abydos (p. ifi) angenommen hat, um die Ausweitung des Kanals im Vorbereich des Tempels zu einem Wende- und Manövrierbecken für die vom Fluß kommenden und wieder dorthin zurückkehrenden Boote. In dem Becken vor dem Karnaktempel beispielshalber mußten die Userhat, ihre Zugboote sowie weitere Begleitboote Platz finden. Nach Süden dehnte es sich bis zur Kapelle des Achoris aus, wo die eigentliche 'Quaianlage' des Amuntempels (Traunecker, in Karnak VI, 7; Traunecker-Le Saout-Masson, La chapelle d'Achôris à Karnak i (1981) passim; Lauffray, in Karnak v, 3 ff. Abb. if.; ders., in Karnak vi, 5 ff. Abb. 2 f. Taf. 2b; ders., Karnak d'Égypte. Domaine du divin (1979), 96 f. Abb. 73 ff. dazu PlanAbb. i2) lag. Bei der dagegen von der Verf. als 'Quaianlage' interpretierten Plattform vor dem Karnaktempel (vgl. dagegen bereits Lauffray, Kêmi 2 I (1971), 77 ff .) handelt es sich—und dies gilt generell für alle in dieser Arbeit angeführten Quai- oder Anlandeanlagen (s. Sachverzeichnis s.v.) vor ägyptischen Tempeln seit dem Neuen Reich sowie für die an Ufern von Teichen angeordneten Plattformen und die hier ebenfalls angeführten Miniaturanlagen vor Privatkapellen in Amarna (p. 108)-um einen am sinnvollsten mit 'Tribüne' zu bezeichnenden Kultbau (Jaritz, Elephantine iII, 7.40.61; ders., Untersuchung über die Tribünen vor äg. Tempeln seit dem Neuen Reich, in Arbeit). Diese spezifische, vor wenigstens 32 ägyptischen Tempeln nachzuweisende Bauform diente nicht als profane Landestelle, sondern als Erscheinungsort des Gottes in der Öffentlichkeit, als Wegstation und Opferstätte, höchstwahrscheinlich aber auch als Nilkultstätte, Orakelstätte und eventuell auch als 'Bühne'. Der Terminus 'Tribune' ( $d$ ' $\boldsymbol{d} \cdot \vec{f}+\boldsymbol{+}$ Baudeterminativ) wird von der Verf. zwar ebenfalls gebraucht und an der richtigen Stelle (p. 275) eingeführt, doch nicht mit der nötig gewesenen Konsequenz auch an anderen entsprechenden Stellen eingesetzt. Auf keinen Fall jedoch sollten die Termini 'Tribüne' und 'Kiosk' miteinander vermischt oder verwechselt (pp. 275, 378) werden. Es kann höchstens einen auf der Tribüne stehenden Kiosk leichter Bauweise (Bsp. Karnak, s. Lauffray, Kêmi 2 ( 197 I ), 8 I , 92 Abb. 2 ff .; ders., in Karnak v, 45 Abb. i) geben, von dem aus gewisse Vorgänge (z. B. auf einem heiligen See) verfolgt werden konnten oder wohin die Prozession vor oder nach Vollendung gewisser Riten auf dem heiligen See zog. Die räumliche Erweiterung des schmalen Umgangs auf dem Südrand des Heiligen Sees von Dendera (pp. 336 f. Abb. 56b Taf. IV A) kann daher kaum als Tribüne der von uns angesprochenen Art bezeichnet werden, sondern höchstens als Standplatz für wenige Personen. Doch scheint sich hier aufgrund der Lage des Mauerrücksprungs in der Brüstung und dessen von der Brüstung unterschiedlicher Ausführung am ehesten ein Vergleich mit der Lage des Kiosks am Heiligen See von Tôd (pp. 336 f. bzw. 374 ff.) anzubieten. Diese Vermutung bleibt aber ebenso unsicher wie die alternative Annahme eines Kiosks in Leichtbauweise (p. 337) aufgrund der bisher allerdings ungeklärten Funktion der Aussparungen auf der Mauerrückseite (Taf. IV, B). Ziemlich sicher hatte ein solcher Leichtbau kein ebensolches Aussehen (s. auch p. 328) wie ein Kiosk aus Stein vom Typ haj•t 'an der Spitze des Sees', zu dem die Prozession aus
besonderen Anlässen (pp. 226 f.) zog. Einen 'von Säulchen getragenen Kiosk' (p. 337) gab es dagegen als Bauform nicht.

Weitaus zahlreicher als die archäologischen Befunde sind die für eine Interpretation der kultischen Funktion relevanten textlichen Quellen (I B, pp. 17-55). Auf ihnen basieren schließlich auch die philologischen Definitionen für die verschiedenen Tempelgewässer und damit deren gegenseitige Abgrenzung. Zu den allgemeinen ( $\mathrm{I}_{\mathrm{I}}$, pp. 20-32) und den speziellen (I B 2, pp. 32-47) Termini aus den ägyptischen Quellen läßt sich nach den griechischen Papyrusinschriften und den antiken Schriftstellern auch eine klassische Nomenklatur (I B 3, pp. 47-55) erstellen. Als hauptsächliche Textquellen, in denen nicht nur die Tempelgewässer im einzelnen, sondern auch die mythischen Hintergründe ihrer Entstehung angedeutet oder erläutert sind, werden drei Gruppen herausgestellt: Bauinschriften mit politisch-religiösem oder biographischem Charakter, kulttopographische Listen ptolemäisch-römischer Zeit, die die res sacrae eines Gaus oder Tempels nennen, und religiöse Texte. Darüberhinaus informieren die Inschriften über reale Vorgänge des Kultablaufs, nennen in Ritualvorschriften für die Priester bestimmte Seen als Reinigungsstätten. Diese von der Verf. unter Heranziehung relevanter Literatur sorgfältig und kritisch durchgeführte Analyse des Quellenmaterials dient schließlich als Basis und Voraussetzung der den Hauptteil der Arbeit ausmachenden Untersuchung der Einzelmonumente in den Kapiteln II und III.
Eine zusätzliche Darstellung der in ihren Ursprüngen noch unklaren baugeschichtlichen Entwicklung der verschiedenen spezifischen Bauformen der heiligen Seen hätte den Rahmen dieser Arbeit gesprengt. Unter Verweis auf die Primärliteratur finden sich lediglich meist knapp gehaltene Baubeschreibungen derjenigen Einzelanlagen, die archäologisch nachweisbar sind oder die sich anhand von Quellen einigermaßen rekonstruieren lassen. Dabei gelingt der Verf. nicht in jedem Fall die notwendige kritische Interpretation der überlieferten archäologischen Befunde. Ebenso offenbaren sich gewisse, wenn auch verzeihliche Schwierigkeiten im Verständnis einiger bautechnischer Details und im Umgang mit baubezüglichen Fachtermini. Beispielshalber werden die Baugrubenmauern des Heiligen Sees von Tanis (pp. 354 f.) als die Einfassungsmauern eines äußeren, aus Trockenziegeln angelegten Beckens gedeutet. Oder es soll die sorgfältige Quaderbearbeitung der Einfassungsmauern des gleichen Sees (p. 354) dazu gedient haben, das Wasser am seitlichen Versickern zu hindern. Da das Wasser in den heiligen Seen, wie in dieser Arbeit verschiedentlich betont wird, in Abhängigkeit zur Bewegung des Grundwassers stieg oder fiel, muß die saubere Mauerwerksausführung, die in der ägyptischen Baukunst keineswegs ungewöhnlich ist, also nicht primär dem vermuteten Zweck gedient haben.

Bei der Baubeschreibung des Heiligen Sees von Dendera (pp. 334 ff .) meint die Verf. mit 'Seitenwänden' des Bassins (p. 335) sicherlich dessen Seiten- oder Einfassungsmauern. Als Variante für den in seiner Bedeutung eigentlich klaren Terminus 'Brüstung' steht hier 'Mäuerchen'. Dies führt in der Folge zu der unrichtigen Interpretation der Funktion einer Brüstung als 'Mauer' (s. auch p. 194), die um einen heiligen See angeblich als Schutz vor Verschmutzung und Verlandung (p. 236) errichtet wird. Schließlich ergibt sich hieraus (Anm. 786. 822) die sicherlich unrichtige Gleichsetzung einer im Restaurierungsbericht des Generals Hor (p. 226) genannten Mauer mit einer Brüstung. Unter einer 'giebelartig abgeschrägten' Brüstung (p. 335) wird man sich einen anderen Profilschnitt von dessen oberem Abschluß vorstellen, als unter einem 'beiseitig abgefasten' Abschluß. Auch hätte die Verf. auf eine detaillierte Beschreibung einer in die Literatur eingeführten 'Schrankentür' verzichten können. Ergänzend zu den 'sockelartigen Mauerverstärkungen' (p. 337) ist zu bemerken, da $\beta$ es sich hierbei ebenso wie beim Heiligen See des Monthtempels von Karnak-Nord (p. 194) tatsächlich um konstruktiv in den Mauerwerksverband der Brüstung eingebundene Altäre (so zögernd auch die Verf. p. 338) handelt. Dafür spricht allein schon ihre Ausführung (geneigte Seitenflächen mit vertieften Feldern, Echrundstäbe). Wie die auf den Brüstungsaußenseiten gegen die Altäre geführten Treppchen überdies zeigen, waren jene ehemals höher, d.h. es fehlt ihnen heute ein Aufbau, der aus einem umlaufenden Hohlkehlgesims über Horizontalrundstab mit vier über den Ecken aufgehenden Zinken zur Aufnahme eines Libations- oder Feuerbeckens bestand (vgl. die der Brüstung der Chnumtempel-Terrasse in Elephantine sekundär aufgesetzten Oberteile ehemaliger Ständeraltäre und ihre Lage zum Becken des Chnumtempel-Nilmessers, s. Jaritz, Elephantine III, 30 ff. Taf. 47). Endlich sei in diesem Zusammenhang noch auf die verschiedentlich (pp. 192, 194, 359, 373) vorkommende Verwechslung von Steinbruchmarken mit 'Steinmetzzeichen' aufmerksam gemacht.

Eine abschließende Randbemerkung betrifft ein kleines Kalksteinbecken, das bei den Ausführungen zu dem zum MR-Satettempel von Elephantine (pp. i5If.) gehörenden Reinigungsbecken vermutlich der Vollständigkeit halber (Anm. 536) erwähnt wird. Es handelt sich hierbei jedoch nicht um ein Tempelgewässer, sondern um einen technisch erforderlichen Wasserbehälter mit Deckel, in dem das für das erwähnte Reinigungsbecken bestimmte Wasser gespeichert werden konnte. Im übrigen ergab sich dank einer neuerlichen Lesung der zwischen den Fundamentquadern des ptolemäischen Satettempels gefundenen demotischen Bauinschrift (Lüddeckens, MDAIK 27, 1971, 203-6 Taf. 51) eine Umdatierung des bisher angenommenen frühptolemäischen Baubeginns des Tempels in eine spätere Zeit (dazu demnächst U. Kaplony-Heckel in MDAIK).

Trotz der vorgebrachten kritischen Anmerkungen kommt dieser sehr ausführlichen und umsichtigen Untersuchung die Bedeutung zu, eine weitere Lücke in unserem Verständnis der sakralen Nebenanlagen ägyptischer Tempel zu schließen. Für die Auswertung des umfangreichen, bereits in Primär- und Sekundärliteratur veröffentlichten Materials werden sämtliche erreichbaren Textquellen und archäologischen Befunde zusammengestellt, kritisch bewertet und verglichen. Dank des klaren Aufbaus ist das in die Untersuchung aufgenommene und durchgearbeitete Material leicht auffindbar und macht die Arbeit auf diese Weise überdies zu einem praktischen Handbuch.
H. Jaritz

Materialien zur Archäologie und Geschichte des Raumes von Achmim. By Klaus P. Kuhlmann.
Deutsches Archäologisches Institut Abteilung Kairo, Sonderschrift ir. $300 \mathrm{~mm} \times 215 \mathrm{~mm}$. Pp. xi +91 , pls. 44. Verlag Philipp von Zabern, Mainz am Rhein, 1983. ISBN 3805305907. Price DM 98.
The provincial centre of Akhmim, with its continuous occupation from predynastic until modern times, offers abundant material for the study of its history, rivalled only by the ancient capitals of Egypt and very few other provinces. Despite this, Akhmim, the capital of the ninth Upper Egyptian nome, has been unusually neglected by scholars, with our information depending primarily on some scattered reports by visitors and on numerous finds now in various collections throughout the world. These were purchased from Akhmim mostly around the turn of the century when this site became a thriving market for antiquities through the activities of tomb robbers and of haphazard excavations. Fortunately, this picture is changing rapidly with scientific work being conducted by a number of institutions during the past decade (DAI-Kairo, 1977; Macquarie University, Australia, 1979; University of Minnesota, USA, 1979; the Inspectorate of Antiquities at Sohag, 1981). Dr Kuhlmann's book, which assembles and discusses all the material so far known on the archaeology and history of Akhmim, is most opportune and provides a welcome basis on which further research may build.

Following an introduction which summarizes the present state of knowledge about the site, the book is divided into three sections. The first section (pp. 4-13) describes the topographical features of the area, the position of the town, and its selection as a centre for the cult of Min. Kuhlmann studies the two names associated with Akhmim, $\not \supset p w$ and $H n t j-M n w$, and concludes-contrary to common opinion-that they represent two separate towns, suggesting that Hntj-Mnw may have originally been a temple area located near the older site of $\mathfrak{y p w}$. He also examines the word $s n w \cdot t$ and, rejecting its identification with a main temple of Min, proposes that it was a necropolis cult place, situated between Cemeteries A and B.

In section two (pp. 14-49), Kuhlmann considers the temples of Akhmim. He traces the remains of the renowned temple of Akhmim through the writings of Arab travellers and scholars of the Middle Ages, then through those of the European visitors of the eighteenth and nineteenth centuries. Yet his own visit in 198 i failed to locate the temple with any certainty. In the same year, however, during the excavation for foundations of a modern construction, a significant discovery was made that may be related to this temple. A large limestone gate with broken statues of Rameses II and his daughter, Merit-Amun, originally approximately 10 m high, was uncovered; and the area is now being excavated by the Inspectorate of Antiquities at Sohag. Further support for the identification of this find with the main temple comes from the Arabic designation of the area as 'The Bull Garden' and the statement by Herodotus that the cult was maintained in a palm grove with the bull or ram as cult image for (Min)-Amun.

Kuhlmann then studies the temple buildings through the ages. He suggests the possible presence of the cult of Min from the First Dynasty. This rests, however, on very slender grounds. In the Old Kingdom references are made to $p r-M n w n \nexists p w$ and also to a ka-chapel of Pepy in $\mathfrak{y p w}$, but it is uncertain whether the latter was part of the former or an independent building. One of the Sesostrises mentions a foundation for Min of $\not \supset p w$, and the name $H n t j-M n w$ is documented for the first time in the reign of Sesostris I. From the end of the Middle Kingdom, the necropolis temple snw $\cdot t$ is known to us, although in Kuhlmann's opinion this might have existed as early as the Old Kingdom to care for the officials buried in Cemetery B. In addition to the well-preserved temple of Ay at El-Salamuni from the end of the Eighteenth Dynasty, two inscribed blocks may questionably suggest building activities by Thutmosis III and Amenophis IV. A temple of Rameses II is now better known through the above-mentioned recent discovery. No archaeological evidence for any later buildings is known, despite Herodotus' references to the contrary.

From the same sources, Kuhlmann investigates the problem of whether there was more than one temple ('birba' and 'barabi') and tends to favour the presence of two temple ruins, but their identification with today's remains is not yet possible. He also attempts to describe the Akhmim 'birba' adding to the work of Sauneron in BIFAO $5_{1}$ (1952), 123-35.

Section three (pp. 50-86) is devoted to the necropoleis of Akhmim, which were visited and described by the European, but not by the Arab, writers. Since the eighteenth century, but particularly during the nineteenth century, the tombs of Akhmim were ravaged, especially in Cemetery A. Three cemeteries are known. In the case of each, Kuhlmann divides the tombs into various types based on their architectural features, and produces complete drawings to provide examples of each classification.

Cemetery A, near El-Hawawish: Kuhlmann discusses the name, the location and the area of the site, as well as the history of both its excavations and plundering. The cemetery contains burials from the Naqada Period down to Roman and Coptic times, with the majority of tombs probably from the Ptolemaic Period and rare evidence from the Old Kingdom to Second Intermediate Period. It also includes burials of animals and birds. The author then follows the growth of the cemetery during its long occupancy, dividing the tombs there into three main types and providing a list of the Cairo JE numbers of items found by Maspero in 1884-8.

Cemetery B, (Bayt) El-Madina: Kuhlmann's reference to this cemetery as 'El-Madina' is not unjustified, for the name is used by the locals to refer to this mountain and it appears in older literature. Not only is the mountain honeycombed with rock tombs, looking like a city (madina), but also these tombs were inhabited by Copts during early Christian times. Kuhlmann agrees that one can think of a necropolis as a city, but thinks that Bayt El-Madina 'house of the city', may refer to a temple at the foot of the mountain which was seen by Saint-Génis. However, the term 'El-Madina' is merely a local tradition, undocumented in the official records of the survey department of the country; and as the cemetery has been called El-Hawawish since the visit of Newberry in 1912 and in all modern literature, reverting now to 'El-Madina' may only cause confusion. Since Cemeteries A and B are both now called El-Hawawish, a reasonable solution, perhaps, would be to call them El-Hawawish A and El-Hawawish B.

The mountain was robbed in $1888-9$ and many of its coffins, whose dating is still disputed, are now in the Cairo Museum. The cemetery was extensively used in the Old Kingdom, although Newberry asserts that one tomb there belongs to the Twelfth Dynasty (Newberry no. $25=$ Kanawati M43). Kuhlmann is certainly correct in questioning Newberry's dating. The tomb has recently been excavated and published, where a date at the beginning of the Sixth Dynasty seems most likely (Kanawati, The Rock Tombs of El-Hawawish, v, 8 ff .). Despite the re-dating of M43 to the Old Kingdom, the problem of whether this cemetery was used during the Middle Kingdom has concerned both Kuhlmann and the reviewer. If the nomarchs of the Middle Kingdom were buried in Cemetery B, did the stela of the nomarch Intef (p. 57), which was acquired by the Cairo Museum in 1887 , originate in Cemetery A, as suggested by Kuhlmann, or in Cemetery B?

Cemetery C, near El-Salamuni: Kuhlmann mentions previous references to the site and his own work on the temple of Ay since 1979. The cemetery contains mainly Late Egyptian-Roman burials, with a number of Old Kingdom tombs as well. The author is of the opinion that burials at El-Salamuni did not belong to residents of Akhmim itself, but probably to those of other towns in the vicinity. He also suggests that the New Kingdom tombs are to be found in Cemetery A and that the
rooms near the temple of Ay, thought to be Eighteenth Dynasty tombs, are only magazines and living quarters for the temple priests.

Despite its title, this volume does not simply present a list or a description of materials; throughout the book Dr Kuhlmann makes a conscious attempt critically to examine and contrast the sources. The result is a suggestion or probable identification of one or more sites for a building or even the elimination of certain areas as possible locations. At a time when current excavations at Akhmim are constantly adding to our knowledge of the history of this province, the collection and analysis by Dr Kuhlmann of all the basic source material up to the time he wrote this book lay a solid foundation for future research.

Naguib Kanawati

La main dans l'Égypte pharaonique. By Claude Sourdive, with a preface by Jean Leclant. $225 \times$ ${ }_{156} \mathrm{~mm}$. Pp. xiv ${ }^{6}$ 19, photographic pls. 3, numerous figures and tables. Peter Lang, Berne, $1984 .^{2}$. ISBN 326103280 4. Price Fr. 500.

The title on the cover of this book raises some false expectations, since the work might have been thought to deal with representations of the hand in human and divine figures. Such a theme would have been of great interest, because the hand is less of a stereotype in Egyptian art than other bodily parts, and its various functions are expressively shown in subtle fashions that ask for further consideration. In fact, the scope of the book is more accurately indicated by the subtitle Recherches de morphologie structurale sur les objets égyptiens comportant une main. The objects are divided into the following groups: hand-held sticks; 'vertical brachiomorphs' consisting of fly whisks, hairpins, clappers and handles intended for whips; 'vertical-horizontal brachiomorphs', that is, head-rests; 'horizontal brachiomorphs' comprising spoons, kohl applicators, censers, and tongs; and miscellaneous items including balance arms, scoops, and unguent horns. The positional classification relates to the theoretical importance that the author attaches to the orientations taken up by the hand and arm in space. The author also points out that certain objects which are grasped in the hand and might, therefore, have been expected to acquire a hand motif do not do so; these include combs, mirrors, and most sistra.

In parts 1 and 2 of the book, the author gathers together a large body of material of more than five hundred objects and illustrates it copiously with line drawings based partly on his own photographs and partly on existing publications. Clearly, it is of great benefit to have the material collected in this way, especially as some of it has not previously been published, in particular the corpus of eighteen whip handles (pp. 214-21). One should perhaps add to the catalogue the depiction of a curious device incorporating a hand used by the king to adjust the bolt of a shrine door in the temple of Sety I at Abydos (Calverley, Temple of King Sethos I ir, pl. 4).

Many of the objects have been subjected to various forms of qualitative and quantitative analysis. It must be said that this treatment is not always illuminating and in some cases is suspect because of the small size of the samples. Of course, Egyptologists can only work with the material available and very often it is less adequate than they would wish. However, the question must arise as to when it becomes too inadequate to produce meaningful results. In the case of the analysis of the hand-held sticks (pp. 75-91), there are altogether twenty-two examples, which are divided into three groups, according to who carries them, of eight, nine, and five examples each. One might well ask whether these small samples really justify the elaborate analysis given them in chap. 2 .

Similarly, only fourteen examples of spoons survive from the Archaic Period, the Old Kingdom and First Intermediate Period and thirteen examples from the Middle Kingdom (p. 293). From these, the author argues that in the Middle Kingdom certain types found in the earlier group were abandoned. However, the thirteen Middle Kingdom examples are further broken down into seven groups, of which one consists of four examples, three of two examples each and three of one example. One feels that the Middle Kingdom sample is too small to rule out the possibility that, owing to the chances of survival, types found in the earlier period have simply not come to light in the Middle Kingdom.

The inadequacy of the material is compounded in at least two cases by apparent inaccuracies in
analysing examples. I refer to the hand-held sticks $\mathrm{P}_{1}$ and $\mathrm{P}_{2}$. In table I on p .76 , the length of the stick $P_{I}$ is given as II cm and the height of the figure holding it, which is incomplete, is estimated at 27 $\mathrm{cm}+$, giving a ratio of stick length to figure height of $40.7 \%+$. (The second plus sign is a mistake, because an increase in the height of the figure would cause a decrease in the percentage ratio.) If, however, measurements are made on the drawing of $P_{I}$ on pl. I fig. 2 , the length of the stick is found to be 3.25 cm . From this, one can work out the scale of the drawing and calculate that the suggested 27 $\mathrm{cm}+$ for the height of the figure would be equivalent to $7.98 \mathrm{~cm}+$ on the drawing. Since the surviving height of the figure on pl. I from the top of the head to just below the knee is 7.3 cm , the estimated height must be too short. A better estimation can be gained by using the known proportions of Old Kingdom figures in which the height from the top of the knee to the hairline is generally two-thirds of the height from the soles to the hairline. If we take the top of the knee to be roughly level with the bottom of the kilt, the distance from there to the hairline is 6.25 cm . A third of the distance from the soles to the hairline would therefore be 3.125 cm . The height from the hairline to the top of the head measures 0.45 cm . Thus, the complete height of the figure should be approximately 9.825 cm , and the stick length to figure height ratio would be about 33.1 per cent. In fact, one can see by eye that, contrary to the figures given in table $1, P_{I}$ is shorter in relation to the height of its holder than $P_{3}$ and probably much the same as $\mathrm{P}_{4}$; certainly by no stretch of the imagination do the illustrations show it as the longest of these examples in relation to the height of the holder.

Table I gives the length of the stick $\mathrm{P}_{2}$ as 8.4 cm and the height of the figure holding it as 29.5 cm with a stick length to figure height ratio of 28.5 per cent. In the drawing on pl. 2 fig. 2 , the measured height of the figure is 4.9 cm , which means that 8.4 cm should equal I .4 cm in the drawing. In fact the stick measures at least I .75 cm , giving a stick length to figure height ratio of approximately 35.7 per cent. There would, therefore, be no reason to regard the stick as exceptionally short.

Thus the two sticks which the author regards as the longest and shortest of his P series appear in fact from these calculations not to be so, which would upset the layout of tables 5 and 6 . It is possible, of course, that the figures, executed from the author's own photographs, are not drawn with sufficient accuracy to allow one to check the author's calculations in this way, in which case their inclusion in the catalogue seems rather pointless; indeed, if the stick $\mathrm{P}_{3}$ (source of drawing not acknowledged) is in reality shorter in relation to the height of its holder than the stick $P_{I}$, then the drawings are valueless.

I wonder whether the author is correct to include two examples of the fly whisk from Amarna (p. 141 nos. 070 and 07 I ). They are alleged to occur in a scene in the tomb of Huya carried by the king and queen, who would then be the only woman to do so (p. 164). The scene is very damaged as published by Davies, Amarna III, pl. 13, but is reconstructed on p. Io of the same volume, where the royal couple are given fly whisks. One might suggest that the king really held the $n h ; h ;$ flail and that the lines shown on pl. 13 and taken by Davies on p. io to be part of a hand are extraneous in origin. Little is left of the supposed whisk held by the queen; on pl. I 3 there is no sign of a hand which only occurs in Davies's reconstruction.

On p. 80 the author states that 'from the Middle Kingdom and systematically in the New Kingdom in the wall paintings the fingers are shown equal, the end of the hand being straight'. This is, however, true only when the hand is relaxed, for instance hanging at the side of the body, when it curves slightly and is shown in an apparent three-quarter view which cannot be translated directly back into reality. When the hand is shown from the front or back with the fingers straight, it is usual for the artist to make at least a slight difference in the lengths of the fingers, even if in many cases it is less than is found in real life.

Part 3 of the book, comprising almost one-third of the whole, is concerned with theory. The treatment of hieroglyphs featuring the hand is typical (pp. 497 ff .). The author postulates a hieroglyphic system based on a number of 'binary oppositions', of which the first is a ' $2 / \mathrm{I}$ opposition' of two arms versus one arm, one hand, one finger; the second is an opposition between the open hand and the clenched fist; the third is an opposition between vertical and horizontal, modulating into a position of obliquity. A classification of this sort appears to be no more than a taxonomic device and it is hard to see that it contributes greatly to understanding.

The author cites ( p .527 ) as examples of non-realism in these objects the different forms of the hand that link the handles of spoons to their bowls, on the grounds that they do not reflect the way in which a scoop, such as a shell, would naturally be picked up in life. While this is so, it is also true that the various gestures adopted succeed in conveying a compelling notion of the act of grasping an object. In
this they typify Egyptian art generally which creates its own reality by bringing together various aspects of visual experience so as to form images which do not translate directly back into real life, yet form a coherent and convincing whole. Aesthetic considerations such as these are not, however, a feature of the present book.

Finally, one must point out that it would have been helpful for the reader if an index to this long book had been provided. One may also express the hope that the sometimes over-elaborate treatment of the material will not stifle, rather than stimulate, interest, since the objects brought together in this book form a corpus of material that is, on the whole, not well known and which is certainly worthy of study.

Gay Robins

Grillen, Kochen, Backen im Alltag und im Ritual Altägyptens. Ein Lexikographischer Beitrag. By Ursula Verhoeven. Rites Égyptiens IV. Bruxelles, Foundation Égyptologique Reine Elisabeth, 1984. Price FB 600.

Der Titel dieser Kölner Dissertation von 1983 provoziert auf den ersten Blick ein Lächeln über ein vermeintliches 'Frauenthema'; zu Unrecht, wie man sehr schnell merkt. Es handelt sich um eine lexikographische Untersuchung wie man sie sich in unserer Wissenschaft auf vielen weiteren Gebieten wünscht. Man sieht im Verlauf der Lektüre, wie sehr unser Verständnis von sprachlichen oder kulturgeschichtlichen Details noch verbessert werden kann.

Zunächst zum Aufbau des Werkes. In einer kurzen Einführung (SS. 1-6) werden Quellenlage und Arbeitsprogramm skizziert. Es folgt (SS. 7-13) die methodisch wichtige Festlegung der für den Bereich des 'Garens' zu verwendenden Terminologie (mit einer praktischen Übersicht S. ı3). Es braucht kaum betont zu werden, daß sich die Ägyptologen darum bisher allenfalls am Rande bemüht haben. Die eigentliche Arbeit besteht aus vier Hauptteilen: 'A Grill- Röst- Dörrverfahren', 'B Kochverfahren', 'C Backverfahren', 'D Fälschlich als Garverfahren gedeutete Verben' (SS. 16-204). Diesen Block vorangestellt ist eine Vorbemerkung zur Gliederung der die jeweiligen Verben betreffenden Abschnitte (SS. 14-15); es folgen eine Zusammenfassung der Ergebnisse (SS. 205-15), sowie Abkürzungsverzeichnis, Indices und Inhaltsverzeichnis.

Die Zahl der betrachteten Verben beträgt 17 ; da selbstverständlich auch die jeweils belegten Ableitungen besprochen werden, ist die Untersuchung weit ergiebiger, als diese Zahl vermuten lassen könnte. Jeder ein Verb behandelnde Abschnitt teilt sich ein in die Analyse und die zugehörige Dokumentation. Diese enthält zahlreiche Umzeichnungen, sei es aus Publikationen, sei es nach Photos und von der Autorin erstellt, die die zu den Texten gehörigen Abbildungen (nach der Quellenlage meist aus Gräbern) wiedergeben. Die Dokumentation ist nach fünf Kontextbereichen geordnet: I Garmethode für menschliche Nahrung II Garmethode zu medizinischen Zwecken, III Garmethode zu Opferspeisen an Götter, IV Garmethode als Vernichtungsart, V Sonstiges. Der analytische Teil beginnt jeweils mit einem sprachgeschichtlichlexikographischen status quaestionis. Das Ergebnis der Untersuchung der Belege läßt meistens Präzisierungen zu, vor allem wegen der bislang herrschenden diffusen Verwendung des einschlägigen 'Kuchenvokabulars'. Als Beispiel nenne ich von S. ı7, daß š̌r keineswegs 'braten' bedeuten kann (so im $W b$. und $L \ddot{A}$ [Anm. 4] zu lesen), sondern 'grillen'; die davon abgeleitete Bezeichnung für die Opferspeise $3 s ̌ r t$ ist am besten mit 'Grillklein' zu übersetzen (SS. 21-33).

Auf einige besonders bemerkenswerte Passagen möchte ich im folgenden hinweisen.
SS. 85 ff.: Zu den Standardmeinungen in der Ägyptologie gehört die These vom Lautwandel $f>p$ in $f s(j) / p s(j)$ 'kochen'. Sie wird von der nun vorliegenden Dokumentation, die über die des Wb. hinausgeht, erheblich erschüttert, weil nämlich Schreibungen $p s(j)$ und $f s(j)$ nebeneinander in der 5. Dyn. auftauchen. Da ein Lautwandel $f>p$ auch ganz allgemein unwahrscheinlich ist (Belege S. 87 Anm. 5-6) läßt sich eine neue Hypothese entwickeln (für den grundlegenden Ansatz dankt Frau Verhoeven Peter Behrens). Es ist sehr gut denkbar, daß die dem $p s(j)$ parallelgehende Form $f s(j)$ eine regionale, um nicht zu sagen dialektale, Variante darstellt, bei der bereits im AR der Wandel $p>f$ vollzogen ist. Die sogenannte historische Schreibung $p / f / s(j)$ kann als Kompromiß nach vollzogenem Wechsel angesehen werden so wie bei $z w r>z w j$ 'trinken'. In der Schrift bleibt es aber in
vielen Fällen bei $p s(j)$ (ob textgattungsspezifisch?) und diese Form bleibt 'Sieger', koptisch $\boldsymbol{\pi I C E}$ (boh. $\phi \mathrm{ICl}$ ist eine sekundäre Entwicklung).

SS. 102 ff.: In den Abschnitt ' $p s(j)$ ' gehört auch eine Besprechung des sogenannten Kannibalenspruchs (PT Spr. 273/4). Es wird in überzeugender Weise dargelegt, daß von einem Relikt frühgeschichtlichen Kannibalismus' in diesem Text kaum die Rede sein kann. Machtbeladene Wesen ('Väter' und 'Mütter' des toten Königs) werden zerkocht, aus ihnen wird eine Art Zaubertrank bereitet, aus denen der Verstorbene sich deren Kräfte aneignet: $h k ; w$ und shw. Das Mahl ist ein imaginäres, magisches. Es dient nicht der leiblichen Versorgung des vergöttlichten Toten (dazu nimmt' man Gregrilltes). [Siehe auch noch weiter unten].

SS. 143 ff .: Die Betrachtung der Kontexte, in denen die Verben wdd und $\underline{d} d h$ belegt sind, führt zur Beobachtung, daß Flüssigkeiten ihre Objekte darstellen, wodurch verschiedene jüngere Vorschläge zur Bedeutungsentwicklung von wdd (Osing) als hinfällig betrachtet werden sollten.

SS. 173 ff. und 183 ff.: Das Verbum $n w h$ und sein Kausativum snwh lassen sich trotz Verwendung im gleichen Text fein differenzieren: $n w h$ 'ausglühen', snwh '(ganzlich) ausglühen lassen'. Man sieht, wie z.B. in der Kanais-Inschrift Sethos I ihr Verfasser sorgfältig die Wortwahl überlegt hat: Der von der Sommerhitze 'ausgeglühte' Mensch kann sich an Sethos' Brunnen laben, dagegen wird der, der den König nicht achtet, von den Göttern 'gänzlich ausgeglüht'.

SS. i 90 ff.: Wir kehren noch einmal zu dem sogenannten 'Kannibalenhymnus' zurück. Darin wird ein Verbum $q r r$ gebraucht, das die Bearbeiter dieses Textes nach Sethe trotz dessen eigener Zweifel mit 'auskochen' o.ä. übersetzt haben. Die Betrachtung der bildlichen Darstellungen, die durch $q r r$ erläutert werden, ergab jedoch (Junker), daß damit eine Handlung beschrieben wird, bei der Tongefäße erhitzt (nicht gebrannt) werden, weil man mit Hilfe der in ihnen gespeicherten Wärme anschließend Teig ausbacken will. In den Darstellungen sieht man zehn, zwanzig oder mehr Formen übereinander kunstvoll aufgetürmt. Das Verbum wird nie mit der Flamme determiniert, daher die Schlußfolgerung, seine Bedeutung sei eine spezielle, etwa 'aufstapeln zum Erhitzen'. Auf den obigen Spruch angewendet ergibt sich, daß nicht Knochen(mark) ausgekocht wird, sondern die Feuerstelle aus menschlich/göttlichen Körperteilen besteht, die verheizt werden und deren Knochen übrig bleiben.

Die metaphorische Verwendung von Verben des 'Garens' im Sinne der Beschreibung der Vernichtung von Feinden und Verdammten bleibt noch zu erwähnen. Die Wahl des in jeweiligem Kontext gebrauchten Verbums kann sehr gut mit dessen Grundbedeutung in Übereinstimmung gebracht werden, z.B. dürfte š̌r auch deswegen als Opferspeise in Betracht kommen, weil die Speise, die auch vernichtete Feinde versinnbildlicht, aus kleingehacktem Fleisch besteht. Das ist eine passende Anspielung auf deren Schicksal. Im Falle von 'wg 'rösten von Getreide' andererseits kann die Vernichtung der Keimfähigkeit das Ausschlaggebende sein. Diese Beispiele genügen, man vgl. die Zusammenfassung SS. 205 ff .

Im einzelnen wird man in dieser Arbeit hier und da Kleinigkeiten zu verbessern finden, das ist ganz normal. Ich beschränke mich auf zwei mehr oder weniger zufällige 'Lesefrüchte':
S. II 3 wird als Dok. 5 die bekannte Stele aus Herakleopolis Kairo JE 91095 (Kat. Götter Pharaonen, 1978, Nr. 13) besprochen, die bisher fälschlicherweise als Beleg für das Kochen von Fisch als Fleischersatz angenommen wurde (SS. 90 f.). Die Umzeichnung des ersten Zeichens ist nicht genau. Es handelt sich nach dem Photo eher um einen Arm Gardiner Sign-list D36 mit etwas breiter Ausführung der Handfäche. Ob eine Form von $r \underline{d}(j)$ zu lesen ist, erscheint mir fraglich, zumal mit perfektiver Übersetzung von $* \underline{d}(j) \cdot k$ statt prospektiver. Vielleicht liegt Meeks, $A L 770544$ 'action' vor (allerdings fehlte ein Semogrammstrich): 'Du bist dran . . .'.
S. 4I: Es ist gibt doch einen Hinweis darauf, daß in Ägypten eventuell Löwenfleisch gegessen wurde, nämlich eine Stelle im Cairo Calendar JE 86637 C4, 2: 'Du sollst nicht das Fleisch von irgendeinem Löwen essen’ (zitiert nach Kaplony, in Mélanges Adolphe Gutbub, 1984, 121, Anm. 14).
Mit der vorliegenden Arbeit hat ihre Autorin einen sehr guten Einstand gegeben. Hoffentlich kann man bald, wie S. 13 angemerkt, ihre Untersuchung über das Brandopfer (dessen eingehende Behandlung ausgespart blieb) lesen.

The Predynastic of Hierakonpolis-An Interim Report, Egyptian Studies Association Publication No. I. By M. A. Hoffman. $240 \times 168 \mathrm{~mm}$. Pp. viii + I 54, pls. 8, text-figs., I map. Cairo University Herbarium, Giza and The Department of Sociology and Anthropology, Western Illinois University, Macomb, Illinois, 1982. ISBN 977 V216 53 X. Price not stated.
One of the most important sites currently being excavated in Egypt is that of Hierakonpolis, ancient Nekhen. Earlier excavations ${ }^{1}$ have shown the site to be of tremendous importance for our understanding of the origin of civilization in Egypt and the history of the Protodynastic Period. Unfortunately, much of the early work at the site was unsystematic and summarily reported. ${ }^{2}$ The new excavations at the site begun in 1967 by Walter A. Fairservis of Vassar College and Michael A. Hoffman promised to add much to our knowledge of this critical period. Until the appearance of this report, the fieldwork conducted at Hierakonpolis was published only in a few short articles. ${ }^{3}$ This book is a summary of the work done during three seasons in the Predynastic portions of the site, from 1978 to 1980. The important work done in the cultivation on the Protodynastic part of the town and the excavations undertaken at the 'fort' are only briefly mentioned. The publication is composed of a number of different reports by site supervisors, in addition to detailed analyses of the artefacts, the geology of the site, floral and faunal remains, and concluding discussions by Hoffman.

The site reports cover a number of areas which were tested along the desert edge in the 'Gerzean Town' ${ }^{4}$ and in the wadi bed to the south-southwest of the Second Dynasty 'fort'. The 'Gerzean Town' represents what is probably the largest surviving settlement of the Predynastic Period and is of pivotal importance for an understanding of the development of urbanism in ancient Egypt. A preliminary survey of the site conducted by K. W. Butzer and W. Kaiser ${ }^{5}$ suggested that it would be a fruitful area for archaeological investigation. An area within this stretch designated 'Locality 29' was excavated by Michael Hoffman (p. 7). In it, he found a remarkably dense and well-organized group of residential structures with associated plots, fences, pathways and a pottery kiln. Perhaps the most interesting feature here was a semi-subterranean building called Structure II which had burned and was remarkably well preserved (pp. 10-12). It is interesting to note its semi-subterranean nature in the light of the old arguments about the nature of the famous 'painted tomb' (T. ioo); ${ }^{6}$ however, the domestic character of this structure is clear as opposed to the obvious funerary nature of Tomb ioo. ${ }^{7}$ Unfortunately, no detailed plan of this important structure is published either in this report or in an earlier article on the house. ${ }^{8}$ Only a rough reconstruction of it is included as Fig. VI. 4 (p. 183). Nor are the associated artefacts, an extremely important assemblage, published in detail. The author dates the structure to the 'Amratian' period (p. 29); however, his description of the associated artefacts clearly suggests a Naqada II (Gerzean) date (p. in).

Another important area investigated by J. Fred Harlan was located in the desert about I km up the Great Wadi from the Second Dynasty 'fort'. This site, known as 'Locality i IC' (pp. 14-25), consisted of a large trash mound, pottery kilns, and a domestic structure. The trash mound represented an enormous deposit of organic refuse and artefactual materials (pp. 14-17), suggesting either long-term occupation or perhaps more intensive activity over shorter periods of time. A neighbouring residential structure consisted of a prepared floor cut into the indurated substrate. ${ }^{9}$ A number of circular storage pits were also cut into this floor. In the centre of the structure was a large acacia post still bearing ancient adze marks on its lower end and propped up with stones. Rather than the tent suggested here (p. 20) it is probable that this structure was a wattle-and-daub hut with a central post supporting the roof. ${ }^{10}$

The numerous pottery kilns found at the site ranging in date from late Naqada I/early Naqada II to the Protodynastic Period represent an unparalleled situation for the study of the development of

[^160]ceramic manufacture in the Predynastic Period. Unfortunately, here again the material recovered is presented in a fashion so summary as to render it almost useless (pp. 23-35). The range of forms produced in the kilns is nowhere stated and it is only mentioned that rolled-rim jars were the type most commonly encountered (p.24). Again no plan of the kilns is illustrated nor is any of the pottery which was recovered from them.

Among the most enigmatic features of the report is the record of the excavation of a number of shallow depressions noted previously by Butzer in the area of the Predynastic town (pp. 25-34). The test excavation of a number of these hollows revealed that they contained sterile aeolian sand fill; however, this was capped by 'a large artifact sample' (p.25). If this deposit resulted from a 'nowdeflated midden overburden' (ibid.), then there must have been some relationship to the underlying depression. In any event, this seems more likely than the alternative explanation also put forward that the material 'migrated' downhill (p. 26). ${ }^{1}$ An area to the southwest of this designated 'Locality 30 A' contained a large depression $c .20 \times 25 \mathrm{~m}$ which the author suggested may have been a catch basin for irrigation (pp. 34-5). Excavation proved inconclusive and local informants suggested it was a modern sebakh pit (p. 35).

One of the outstanding monuments of the Protodynastic Period in Egypt is the great Second Dynasty 'fort' at Hierakonpolis. Despite a number of excavations in and around the structure ${ }^{3}$ relatively little is known about the design of the building itself, which must have been similar in function to the enclosures which were part of the royal funerary complexes at Abydos. ${ }^{3}$ No work appears to have been done on the 'fort' by the expedition; however, they have undertaken a quite creditable job of salvaging material from plundered tombs in the vicinity (pp. 36-8). Additional tombs were excavated or re-excavated at 'Locality 6' located in the 'Great Wadi' to the southwest of the 'Fort' (pp. 38-60). This area had already been explored by Lansing ${ }^{4}$ and possibly by de Morgan. ${ }^{5}$ It appears as though this necropolis was already established by the late Naqada I period and then reused in the Late Predynastic or even the Protodynastic period (p. 39). In this context it is impossible to give credence to the speculation that a large, totally plundered, rectangular burial chamber cut into the marl substrate, 'The Stone Tomb [sic.]' belongs to the earlier period (p. 50). In all probability, the tomb belongs to the Late Predynastic and Protodynastic 'Open Pit' type mentioned in Reisner's Tomb Development. ${ }^{6}$

A far more interesting discovery was the subsidiary construction associated with another large Protodynastic tomb, 'Tomb r'. Remains of an exterior fencing of postholes was discovered surrounding the tomb (pp. 43-7), possibly for buttressing the tomb superstructure as has been discovered elsewhere. ${ }^{7}$ Unfortunately the plan of this structure, like many of the illustrations in the report, is inadequate. Particularly poor is the use of dry-transfer 'bricks' as a substitute for the accurate rendering of the exterior brickwork.

Nearby and clearly associated with yet another cemetery was a group of rock drawings on a limestone outcrop which had also served, seemingly very briefly, as a rock shelter (pp. 6r-5). The most impressive of the drawings are three large ships of a very elaborate nature such as those found elsewhere in Egypt and Nubia. ${ }^{8}$ The funerary nature of the ships is underscored by the presence of an unrecorded Predynastic cemetery to the immediate northeast. As is frequently the case with petroglyphs in the Nile Valley, drawings of later periods may be juxtaposed with or even superimposed upon earlier designs. ${ }^{9}$ Such must be the case here with the 'associated' (p. 65) animal representations. Contrary to the published report, a visual inspection clearly shows that the animal drawings are executed in a very different manner and show a more significant degree of patination than do the boat drawings. It can only be surmised that the representations of Nilotic fauna belong to a much earlier period and have no significance in interpreting the function of the boats (p. 65).

Traditionally, the most important artefact class recovered in the excavation of a Predynastic Egyptian site is ceramics, and it is on its reportage of this material that an excavation memoir must be

[^161]most critically judged. Unfortunately, the treatment of the pottery recovered in the excavation is perhaps the weakest portion of the report. As Hoffman points out, a typology of domestic wares is critical to our understanding of Predynastic settlements (p. 66). However, such a typology must start from the base already established by Petrie, ${ }^{1}$ and added to by Brunton ${ }^{2}$ and Kaiser. ${ }^{3}$ It is this existing typology which should be referred to, refined, and expanded upon.

Unfortunately, the classification presented here is one almost devoid of any reference to previous work and so summary as to be almost altogether useless. One wonders what the 'micro-stylistic categories' mentioned were (pot, dish, etc.?). Even worse, it would be impossible to rework the typology from the summary nature of the data given. The profile illustrations give no diameter or indications of surface treatment. Moreover, the illustrations often do not relate to the report's 'tentative reconstruction of vessel shapes'. For example, the sherds as illustrated in fig. II. 2, IAra (p. 79), grouped under the same type, although one is an open and the other a closed vessel, do not correspond to the profile of the vessel in fig. II. I (p.78) which is a simple hemispherical vessel quite unlike either of the two very different sherds illustrated. The typology, brief as it is, is riddled with mistakes like this. If type IA Ic is to be taken as a shallow bowl, to judge from fig. II. i, then the lower sherd in fig. II. 2 is obviously in the wrong place. Types IAid and IAre are extremely peculiar as drawn in fig. II. I and the sherds illustrated in fig. II. 2 suggest Petrie's Corpus types R 25, 26a, $26 \mathrm{~b}, 26 \mathrm{c}$, and 27 instead. ${ }^{4}$ Under IIA 1 a in fig. II. 4 (p. 84) are grouped two sherds of very different types of vessels. The stance of the sherds IIAic and IIAre appears to be wrong; they are more probably Petrie's Corpus B 21, 22, 25, or 29a-e. ${ }^{5}$ The illustration for fig. II. 4, IIA2a(2) is confusing; does IIAza(2)a come between two examples of IIAza(2)b? Examples for the other types in fig. II. I are not given although some are obviously familiar vessels.

Still more confusion in the typology results from imprecision in identifying the various wares. Now that a systemized ware terminology has been introduced for Egyptian pottery, it behoves archaeologists to use it or at least make reference to it in their reports. The great advantage of the so-called 'Vienna System'6 is that it is fairly objective, at least in principle. The danger with subjective ware classifications is that they may lump together two very different fabrics or, alternatively, split the same basic fabric apart. Hoffman's 'Ware/Temper Classes' (p. 68) might be correlated with the 'Vienna System' as follows:

## Hoffman

I. Straw Tempered Ware
II. Untempered Plum Red Ware
III. Grit Tempered Ware
IV. Straw and Stone Tempered Ware
V. Crushed Stone Tempered Hard Orange Ware

## 'Vienna'

Nile silt C
Nile silt A
Marl B?
Nile silt C/Fine marl A var. 4? Fine marl A var. 2

Within Hoffman's own classification significant overlap must occur between types I and IV, and types III, IV, and V. In addition, the term 'Untempered Plum Red Ware' is misleading. Examples of this ware contain a significant percentage of sand as well as some organic material which acts as a tempering agent. ${ }^{7}$ Whether the addition of this material was intentional or not, it is certainly not the homogeneous fabric the term suggests. Still, as bad as it is, this typology is far and away better than the irredeemable 'sandwich ware' typology of the first report. ${ }^{8}$

This confusion of both ware and shape types results in a distortion of the real functional and temporal attributes of the data rendering the quantitative analysis of this material highly suspect at best. Moreover, distribution studies of the pottery at Hierakonpolis relying on sherd weights based upon this grossly oversimplified typology would enable one to reach only the most obvious conclusions about function, and any chronological analysis of the site within this framework would be impossible.

[^162]The exposition of the data in the remaining chapters is briefer, but far superior, and will prove to be among the most valuable features of the report. Because of the limited body of data on dynastic lithic material it would have been desirable to see some illustrations and photographs of at least the major types in McHugh's chapter on 'The Stone Artifacts from Structure II, Locality 29' (pp. 85-92).

The report concludes with two interpretive chapters, the first of which deals with the settlement pattern of the prehistoric community. Hierakonpolis is the only Predynastic and one of the few Egyptian sites where it is possible to begin to get an idea of how ancient Egyptian settlements functioned. From the material recovered by Hoffman it is clear that there was, at any one point in time, a highly diversified range of activities being conducted at the site. Also, many of these activities were associated with specific areas, either because of their proximity to important raw materials or because they reflected the political and economic organization of the community. For example, the 'Great Wadi' seems to have been the site of ceramic manufacturing for a lengthy period of time, probably to take advantage of the desert scrub growth for fuel, free circulation of air, and space to stack finished and unfinished vessels. In modern ceramic manufacturing centres potters' workshops are located on the periphery of the settlement for much the same reasons. ${ }^{1}$

It is highly unlikely that cereal agriculture was practiced in this area (p. I4I). Climatic conditions in the Predynastic would have made it impossible for even marginal crops to be grown here. ${ }^{2}$ Moreover, it would be totally illogical to attempt to cultivate these poor, dry soils when the extremely rich Nile alluvium was little more than a kilometre away. This 'neo-desiccation' hypothesis has been evoked as a model to explain the growth in the settlement over time (p. 141). However, the agglutination of the settlement could just as well be explained by an increase in population. The continuance of the ceramic industry in the 'Great Wadi' through the Predynastic period suggests that there was very little change in the perimeters of the community which would have resulted in the 'crowding' to be seen in the archaeological record.
The final chapter is a summary of the material and conclusions discussed in the report. A table of radiocarbon dates is given which largely supports the thesis that much of the activity at the site should be dated to the Naqada II period (p. I 39). A purported occurrence of Badarian pottery at the site is left undocumented (p.140). This chapter also attempts to estimate the population of the site throughout the Predynastic period. However, the ranges of the estimates given are so great, 2,544 to 10,922 for Naqada I and 304 to 1,374 for Naqada II (p. 143), as to be of little use.
Archaeologists too often imbue their discoveries with cosmic significance, and this chapter is particularly prone to such flights of fancy. In discussing ideological issues an ordinary disc macehead becomes a 'powerfact' and even 'a forerunner of the spectacular Scorpion Macehead' (p. 145), and 'The plan of the cemetery itself, with its enigmatic "southern style" stone tomb . . . and "northern style" tomb i . . . foreshadows the entire symbolic order of Upper and Lower Egypt' (p. 148).

While of a handy size and format the volume is difficult to obtain and fairly expensive. Some of the photographs are bleached out or out of focus while the line drawings, with the exception of the maps, are uninformative and substandard. The importance of this site and the broad interest it generates among archaeologists, Egyptologists, and historians calls for a much more extensive and less subjective presentation of the data. It is commendable that a report on the excavations has finally been published and it is to be hoped that future reports are both more frequent and better produced.

Peter Lacovara

Predynastic and Archaic Egypt in the Brooklyn Museum. By Winifred Needler. Wilbour Monographs (ix) $280 \times 245 \mathrm{~mm}$. Pp. 430 , 92 pls., 46 figs. New York, The Brooklyn Museum, 1984. ISBN $\circ 87273099$ 9. Price not stated.

This volume combines two kinds of publication in a single book: a museum catalogue on the one hand, and an excavation report on the other. The fact that the bulk of the Predynastic and Early Dynastic objects in the Brooklyn Museum derive from excavations conducted by Henri de Morgan between 1906 and 1908 makes this approach suitable. The excavation section includes an account of

[^163]the background to the work of de Morgan in Upper Egypt, the excavator's own report of his second season, and a short modern commentary on the excavations. The finds are then listed, grouped according to the site of their discovery. Not all the Brooklyn objects listed in this section are included in the later part of the book, the catalogue itself. For example, of the fifty-six stone vessels from El-Ma'mariya listed on pp. 105-9, only three appear as catalogue entries. This is explained on p. 170 as a policy of publishing only selected examples and omitting the duplicates. Whilst the problems of cost in producing full catalogues are appreciated, publications of permanent museum collections should include all items, however repetitive, in order to serve as the definitive publication of the material. The expense of printing the catalogue section of the book could have been reduced by a greater use of drawings in place of photographs, especially for the pottery, stone vessels, and flint implements, for which drawings provide a more useful and informative record. The absence of drawings in the catalogue entries is curious, since good drawn illustrations have been used for the lists of excavation material.

The catalogue is divided by class of material and the objects are generally familiar Predynastic and Early Dynastic items, but they are, nevertheless, of sufficient quantity to present a good corpus for comparative study. The fact that so many are provenanced to the sites worked by de Morgan between Esna and Gebel Silsila makes the collection more valuable. For some classes of objects additional bibliography has recently appeared: the discussion of the jar with gold fittings on p. 25 I (Catalogue 139) includes references to a number of parallels, but a more complete list is available in A. J. Spencer, Catalogue of Egyptian Antiquities in the British Museum, v: Early Dynastic Objects, 20-1. Catalogue items 226-7, 277-9, 281, 284, and 287, from a deposit in the early Osiris temple at Abydos, can now be considered in the light of similar material recently discovered at Elephantine (G. Dreyer, Elephantine VIII: Der Tempel Der Satet). Objects of the same kind in the British Museum, excavated by Petrie at Abydos, have also been published (Spencer, op. cit.). For the figures of lions (Catalogue 280-2), see now B. Adams and R. Jaeschke, The Koptos Lions (Milwaukee Public Museum Contributions in Anthropology and History, no. 3, January 1984). The provenance of item 286 of the catalogue, from the region of Zagazig and El Hihya, is quite likely to have been Kufr Nigm, now well attested as an Archaic site.

The book is a valuable contribution to the bibliography of Predynastic and Early Dynastic Egypt, both as a detailed catalogue of a major collection and as an important record of a virtually unpublished excavation. The scale of Henri de Morgan's work in Upper Egypt will probably come as a surprise to some readers, but this publication should ensure that the sites excavated, some of which are certainly not the familiar localities associated with Predynastic and Archaic archaeology, receive the attention they deserve.

A. J. Spencer

Das Grab des $\neq 7 n j$ - $j t j$ •f. Die Wandmalereien der XI. Dynastie. By Brigitte Jaroš-Deckert. Nach Vorarbeiten von D. Arnold u. J. Settgast. Grabung im Asasif i963-1970 Bd. V. Archäologische Veröffentlichungen des DAI Kairo Bd. 12. $350 \times 250 \mathrm{~mm}$. Pp. 142, figs. 35, pls. 46 and 5 oversize folding plates. Mainz, von Zabern, 1984. ISBN 380530041 7. Price DM 198.
Under the joint direction of D. Arnold and J. Settgast an expedition of the DAI Cairo cleared the tomb of the troop commander Intef, TT 386, and recorded its decoration in the course of excavations in the Asasif initiated in 1963. Arnold's account of the tomb's architecture appeared in 1971, as the first volume in a series dedicated to the work in that part of the Theban necropolis. ${ }^{1}$ In the volume under review B. Jaroš-Deckert now publishes the wall decoration of the tomb, utilizing the field notes and drawings prepared by the excavators for publication (see remarks in the foreword, p. 13).

The title that refers to paintings alone belies the book's content, for the reliefs from the so-called deep corridor are discussed, over and above the paintings of the portico and those on the walls of

[^164]the cult chamber. Considerable space is devoted as well to a comprehensive discussion of the development of tomb decoration in the Thebais to the end of Dynasty XI, an analysis that must draw heavily on the author's dissertation, although this is not stated. ${ }^{1}$ Yet remaining to be published are the fragments of the façade stelae ${ }^{2}$ and the objects from the tomb, among them the statue of the tomb owner. ${ }^{3}$

In the introduction, pp. 15-19, Jaroš-Deckert describes the scheme of the tomb's wall decoration and its state of preservation. Approximately one-third to a half of the paintings on plaster in the portico is preserved in situ. By contrast, not a single piece of decoration has survived in place in the tomb's interior. (The limestone casing blocks from the cult chamber and from the corridor that gives access to it from the portico were removed beginning probably toward the end of the Ramesside Period, see p. 8o.) About to per cent of the reliefs in the corridor were recovered during the clearance while from the cult chamber even less could be salvaged. Making use of Arnold's proposed reconstruction drawings of some elements of the decoration, Jaroš-Deckert has been able to reconstitute plausibly the relief programme of the corridor in its entirety and to make suggestions concerning from one-third to a half of the themes in the cult chamber's paintings. The introduction concludes with a description of the colours employed by the painters with reference to the Munsell system.
In the following pages, the wall decoration of the tomb is presented in meticulous detail. The paintings on plaster of the portico were devoted to scenes of daily life and 'events' (see further, below) in Intef's military career. The former are, in general, conventional in subject-matter, and their execution was entrusted to painters working in a local, Theban style. Its three primary characteristics, as epitomized by the author in her summary (pp. Izof.), are: (I) a restricted palette employing earth colours-an intense red tending to brown, a lighter red used sparingly, and an ochrous yellow-applied either broadly to contrast with the pale background, or with extreme restraint for outlines only; (2) inconsistent proportioning of figures whose heads are usually too small while the lower extremities of standing figures tend to be overly long and those of squatting or kneeling figures, too short; (3) 'uneconomical' utilization of space-i.e. figures are isolated and only rarely fill the height of the register. The themes dealt with by painters working in the local style include the preparation and presentation of food offerings, scenes of artisans at work. agricultural pursuits and the like. ${ }^{4}$

Jaroš-Deckert describes a second style among the paintings on plaster as canonical. Its salient features, again as epitomized in the summary (p. 122), are: (i) an expanded palette with brilliant colours; (2) traditionally proportioned figures, laid out with the help of horizontal guidelines and a vertical axis (hence the designation 'canonical'); (3) optimal use of available surface. Painters working in this style were allotted apparently fewer but more important commissions in the decoration of Intef's tomb.

Paintings in the canonical style (as far as can be determined taking into account the not inconsiderable amount of lost decoration) were assigned better locations, protected from weathering, viz. the west faces of piers and the tomb façade beyond. The canonical painters executed the depiction of three warships transporting infantry (in the private sphere a motif unique to Intef's tomb) and the five registers showing the siege and conquest of an Asiatic fortress. Noting the similarities but also the tell-tale discrepancies between the depiction of the same themes in the decoration of NebhepetreMontuhotep's Deir el-Bahari temple and TT 386, the author postulates a common, now lost, prototype (pp. 44 f .).

The style of seven painting fragments from the depiction of a battle on water from the portico show

[^165]them to derive from a scene executed by painters of the local school (p. 76). Thus not all the plums fell to the canonical painters' lot. Because the scene shows Egyptians versus Egyptians, Jaroš-Deckert interprets the tableau to depict an episode in the wars of reunification that occupied the earlier years of Nebhepetre-Montuhotep's reign (p. 125). ${ }^{1}$ Considering the historicity of the battle scenes in general (pp. 124 f .), the author concludes that all but the depiction of the siege may well reflect actual events in Intef's military career. To the siege scene she would attribute the symbolic function of documenting Intef's achievements in the military sphere and his status among his contemporaries at court.

Only seldom do associated inscriptions elucidate the tableaux of the portico. However, the west faces of the two piers flanking the entrance to the tomb's interior, nos. V and VI, seem to have borne only texts (pp. 62 f .). The meagre remains preserve remnants of the titulary of NebhepetreMontuhotep. The praenomen is written with the 'steering instrument' Gardiner Sign-list Aa 5, not with the oar, Sign-list P 8. Accordingly, the decoration of the tomb is datable to the years before the king altered his Horus name to $z m ;-t z w j$ (pp. 117 f.). Since Jaroš-Deckert follows the generally held view that this change is a direct corollary of the reunification, she finds the presence of a residential, i.e. memphite, canonical style in the paintings of Intef's tomb difficult to explain (p. 128). (That the tomb was decorated in two phases, some scenes painted before the reunification and others afterward, is an hypothesis unsupported by the archaeological record-p. 128, n. 796.) If it be allowed that the effective reunification considerably predated the adoption of the Horus name $z m ;-t ; w j^{2}$ then the dilemma is resolvable.

The reliefs of the corridor giving access to the cult chamber were executed in both raised and sunk technique, with the former predominant. The iconography includes representations of the tomb owner and his wife Senet (all in raised relief ) before the offering table, trains of offering bearers, and the burial procession. Six fragments can be shown to belong to a scene depicting a large-scale figure seated on a lion throne (reconstruction by D. Arnold). The identity of this figure cannot be determined with certainty, but good arguments can be adduced for positing that it could well depict Nebhepetre-Montuhotep (p. 86). Representations of the king in private tombs prior to the New Kingdom are rare; indeed, only two certain examples can be cited, both in Theban tombs of the early Middle Kingdom, one representing Nebhepetre (in TT 3 II, the tomb of Khety).

The paintings of the cult chamber relate exclusively to the funerary cult for the benefit of Intef and Senet. The walls flanking the entrance to the room bore depictions of retainers bringing sacrificial animals and offerings. An extensive offering list and a false door occupied the south wall; on the north wall, Intef and Senet sat before an offering table to receive the requisites of the funerary meal. Large-scale figures of the tomb owner striding out of the tomb were shown on either side of the statue niche centrally located on the west wall. In these paintings Jaroš-Deckert recognizes another, third style of painting, peculiar to craftsmen who customarily were charged with depicting the frieze of objects exemplified, e.g. in the decoration of the burial chambers of TT 319 (Queen Neferu) and 31 I (Khety). The characteristics of this supposed third style are not defined precisely (p. i28). I am inclined to the view expressed cryptically in a parenthetical remark (p. I 35 n .870 ) that these painters and those working in the local style are probably one and the same. Apparent minor variations in style could well be attributable to differences in subject-matter.

The author devotes the thirty-five pages following the description of TT 386 's decoration to a consideration of the development of Theban tomb art to the end of Dynasty XI and the place of Intef's tomb within that continuum. Whereas the canonical style documented in some of the tomb's paintings remains anomalous (as noted above), the paintings in the local style (and those of the cult chamber in the so-called Gerätefries style as well) have clear affinities to the painted decoration of contemporaneous tombs. So, too, the reliefs of TT 386 that are shown to be closely comparable to those in TT 31 I and 319 . Only those few Egyptologists, myself among them, who are well acquainted with the fragments of Dynasty XI relief and painting exhibited in the Metropolitan Museum of Art will be able to appreciate fully Jaroš-Deckert's analysis, since, with the exception of TT 366 (the tomb of the vizier Dagi), the contemporaneous tombs cited are virtually unpublished (see foreword,

[^166]p. I3). For comparative purposes, she has been able to include only io black-and-white photographs on two plates; 7 of them have been illustrated elsewhere. These are supplemented by in line-drawings in the text, 5 depicting reliefs. Discussions of relief style on the basis of such drawings are of dubious value, a case in point being the description of the stela CG 20009 (pp. Io9 f.). The 'awkward' figures in sunk relief on the stela are contrasted with those in raised relief as having long, thin extremities, broad shoulders and heads that are too small. But the accompanying drawing shows all the figures, regardless of technique, to be identical in outline. Consulting a photograph of the stela published elsewhere ${ }^{1}$ that shows it in a raking light, it is clear that Jaroš-Deckert's description is accurate, if taken to refer to the effect produced by the contrasting techniques.

As to the drawings of the decoration of TT 386 itself, the user of the book should consult the Falttafeln, 2-5, in preference to their reductions, Tafeln 14, 17, 20, and 21, respectively. In the smaller plates, scaled $\mathrm{I}: \mathrm{I} 0$, the dots used to indicate the draftsman's restorations of lost areas merge. Why some lines have been restored with dotting while others were not is unclear (cf. e.g. the contour of the ship's hull and the water-line below it in the middle register, Falttafel 2). A directional arrow is omitted from pls. I I (map of Deir el-Bahari and the Asasif showing the locations of Old and Middle Kingdom tombs) and 12 (plan of TT 386). The photographic plates illustrating the decoration of Intef 's tomb are exemplary. Particularly noteworthy are the twenty colour illustrations that provide an excellent sampling of the paintings and coloured relief fragments.

The style in which this book is written is often cumbersome and exasperating. The reader whose mother tongue does not happen to be German will find some portions heavy going. In future, Jaroš-Deckert would be well advised to simplify her writing, if she cares that her work be appreciated by other than German-speaking colleagues.

In conclusion, some brief comments on specific points in the text:
pp. 22 f. B. Scheel, $S A K$ I3 (i986), i90, convincingly argues that the bottom register $\mathrm{O}_{3}$ does not depict metallurgy. Instead, 'kitchen' vignettes are its subject, a possibility left open by Jaroš-Deckert.
p. 23 and passim. The use of the loaded term 'Künstler' to describe the painters and sculptors at work in TT 386 is at best anachronistic. As has been demonstrated time and again, these men were craftsmen, not 'artists'.
pp. 26 f . For the scenes of metallurgy in Ia3, see now Scheel, op. cit. i 93 ff .
pp. 27 ff. Jaroš-Deckert asserts that the middle register depicting a warship transporting infantry 'fällt deutlich durch Stil, Raumverteilung und Wahl der Details heraus' in comparison with the thematically identical scenes above and below. The description that would have 'alles ungeordnet, deswegen aber nicht lebendiger sondern eher plump' is unconvincing; the idea that another hand be detectable is not credible.
pp. 37 ff . The use of the linguistic term 'Semitic' to describe the enemy in the siege scene is inappropriate. Read in the present context the customary 'Asiatic'. Discussing the organization of the tableau, Jaroš-Deckert maintains on p. 37 that the painter depicted the figure of Intef over two registers at the lower left of the decorated surface to balance the Asiatic fortress shown over two registers at the upper right. On p. 38 she asserts that a horizontal, two-register prototype has been adapted here to a vertical format, resulting in the distribution of the elements attributed on the previous page to the ingenuity of the designer.
p. 49. Regarding the presence of granaries in Middle Kingdom house compounds-as postulated here for the estate of Intef-see now B. J. Kemp, $Z \ddot{A} S_{\text {I }} 3$ (i986), i2 if. The author's suggestion that the figures mounting the stairs associated with the granaries could be dancers is adventurous.
p. 86 n. 495. Neither A. Radwan nor M. Wegner, both cited here, discussed the possible representation of the king in Intef's tomb, as the citation implies. In the interest of clarity, the note could have been amplified or introduced by a comment such as: 'For comparable depictions of the ruler in private tombs, see. . .' This is only one instance of the author's tendency not to distinguish adequately the opinions of others from comparisons she herself has drawn, a problem encountered increasingly in the second, analytical portion of the book.

[^167]p. 87 . The relief fragment no. 227 (pls. 5 d and 31) shows Intef wearing a cylinder seal on a cord about his neck. It thus depicts him in his office as chancellor; so, too, the representation of Dagi cited for comparison in n. 503 .
p. io2. For the dating of the Old Kingdom tombs at Thebes consult the comments of H. G. Fischer, BiOr 36 (1969), 30 f.
pp. 1 if f. The drawings of the few hieroglyphs included in the text at this point (and in the table on p. i 19) are abominable.
p. 128. To the bibliography on the introduction of Memphite models to Thebes following the reunification, add H. G. Fischer, Artibus Asiae 22 (1959), 240 ff.

M. Eaton-Krauss


#### Abstract

A Theban Private Tomb. Tomb No. 295. By El Sayed Aly Hegazy and Mario Tosi. Deutsches Archäologisches Institut. Abteilung Kairo. Archäologische Veröffentlichungen $45.355 \times 268 \mathrm{~mm}$. Pp. 33, pls. 12 ( 10 in colour), i plan. Verlag Philipp von Zabern, Mainz am Rhein, i983. ISBN 38053055 I 6. Price DM 120.


Theban tomb 295 is that of Djehutymose called Paroy, and is situated at the bottom of the southern side of the hill of Khokha. Djehutymose, among his other titles, was 'sem priest in the Place of Embalmment', and he lived in the Eighteenth Dynasty, probably during the reigns of Thutmose IV and Amenhotep III. My connection with this tomb is, it might be said, a very direct one, since its burial chambers are accessible through a robbers' hole in the floor of tomb 253 (Khnummose), the publication of which I am currently undertaking. Mr Hegazy kindly allowed me to see his tomb in the course of the 1985 season.

The tomb was originally discovered by Mond in 1915 . Subsequently photographed by Burton, no further work was undertaken until its re-clearance by Hegazy in 1976. Its official entrance today is through the neighbouring tomb of Nefersekheru (296), which itself is one of three tombs opening off a deep courtyard cut in the Theban rock. The original entrance has been blocked for security reasons and the courtyard on to which it gave is presently buried under a vast quantity of debris. The tomb consists of one rectangular decorated offering room, giving into a smaller room in the floor of which are two shafts, linked by a remarkable narrow passage. The eastern of these leads into two smaller rooms, from the second of which the main burial shaft descends to a depth of 5 metres below the chapel.

The paintings of the principal room are of a very high quality and brightly coloured, and for this reason have been documented in colour photographs. The scenes consist principally of feasts, offering, and funerary scenes; so-called 'scenes of daily life' are conspicuous by their absence. The beautiful scene of adoring Osiris in a shrine is particularly striking, as is that showing parts of the embalming and opening of the mouth rituals (pls. 2, 9d); great damage was done to this scene when a doorway was forced through here so that the tomb could be reused. The scenes are treated in a uniform manner: each is described, and the accompanying texts are additionally presented in a hand copy and translated. Examination of the originals has shown these copies, including those of the faded texts, to be very accurate. ${ }^{1}$ Explicit reference to the existence of the location diagrams after p. 32 would clarify the division of scenes more quickly, as would an ordering of the plates to correspond with the sequence of discussion in the text. It must be said that, excellent though they are, the photographs of whole walls do not present the detailed documentation that one might wish for a tomb of this type, although they do give a sense of the wonderful colour. Details cannot be seen as clearly as they would be, for example, in a drawing, and there are only six close-ups (pls. 8-9); in particular, justice is not done to the ceilings by pl. ro. The colour reproduction of the photographs is somewhat variable: I know the coloration of all walls to be similar, but this is not the impression gained, for example, from comparison of pl. 6 with pl. 7 , or of pl .7 with its detail in pl .8 b . Neither the authors nor the photographer can be blamed for this; more care by the publisher and printer is needed,

[^168]particularly with a volume costing nearly DM 4 per page. Some more 'objective' method, such as the use of colour charts, is required, although it is a very laborious undertaking.
Three pages of this book are devoted to the finds from the clearance of the burial chambers, principally canopic jars and fragments of cartonnage. No ceramics (apart from canopics) are mentioned. Of the finds illustrated, one of the most interesting is unfortunately not mentioned in the text. On pl. in is what appears to be a four-legged chest bearing a late hieratic inscription (the end of the text is not completely clear):

Ns-b;stt-dd-cnh iry-ç pr 'Imn Pi-di-mnw zз n DDd-mntw zз n Rs...
$N s-b s s t t-d d-c n h$ (? son/daughter of ?) the doorkeeper of the estate of Amun Pi-di-mnw son of Dd-mntw son of Rs... ${ }^{1}$
The first name could be either male or female and the affiliation to $p$-di-mnw is uncertain, as is the reading of mnw.

It is clear from this last object that the tomb was reused in the Third Intermediate Period. However, there are only the general remarks on p. 27 to this effect. Some finds may be from the original burials, if Tjepu (p. 29) is to be identified with the lady Tjepy on pl. 6.

One of the most remarkable aspects of this tomb is the complexity of the genealogy of the family of Djehutymose, and it is hardly surprising that the authors have contented themselves with a simple general statement (p.8). This is compounded by the damage (often ancient and deliberate) to the names, titles, and representations of some of the principal figures in the paintings. Two men, Hetep and Senetjer ${ }^{2}$ (both pl. 7), are possible candidates for the deceased's father, yet Senetjer may instead be his great-grandfather (pl. 6, where the man making offerings to him is given the filiation $z ; n z s t n$ $z z t \cdot f$-detail in plate 9 a ). That the deceased should have four possible wives seems unlikely; two female names, Nefertari and Renutet, appear with the greatest frequency and may be alternate names of the same woman. In pl. 4, the children Huy and Henutwedjeb appear with the tomb-owner and Nefertari (above) and the same and Renutet (below), suggesting an equivalence. Both women are shown on the false door, and are at most the only wives of Djehutymose. The other candidates appear in plate 6: Tjepy's husband's name is lost, while Isis's partner, although called Paroy, bears the title (probably) imy-r pr imntt not found elsewhere in the tomb, and so just could be another individual. A review is not the best place to solve such problems, but it is to be hoped that the complexity of the situation is apparent.

This book should be considered as a good basic publication: with the above reservations, the tomb has been well documented. Some may complain that there is little in the way of discussion of more general issues raised by the tomb-its place in Egyptian religion, art, and so on. However, this should be regarded as a secondary consideration, as the prime duty of the field-worker must be to make material available in a reasonable time. Messrs Hegazy and Tosi are to be congratulated on a well-produced publication, and for their efforts to reduce the appallingly high number of unpublished Theban tombs.

Nigel Strudwick

Urkunden der 18. Dynastie, Übersetzung zu den Heften 5-I6. Edited by Elke Blumenthal, Ingeborg Müller, Walter F. Reineke, under the direction of Adelheid Burkhardt. $214 \times 145 \mathrm{~mm}$. Pp. 509. Berlin, Akademie-Verlag, i984. Price not stated.
As long ago as 1914, Kurt Sethe issued a German translation of the first four parts of his hieroglyphic series Urkunden der 18. Dynastie (Urk. IV); but that slim volume covered only

[^169]pp. 1-314 out of 1,226 pages of hieroglyphic text. Half a century later, Wolfgang Helck brought the hieroglyphic edition to completion with his parts 17-22 in 1955-8, promptly following these with a corresponding volume of translations in 196r.

There matters stood for the next quarter-century, with over 900 pages of parts $5^{-16}$ of Sethe's original hieroglyphic edition still lacking a corresponding translation-although in the interim not a few texts (as in Theban tombs or museum-collections) have been edited elsewhere across the whole spectrum of international Egyptology. The formal gap has now been closed by the issue of the present volume, the work of no less than ten translators from Berlin, Leipzig, and Budapest, who include (besides the four editors named above), Erika Endesfelder, Karl-Heinz Priese, Frank Steinmann, Elke Freier, Angela Onasch, and Ulrich Luft. Each translator dealt with about $80-90 \mathrm{pp}$. of hieroglyphic text, but Luft with the final 200 pages.

This volume of translations is important because of the number and range of notable inscriptions contained in parts 5-16 of Sethe's work. They include the Punt expedition of Queen Hatshepsut; the obelisk-inscriptions of Hatshepsut and Tuthmosis III; Tuthmosis III's Poetical Stela, his gifts to Amun, and especially his military Annals and major topographical lists. With these go inumerable building-dedications and lesser monuments, besides a long series of texts from tombs, stelae, and statuary of officials of the reigns of Hatshepsut, Tuthmosis III, and Amenophis II. Therefore, the appearance of this whole corpus in a straightforward German translation is to be heartily welcomed.

The editors were well aware of the problems in basing their work on a text-edition already $70-80$ years old. No full-scale campaign of collation has been practicable, but they have attempted to incorporate improved readings from the Wörterbuch files and records and from Egyptological literature, in translations and notes. In days gone by it was often very difficult to correlate the translations of inscriptions in Breasted's Ancient Records with the texts in Sethe's edition; here, the headings to translations include running references to Breasted throughout. Again, when Sethe was copying texts in the Theban necropolis at the beginning of the century, he could quote no definitive numbering for Theban private tombs, making it very slow to locate his texts in the Porter-Moss bibliography. But here, extracts from such tombs are given the proper modern tomb-numbers and cross-referenced to Porter-Moss, an immense aid.

On checking throughout, the translations themselves read well and fluently; I do not propose to add Verschlimmbesserungen here. The footnotes are kept short, mainly devoted to textual corrections, references to later treatments, and other data of value. For the sake of the general user the work includes a compact glossary of names of deities and places and sundry realia with brief explanations. It but remains to thank the editors and translators for a solid and reliable piece of work that will be much used by all their colleagues for decades to come.
K. A. Kitchen

Der ägyptische Mythos von der Himmelskuh. Eine Ätiologie des Unvollkommenen. By Erik Hornung unter Mitarbeit von Andreas Brodbeck, Hermann Schlögl und Elisabeth Staehelin und mit einem Beitrag von Gerhard Fecht. Orbis Biblicus et Orientalis, 46. $230 \times 150$ mm . Pp. 129, Figs. 10 with 2 in colour. Freiburg, Schweiz, Universitätsverlag and Göttingen, Vandenhoeck \& Ruprecht, i982. ISBN 352553665 8. Price DM 42.
Students of this justly famous text have hitherto relied mainly on the comprehensive edition of Charles Maystre in 'Le livre de la vache du ciel etc.' in BIFAO 40 (1941), 53-I 15 . Now Erik Hornung and his colleagues have produced a text with a translation, commentary, and essays of interpretation. Their book supersedes all previous studies, and for good measure Gerhard Fecht contributes a detailed and annotated metrical analysis. The text has been autographed by Andreas Brodbeck and it is based on a new examination of the various versions, with the exception of the Tut'ankhamūn text, for which Piankoff and Maystre are relied on. On p. 33 (para. 3) the reference to the relevant plate (65) in the small edition of Piankoff, The Shrines of Tut-Ankh-Amon could well be supplemented by a mention of Fig. 46 on p. 142, for it is much clearer.

In the opening section the clause beginning with $m$ - $h t$ is translated with a pluperfect: '.. . nachdem er das Königtum bekleidet hatte.' There seems no objection to such a use of $m$-ht, but the verbal form wnn $\cdot f$ appears to favour a past continuous sense, 'when he was king . . $\therefore$ ' Certainly the revolt of men
which is then described is envisaged as occurring during the kingship of Re on earth; later (vv. 130-3) the departure of the sun-god to heaven is mentioned, as is pointed out; what is not clear is whether the initial allusion to his shining forth entails that stage, in which case a pluperfect would be conceptually justified. Of greater import is the new version of the next clause: 'als Menschen und Götter (noch) vereint waren.' Previous versions, apart from Roeder's, linked this clause to the preceding one, as in Wilson's 'when he was king over men and gods together', lit. 'when he was in the kingship of men and gods'; cf. Wb. II, 333, 21 , here rejected because the phrase, followed by $m$ ht wrtit, 'in a united state', belongs to a new verse: see Fecht on pp. i i i and 124 note b. It may be questioned, however, whether definition as a metrical entity necessarily implies syntactical independence. The metrical scheme here presented-and it is wisely followed in the translation-shows many instances of relative clauses in separate verses, but no other instance of a genitival phrase thus separated. Nor are there parallels, it seems, to the expression 'kingship of men and gods' with the initial abstract noun. Semantically the translation proffered here, with its stress on the unity of men and gods, presents an attractive concept which is only implicitly suggested in the traditional versions.

Although the text opens with an allusion to the self-procreation of the sun-god as the god who originated from himself, within the space of a dozen lines we are told that he ordered to be summoned to him his Eye as well as Shu and Tefnut, Geb and Nut, together with the fathers and the mothers who were with me when I was still in the primal water. Here the mention of fathers and mothers obviously contradicts the claim of self-origin. We are told (p. 52 n .10 ) that by the fathers and mothers we may understand the four pairs of primal deities (the male-female pairs of the Ogdoad of Hermopolis), with the suggestion that these beings should be regarded as helping the sun-god in the realization of creation after his emergence from Nun, where he had existed alone. This is a neat piece of tidying-up, but the text expressly says that the fathers and mothers were with the sun-god when he was in the primal water. And what about the phrase the fathers and the mothers? Cf. too the mention of Nun (25) as the eldest father (or, father of the eldest ones). This crying contradiction is ignored. Perhaps we should take a crumb of comfort from the fact that the sun-god did not say my fathers and mothers. It is well known that Egyptian religious texts, taken together, are crowded with contradictions. Within a single text, however, one expects a coherent whole and an editor's duty is to seek to establish that coherence as far as possible -a task perceptively achieved, for the most part, in this commentary. My own view is that the priestly author, when he referred to the god who originated from himself, was reproducing a stereotyped expression unthinkingly and was therefore not bothered by the subsequent contradiction in which he allowed Hermopolis to take over from Heliopolis.

Of course there are other inconsistencies. According to v. 32 mankind came into being from the eye of Re, i.e. from his tears (see p. 54 n .26 ); yet just before that (vv. 25-6) we are told that Nun created mankind. But here the contradiction is less blatant since Nun is also described as the oldest god, from whom the sun-god himself came into being. A distinct improvement in coherence and meaning is presented at v . IIO, where Re complains of his weakness, saying 'my body is weak $m z p t p y$ '; here previous versions gave as in primal times, or the like, but Hornung effectively renders it as for the first time, pointing out that in the primal era of creation the sun-god must be deemed to have been quite the opposite of 'weak'; only now does weakness come upon him. Further, a word for 'as' is missing. In v. 163 Shu is ordered to take his daughter Nut on his head in order to lift her up, and an aetiological remark follows, about the carrying of a son on his father's head. This comparative rarity is well documented (p. 62 n. II 2), examples being cited of male and female children being carried on the head or on the shoulder of a divine figure and concomitant texts indicating that the goal of the carrying is the light of the sun-god in heaven. More problematic is the sentence $z \cdot \cdot \mathrm{kim} \cdot \mathrm{i}$ (188), rendered Dein Sohn bin ich and explained by Fecht (pp. 125-6) as an interpolated speech by the dead King as Shu the son of Re. The context is rather unclear, and if one were tempted to render Thy son is with me, the use of $i m \cdot i$ in 183 , $i w \cdot i$ im. $i$, goes against that, since the meaning $\operatorname{Iam} I$ seems the only one possible. Here it is rendered Ich bin, der ich bin, with a startling invocation by Fecht (p. 125) of Exodus 3: 14 (I AM THAT I AM, or I WILL BE WHAT I WILL BE). The Hebrew is concerned with the meaning of the name Yahweh; the Egyptian context, as Fecht shows, relates to the sun-god's claim: he is what he has shown himself to be-the successful queller of men's mutiny, and so able to say in the following verse, I will not allow them to make (a revolt).

If the Commentary is at times aridly brief, as on the 'Second Death' (one line, p. 73 n .242 ), full amends are made in the meaty appendices: a discussion, first, of the structure, meaning, and date of
the text. It is noted that formally there is an avoidance of rigid symmetry. A valuable analytical plan (p. 75) shows that after the opening myth there are sections devoted to the ordering of heaven and of the underworld and one concerned mainly with power through magic; shorter portions deal with the production of the cow's image and with the theology of the $b a$. Disparate as the sections following the myth may seem, it is argued that they form a connected whole whose aim is to explain the present imperfect state of the world in which men and gods are separated, unlike the blissful unity which prevailed at first. In this latter connection a great deal is built, one feels, on one slender phrase, and the later sections tend still to bear out Roeder's designation of the work as a 'Zauberbuch'. As for the dating of the work an eminently judicious survey leads to the conclusion that it may derive from the time immediately after the death of Akhenaten ( $c .1336 \mathrm{BC}$ ) or from a slightly earlier date during the reign of his father Amenophis III. There are four admirable studies, in conclusion, of basic themes: the royal rule of the gods, the rebellion of mankind and their punishment, the theme of the Heavenly Cow, and time and eternity. The second discussion uses exactly the right word: 'Rebellion.' This idea is the essence of the 'Fall' according to Egyptian ideas. Compared with the Hebrew parallel, it is singularly bereft of any ethical colouring, with the notable exception of $v .137$, where mention is made of the 'evil' (hww) wrought by men in their pursuit of slaughter, in a clause that is perhaps optative, as Fecht, p. 125, suggests: may your evil come upon yourselves, you blood-letters. But the 'evil' is probably viewed as an act offensive to the gods because they do not like to be disturbed, as in the story of Atrahasis. Much stress has often been laid on the old age and weakness of the sun-god as portrayed in the opening of the work. In the defined context it is part of the human predicament which characterizes the god's rule on earth; once he returns to heaven on the back of the celestial cow there is no suggestion of this condition. Rather does he there resume his eternal sovereignty.
J. Gwyn Griffiths

Das Buch von den Pforten des fenseits. By Erik Hornung unter Mitarbeit von Andreas Brodbeck und Elisabeth Staehelin. Teil II. Übersetzung und Kommentar. Aegyptiaca Helvetica, 8. $300 \times 210$ mm . Pp. 317 with many line-drawings. Geneva, 1984. Price DM 80.

The text on which this study is based and which comprises the New Kingdom versions was published in 1982; cf. the remarks of the present reviewer BiOr 39 (1982), 45-6 and the additions here presented on pp. 316-17. Here also an Introduction treats of previous publications, the earliest of which goes back to Champollion. Among recent translations, both in English, are those of Piankoff (1954) and Zandee (1969). In 1972 Hornung published the first German translation in his $\ddot{A} g y p t i s c h e$ Unterweltsbücher, but claims to offer many improvements in the present work. The earliest text, that of the tomb of Haremheb, can also be consulted in the photographs by Frank Teichmann which were published by Hornung and Teichmann, Das Grab des Haremhab (1971). After a description of the sources used comes a discussion of the division of the material. There are twelve hours of night, the basic division, but the correspondence between hour and gate is not so simple a matter, and the relation posited here differs from that given by Maystre and Piankoff. The underlying idea found in this book as well as in the Book of Amduat and the Book of Night is that gates occur between the hours of night in the underworld, so that the first gate appears at the beginning of the second hour. Each gate is thus to be regarded as closing the hour that precedes it rather than as opening the hour that follows. A schema emerges of 12 hours and one hundred scenes, the final picture being located outside the series. Marcel Jenni and A. Brodbeck provide the related drawings to accompany the translation, and also the very useful collected scenes for the 12 hours at the end. The sources vary considerably in fullness and quality, and they have been pursued with up-to-the-minute exemplary industry. While the illustrations do not relate to named sources, they provide a synoptic view.

In every facet of the work the highest standard is maintained, and the following comments on various points of interpretation are not intended to suggest reservations of any kind. The first scene describes Re as the creator-god who has ordered the affairs of men and gods, cattle and reptiles, after he has approached them $m t 3$. Here a translation in der Erde is followed by a note (p. 35 n .6 ) which maintains that the Egyptian carefully distinguishes between $m t$ ', 'in the earth ( $=$ the underworld)' and $t p t$, 'on the earth'. The deciding factor, if so, is the force of the preposition. If one objects that the natural place for the sun-god to approach all these created beings is the earth rather than the
underworld, one faces the fact that before this the sun-god has assigned the hidden place to them, and the expression is shown to denote the realm of the dead, so that the controlling thought here will be that the created beings are brought, through the fate of death, to a hidden place in the underworld where the sun-god still cares for them. That $m t ;$ and $t p t ;$ must differ in meaning is evident, as is shown, from Amduat (ed. Hornung), i 18 . io and 193.7 (with note in Vol. if, i26), where the two phrases are ranged with $m p t$. A slight problem perhaps arises with the word $d s t$. This is the very common word for 'underworld' in this text (see Index, p. 310), and the phrase $m d 3 t$ occurs often (e.g. I, 57, i16, 121, I39, 169). Are we to believe that there is no difference in meaning between $m t 3$ and $m d s t$ ? Logically, of course, there is no obstacle to using more than one phrase to mean the same thing. $T_{3}$ is clearly the more comprehensive term, implying that the earth includes the underworld. If $m t 3$, 'within the earth', here refers primarily to the underworld, it may yet have a wider reference in that it includes all the creatures that live in the earth; the context of the passage pointedly refers to them, and such a meaning is still in contradistinction to $t p t$. It is rightly stated in the following note (p. 35 n .7 ) that the eyes or eye of the sun-god are often said to illumine the underworld, but in citing Horus and Seth, 1о. 4, for this idea as related to the eyes of Horus, which are buried $r$ shd $t$, um die Erde ( = Unterwelt) zu erleuchten, Hornung must provoke doubt. In effect he is now translating $t$, though not preceded now by a distinctive preposition, as 'underworld'. It is true that an allusion to the underworld here makes sense of an expression that is difficult in its particular context; I note that M. Lichtheim takes it with the next sentence (Toward morning . . .) and that E. Brunner-Traut transposes it to a still later stage. $H . \mathcal{E}^{\circ} S$. is not a text that is especially concerned with the underworld, and the triple division ( $W b . \mathrm{v}, 213.8$ ) of pt $t 3 d_{3 t}$ probably prevails in it.

The underworld is at any rate very much the centre of interest in this text and its representations, and a distinctive feature is the prominence of the gates. Eventually Chapters 144 and 145 of the Book of the Dead emerged as closely comparable texts; there are seven gates in Chapter 144 and twenty-one in Chapter 145. Twelve gates are typical of the Books of the Underworld, and the earliest examples are in the Coffin-Text versions of the Book of the Two Ways, with suggestions too in the Book of Amduat (see here p. 74). In $B D 127$ an element of judgement is associated with the gates of the underworld, as H. Brunner shows in 'Die Rolle von Tür und Tor im Alten Ägypten' in Symbolon 6 (1982), 45-6, where a wider judicial function is also connected with gates in general; cf. G. P. F. van den Boorn in $\mathcal{F N E S} 44$ (1985), r-25 on 'Justice at the Gate'. Full cognizance is taken of this idea on p. 15I in discussing the well-known judgement scene which is attached to the Fifth Gate; and stress is rightly laid on the association of gate and judgement. The idea seems to be absent from the ideology of the other gates. These gates serve to protect the blessed and to repel hostile forces; and the basic principle is salvation through association. The guardian of the gate is commanded to open to Re , with the implication that the same privilege is accorded to his followers (see pp. 43 and 73); indeed the deceased King is sometimes identified with the sun-god.

Several remarkable features characterize the judgement-scene itself, and they are dealt with elaborately (pp. 141-52). One problem is that the balance held before the Osiris-Judge usually (i.e. in these sources) shows the scales as empty, unlike the great majority of such representations, including those in $B D$. If one version only had shown them empty, it could be explained as inadvertent unfinished business. As it is there must be purposive intent, and probably the meaning is that the weighing process is now over; such is the view of Christine Seeber, quoted on p. 152. Further, the verdict is a favourable one since an adjacent figure shows a pig being driven out of a boat by an ape, while the seated Osiris carries an ankh-sign instead of a flail-a point which is duly noted, but without an explanation. Since the monster called the 'Swallower' is missing, it seems reasonable to cast the pig in this role. The texts do not refer to Seth, and indeed Seth would be out of place as a hostile figure in the solar barque-and this is a solar barque-for in this context he is consistently the ally of the sun-god. On the other hand, as Seeber points out, the swallowing monster is usually regarded as a neutral arbiter or executant. Whether the words scm•f it $(i) \cdot f$, 'he swallows his father', should be applied to the pig seems now doubtful, although they had been so related in Vol. i, 196. They are assigned rather to the figure of Anubis and a good case is made for giving a favourable meaning to the swallowing in the sense that it describes the function of Anubis as the embalmer who protects the body. In a valuable study of this scene M. Heerma van Voss (in Travels in the World of the Old Testament, Fs. M. A. Beek, Amsterdam, 1974, 80-90) refers to the use of $s$ s $m$ in the sense of 'inlaying' with gold or lapis lazuli in connection with the mummy shroud, and he cites $W b$. Iv, 45. 10-13 and $C T$
vi, 221 p (of material worked into by Ptah ) for the phrase here used of Anubis, 'he who inlays (the shroud) of his father Osiris'. In either case the process of burial is implied in a helpful way.

Cryptography is used in some of the texts of the judgement-scene and texts of a similar mode in Amduat and the tomb of Tut'ankhamūn are wisely deployed. Inevitably, courage rather than conviction is the mark of some of the proposals. It is worth comparing the attempts made by Heerma van Voss in the study just cited, and the comparisons are made, needless to say, by Hornung himself. Again of particular interest in the Books of Gates is the well-known 'cosmopolitan' episode, here Scene 30, pp. 134-7, with its division of mankind into 'men' ( = Egyptians), Asiatics, Nubians, and Libyans, the Egyptians and Nubians being protected by Horus, the Asiatics and Libyans by Sakhmet. The serenely felicitous aura of the whole scene is striking. It is shown (p. 137) that whereas in the Book of Night similar divisions of nations are contrasted with the Egyptians, who are standing while the foreign peoples are kneeling and bound, here they are all greeted on a par as of divine origin and provided with tutelary deities. It is true that even here Horus tells the Nubians (nhsyw) that they are those whom he has smitten ( $h w \cdot n \cdot i: 1$, 179), but apparently this is said mainly for the sake of a pun (II, I36 n. 9). In general the approach is international rather than cosmopolitan. While the Egyptians enjoy superiority in being named first and called 'men' or 'people', yet they share the sanction of Horus with the Nubians; and the four peoples are all the cattle of Re. The enlarged horizon of the Aten-Hymn is properly invoked, and also, for the appreciation of other languages, the expression 'Interpreters of the Underworld' ( $3 \ll w d 3 t$ ) which Hornung has convincingly found in Amduat 1,56 , 7-8 and II, 75 n .5 , with Re and Thoth in this role. It is of profound significance to find the contemporary consciousness of lively contact between nations transported so boldly to the afterworld. An indication of the advance achieved in interpretation can be seen in Budge's remark on this section (From Fetish to God, London, 1934, repr. New York, 1972, 371): 'This shows that the egyptians did not believe in an international heaven.'

A guardian of the Fifth Gate (p.142) is called $\check{s} t s(w)-i b$, 'he with secret heart', an allusion perhaps to inaccessible knowledge. More intriguing is the name of the Eleventh Gate: štst bzw, 'with secret introduction or initiation' (p. 265), where the phrase bzsts, Wb. 1, 473, 21, is adduced, of initiation into mysteries. But it is shown that here the theme concerns the mysteries of the morning rebirth, relating especially to the secret rebirth of the sun.

Hornung and his team have provided us with a superbly equipped presentation of this important work. It is an enduring achievement which can hardly be praised enough; and a vital part in the achievement is Hornung's own mastery of the related literature, much of which he has himself edited or translated before this.
J. Gwyn Griffiths

Die Textüberlieferung Ramses' II zur Qades-Schlacht-Analyse und Struktur. By Thomas von der Way. Hildesheimer Ägyptologische Beiträge, 22. $237 \times 168 \mathrm{~mm}$. Pp. xli $+427,3$ figures. Hildesheim, Gerstenberg Verlag, 1984. ISBN 38067 8081 i. Price DM 59.
This book is principally concerned with the literary structure of the 'Poem' and 'Record' (or Bulletin) texts of Ramesses II's great epic composition about his notorious Battle of Qadesh against the Hittites, not with the historical dimension (although this does receive due consideration). The work is divided into four major parts or chapters, preceded by an extensive bibliography and general introduction, and followed by a useful set of indexes. The figures at the end comprise a folding line-reproduction of the entire Qadesh scene from the Great Temple at Abu Simbel, and a photograph each of the king in council at Qadesh (Ramesseum) and the king charging the foe (Luxor) respectively.

At the series editor's request, the author has included a succinct twenty-page introduction, giving a brief outline of Egyptian-Western Asiatic political relations up to and including the Battle of Qadesh itself; then the plan of the book. Part One deals first with the physical transmission of the texts (temple walls; papyri) and with the independent nature of the three items of text, i.e. Poem, Record, and Captions to the scenes. Here von der Way has no problem distinguishing between the Captions and the Poem/Record as separate entities; he then argues (pp. 33-4) that the Record should also be treated as an entity separate from both the Poem and the Captions (contra Gardiner), and not be classed
simply as a large caption. Besides the occurrence of the Record in contexts outside of the pictorial reliefs in some cases (p. 34), he also argues for its relative independence on grounds of its contents (p. 88). Turning to the papyrus copies of the Poem, the author assumes that Year 9 of the Papyrus Raifé-Sallier III is that of Ramesses II (pp. 35, 39, 43). However, this assumption is by no means certain. The actual scribe, Pentaweret, wrote much of Sallier I in a Year io (Rt. 3:4) that cannot be earlier than Merenptah (Rt. 8:8). Thus, the Year 9 of Sallier III is possibly also that of Merenptah (as noted also by Kuentz, Bataille de Qadech, 199, the text having perhaps been copied for Ramesses II (cf. Kuentz, 208/8), in his honour, and not in Year 9 of Ramesses II). Therefore von der Way's treatment of the date of composition and possible relation of papyrus and monumental versions loses some of its validity. The author then surveys possible explicit markers in the text to indicate a sequence of natural subdivisions-particles like ist, particular verb-forms; these are correlated with the changes of actor and of location that occur in the course of the text. By this means, often using tabular diagrams, the author presents a digest of both the Poem (p. 87) and the Record (p. 90). With these, few will quibble.

With Part Two we enter the gobbledegook world of 'structuralist' literary analysis. Structuralism has become a fashionable fad in the last decade or so, and the author makes the experiment of using their methods on the text of the Poem and Record. As a result, his Part Two may be considered as first-class entertainment (on an academic plane), but at the end of the day very little has been gained for our analysis or understanding of the form and structure of the text, cf. his tables XV, XVI, pp. 145, 146. We are treated to defective definitions of narrative (p. 95), unnecessary mumbo-jumbo terminology (e.g. macropropositions, macrotransformation, and what-not), and doubtfully valid attempts at 'reduction' of narratives to logically sequential series of events-all attributable to structuralist Pseudowissenschaft, and not the fault of von der Way; in fact, he very properly notices weaknesses in their procedures (pp. 96 f .), and is rightly critical of their sometimes universalist/straitjacket approach to literatures (pp. 130-1). The distinction between Plot (events as told in a narrative) and Story (the real sequence of events) tends to be treated as a source of tension; needlessly so, because anticipations and 'flashbacks' are all part of a narrator's repertoire of techniques; dischronologized narrative is still valid narrative.

Part Three on thematic structure is of rather greater practical value. Taking a cue from his teacher Assmann, the author presents a series of 'inventories' or lists of occurrences of particular themes from the Qadesh text in transliteration, and then (pp. 162 ff .) follows each theme through, adducing parallel material from the New Kingdom and earlier. These miniature surveys are of great interest in themselves. These include the concept of the king on his own as a warrior in battle, help from the $\operatorname{god}(\mathrm{s})$ in battle, and so forth. For such divine intervention, a brief excursus (pp. 197-9) indicates the data on this theme to be found in Israel, Hatti, and Mesopotamia. Differences become apparent between these cultures (deity's presence evidenced in natural phenomena, or divine effulgence (Assyria), in contrast to Egypt, where deity's power in the pharaoh turns him into a divine warrior in the eyes of his foes). The role of 'personal piety' in Ramesses' appeal to Amun for help in crisis is considered; in an official royal text (as opposed to humble private votive stelae) the presence of this motif appears as a new departure, re-echoed in the Twentieth Dynasty. Amun was obliged to help the pharaoh, as the latter had scrupulously fulfilled his cultic obligations (monuments, offerings, etc.) or public acts, had shown an inner trust and obedience toward the god in inner attitude, and was 'son' of the god who owed him 'fatherly' protection. Other themes include the failure and later participation of the army in battle, and the king's material and economic/social provision for his forces, and the role of military loyalty and bravery. All is subsumed under two themes: $A$, the king legitimized by divine aid; $B$, the king and his forces who have loyalty to him and the gods (among whom he counts). The themes can then be set alongside the more general outline of the text and the actor-sequences of Part Two (pp. 259, 271).

Part Four brings us to more familiar ground. A sketch of the principal grammatical elements (particularly verb-forms) largely follows Hartman's study and precedes a full transliteration with translation (on facing pages) of both the Poem and the Record, dividing the text into paragraphs in line with the overall analysis achieved in the rest of the book (especially Part One, rather than Parts Two and Three which contribute very little on this point). One heading is misplaced: p. 302, 'IV. 2.1.8. Amungebet' should be inserted between § 9 r and $\S 92$ (not before § 88 ). The translation is clear and reliable; nearly throughout its structuring of the texts agrees quite closely with the reviewer's
own (yet unpublished) efforts. The translation is accompanied by two series of concise notes, on textual interpretation and wider points. Finally, a brief Part Five presents overall conclusions. Here the author raises the question why Ramesses II gave such prominence in Egypt to what had been politically a near-disaster. The personal heroism of the king in saving the day is not to be discounted here; and there is von der Way's point that this was also the one known occasion when an Egyptian pharaoh and a Hittite great king confronted each other on the field of battle (p. 384). The author has not grasped the significance of the Hittite ruler's supposed plea for 'peace' (p. 391) ; this should be viewed simply as a propagandistic twist to a commonsense suggestion by the Hittite ruler that the two powers simply agree peace as equals, returning to the political status quo that obtained before Ramesses' two campaigns of Years 4 and 5; but in the Qadesh texts it is presented as a plea in submission. The author finally elaborates a theory that the Qadesh epic of the victorious king was an element in a royal plan to win over Egyptians (and especially the military) to the desirability of peace with Hatti. This is more ingenious than convincing. Further campaigns in Year 8, Year ıo, and probably later (as yet undated) with tensions up to Year 18 do not favour this hypothesis. By Year i8, with no permanent gains made, one doubts that anyone in Egypt would be still keen on endless war; in the context of international politics of the day, the treaty of Year 21 (and its preceding negotiations) probably came about at the right psychological moment.

Von der Way's book is thus a valuable and solid contribution on a famous Egyptian composition, even if at times hampered by the ponderous blunderings of the structuralists; it will be of real value to all students of its theme.

K. A. Kitchen

The Edifice of Taharqa by the Sacred Lake of Karnak. By Richard A. Parker, Jean Leclant, and Jean-Claude Goyon. Brown Egyptological Studies, volume 8. $380 \times 270 \mathrm{~mm}$. Pp. x +95 , pls. 44, figs. 2 I. Brown University Press, Providence, and Lund Humphries, London, 1979. ISBN o 87057 1516 and 085331423 3. Price $£ 30$.

The edifice of Taharqa adjacent to the Sacred Lake is among the most enigmatic of all the shrines and sanctuaries at Karnak. Little of it has been preserved, apart from the substructure, and vestiges of the superstructure. Even these scant remains have never been excavated systematically. The extant reliefs and inscriptions contain much that is baffling and obscure. Little wonder, then, that the monument has long resisted the efforts of those seeking to elucidate it and its function.

The present volume makes available the most complete epigraphic and architectural record of this mysterious structure to date. It represents the fruits of research carried out intermittently over five decades by a trio of distinguished Egyptologists. R. A. Parker has contributed facsimile drawings of the decoration of the monument. J. Leclant has supplied a description of its architecture, as well as a useful conspectus of the work done by earlier researchers at the site. J-C. Goyon has written an analysis of the reliefs and translated the texts which accompany them. The last-named has also contributed a brief essay concerned with the religious significance of the monument.

The facsimiles executed under Parker's direction are superb, as anyone who has had occasion to examine the originals will attest. One's only regret is that more has not been explained about the epigraphic conventions employed in making them, particularly as regards the use of shading to indicate damage to inscribed surfaces. This seems to be inconsistent; sometimes damaged areas are shaded and sometimes they are not. ${ }^{1}$ Such inconsistency can lead to confusion, especially when details have been omitted in the plates of the present volume which are visible in earlier copies of the same material and, at the same time, the relevant wall surfaces are shown without any trace of shading. In such cases, it is unclear whether one is faced with a tacit correction of an earlier copyist's mistake, or whether a given detail has suffered destruction and disappeared from view.

Pl. 26, which depicts the ritual elevation of statues of four divinities, provides a neat illustration of the problem. A drawing of this scene was published in 1847 by Prisse d'Avennes on pl. 32 of his Monuments égyptiens. ${ }^{2}$ There, the god Soped is shown wearing a head-dress with a lappet extending

[^170]downward over his chest. The lappet has been omitted in the new version of the scene, but the area where one would expect to find it is unshaded. Has it been lost? Is the god actually wearing the type of headgear shown by Prisse? ${ }^{1}$ If so, does this mean that the lappet was never carved? Only the epigraphist knows the answers to these questions; the reader has been left to wonder. ${ }^{2}$

Leclant's report on the architecture of Taharqa's monument is filled with interesting observations. It cannot be regarded as the last word on the subject, since the building still awaits further clearance, but it is as complete a survey as one could wish for under the circumstances. Of particular interest is the observation that blocks from an earlier structure have been re-used in the construction of the existing fabric. Some of these bear the name of Taharqa's predecessor Shabaka.

The greater part of the volume is the work of Goyon. His contribution, like that of Leclant, has been translated from French into English. Generally speaking, the result is correct, if not fluent. The odd Gallicism still obtrudes here and there; these, together with other infelicities, might have been eliminated by more careful editing. ${ }^{3}$ It should be noted that not all of the English prose in the chapters signed by Goyon is a translation of his own work. The rendering of Spell ${ }_{15} \mathrm{D}$ of the Book of the Dead on pp. 44-5 is a version of the one published by Barguet on p. 49 of his Le Livre des Morts. ${ }^{4}$ The translations in square brackets on pp. 33-5 have been borrowed from Piankoff, The Litany of Re, 22-8. ${ }^{5}$

Goyon's treatment of the decoration of the monument displays impressive erudition. His analysis of the reliefs and the rites depicted in them is both scholarly and sensitive, reflecting a profound acquaintance, not only with ancient parallels, but with the relevant modern bibliography as well. Each rite receives a lucid discussion. With the aid of complementary evidence assembled from a wide range of other sources, even very fragmentary scenes have been rendered intelligible.

Regrettably, the translations of the texts which accompany the reliefs are not of the same standard. The theoretical approach to Egyptian syntax which appears to underlie them is more or less that exemplified by the grammars of Gardiner and Lefebvre. At times, even within this frame of reference, the rendering is apt to be very free. Suffix conjugation forms are translated without regard either to tense or to aspect. ${ }^{6}$ Verbal sentences are treated as if they were nominal, ${ }^{7}$ and affirmative clauses as if they were negative. ${ }^{8}$ Pronouns are altered, added, or omitted, for no apparent reason. ${ }^{9}$ In more than

[^171]one instance, the force of a particle has been ignored, ${ }^{1}$ and frequently the rendering of prepositions is vague and imprecise. ${ }^{2}$

Inaccuracies of this sort will be noted by the attentive reader, and it would serve no useful purpose to discuss them further here. The following remarks are concerned with errors of a more substantive nature in the translations of a number of different passages. ${ }^{3}$
p. 32: The compound mi ntt means 'like', not 'also'. mi ntt wr im=tn in plate 12 C , line 12 should be translated 'like one of you'. See Hornung, Das Buch der Anbetung des Re im Westen II, 73 and 123, with n. 223. This is one of several passages in the Litany of Re where the translation given in Hornung's book is superior to that of Goyon, and it is a pity that the latter did not make greater use of this work when preparing his contribution to the present volume. Hornung's edition is cited only three times: on p. 30, n. 1; p. 31, n. 8; and p. 34, n. 40. The first of these citations is incorrect; for Aegyptiaca Helvetica 3 (1975), 79, read Aegyptiaca Helvetica 3 (1976), 21.
irw $n=f w_{3} . t$ pn Hpry in pl. 13 , line 4 is 'open the way for him, this one, Khepri', not 'allow him this way of Khepri'. (The latter would be expressed in Egyptian by irw $n=f$ w.t.t tn nt Hypry.) For the use of $p n$ as a substantive, see Hornung, op. cit. 100, n. 18 and 123, n. 228.
qrr.wt imy.t igr.t in pl. 13 , line 19 is 'the caverns (and) what is in Igeret', not 'the caverns which are in Igeret'. (imy.t is singular, not plural.) For the translation, see Hornung, op. cit. 74 and 124, with n. 232.
p. 33: $s$ s $R \subset \mathrm{~N} . \uparrow n h \underline{d} t n t r r s$ hnty $d w s . t$ in pl. $\mathrm{I}_{5} \mathrm{D}$, line 24 is not 'for the Son of Re N., living eternally, is the great god who is at the head of the Duat'. Rather, $s r^{\prime} R \subset N . c n h \underline{d} t$ stands in apposition to an earlier reference to the king, now lost except for the concluding di fnh. ntr ${ }^{\prime}$; hnty dwi.t is vocative, the words being addressed to the sun god. For the usage, see Hornung, Conceptions of God in Ancient Egypt, 187-8.
nb qr.wt imn.t irw, cited from Piankoff, The Litany of Re, pl. 3, col. 4, is 'lord of the caverns with hidden forms', not 'lord of the caverns, with hidden forms'. The feminine participle imn.t modifies $q r . w t$, not $n b$. See Hornung, Das Buch der Anbetung des Re im Westen 2, 99, n. 14.
$n b 3 \lessdot \tau w r$ imy. $t-t p=f$, cited from Piankoff, op. cit. pl. 4, col. in , is probably 'lord of ascent to the one who is before him', not 'lord of manifestations of what is in his head' (cf. the parallel psd tpr imy.wt-h3.t=f in the following invocation). For the meaning of $s e c w$, see Hornung, op. cit. 105, n. 53. For the compound preposition (i) $m(y)-t p$, see $W b, ~ v, 271,11-13$.
p. 34: pr m imy.wt=f, cited from Piankoff, op. cit. pl. 4, column ${ }_{15}$, is 'he who came forth from that in which he was', not 'he who comes out of himself'. The reference is to the primeval emergence of the sun god (cf. the parallel $p s d m ; g b$ in the preceding invocation). For the inverted use of imy, as here, see Griffiths, $9 E A 28$ (1942), 66-7.
sty $\check{s} w$, cited from Piankoff, op. cit. pl. 5, col. 3, is 'strewer of light/illuminator', not 'seed of Shu'. See Hornung, op. cit. 107, n. 77.
p. 35: $b 3 s b(3) q$ snt, cited from Piankoff, op. cit. pl. 7, col. 3, is 'ba with bright/splendid body', not 'splendid ba-soul . . $\therefore$ ' The significance of this epithet is discussed by Hornung, op. cit. in7, n. 172.
(p. 32, line 9); 'his' before 'luminosity' (p. 33, line 24); 'his' before 'enemies' (p. 35, line 64); 'he' before 'hides' (p. 70, line 2); 'his' before 'coming' (p. 76, lines 29-33), and so on. Omissions: $s$ after imnt.t in pl. 24, line 45 ; $s$ after $s$; in pl. 28A, line $12 ; k$ after $p \underline{h} r$ in pl. 20B, line 27 and passim. Other words omitted: $\underset{d}{d} d-m d w$ in pl . 24, line 2 ; $n b$ in pl. 44, line 6.
${ }^{1}$ Thus, $\underline{t w t}$ is ha.t nt 3 st in pl. 14, line 18 is translated 'Thou art the body of Isis' (p. 33). The presence of the subordinating particle is is ignored in the translations of several sentences parallel to this one as well. ti sw mn mht $n b$ in pl. 44, line 11 is translated 'it is he who remains in everything' (p. 76). is marking an indirect statement after the verb $d d$ in pl. 24, line 6 is translated 'Here it happens that' (p. 57). The sentence in which that particle occurs should be rendered: 'Amun-Re, lord of the thrones of the two lands, and Kamutef who is on his great seat [have not reconsidered] their statement to their son [King] N. that the Horus with lofty crowns, the son of Re N., is in the midst of a span of years of life, stability, and dominion.'
${ }^{2}$ Examples: sšm $r$ in pl. 13, line 18 and passim is translated 'lead on' (p. 34); hrwdr in pl. 18B, line 26 is translated 'in order to judge' (p. 39); $r$ wbs in pl. 23, line 12 is translated 'opening' (p. 54); $r$ htp in pl. 24, line 45 is translated 'setting' (p. 60); $m$ in pl. 28A, line 6 is translated 'giving it' (p. 74); $t p t s$ in pl. 33 , lines $5-6$ is translated 'in the land' (p. 39, n. 36).
${ }^{3}$ For useful comments on several additional passages, see the review published by Osing in Orientalia 53 (1984), 464-7.
wtty htm msw.t wr $\underline{t n n}$ t', cited from Piankoff, op. cit. pl. 7, col. 7, is hardly 'generator who may annihilate the offspring, unique one who made the earth visible'. htm with bookroll determinative is the verb 'provide' (Wb. ini, 196-197). msw.t, also determined with the bookroll, means 'forms', not 'offspring'. (The same is true of msw.t in Piankoff, op. cit., pl. 5, column I, cited on p. 34; for the meaning, see $W b$. II, i41, 14.) $t n n$ is the verb 'uplift, elevate' ( $W b . \mathrm{v}, 374-5$ ). Translate: 'begetter who provides (or: provided with) forms, unique one who elevated the land'. With htm msw.t, compare the similar epithet $h \mathrm{tm} \mathrm{hprw}$ cited in $W b$. III, 197, 6.
bsy sch.w=f, cited from Piankoff, op. cit. pl. 7, col. 9, is 'the one who brings forth his mummies', not 'the one who comes forth out of his mummies'. Similarly, bsy in plate ${ }_{15}$ D, line 68 should be translated 'the one who brings forth' not 'the one who comes forth'. For the verb bsy employed with causative force, see $W b$. I, 474, 14-16.
$m d w b ; r n n c . w t=f$, cited from Piankoff, op. cit. pl. 7, col. 1 I, is 'the one with speaking ba who extols (or: nourishes) his members', not 'ba-soul who speaks naming his members'. The latter translation inverts the order of the first two elements of the epithet and leaves out of consideration the determinative of the third. $r n n$, followed by the man with hand to mouth, ought to be either the verb meaning 'rejoice, extol' ( $W b$. II, 435, 9-10) or the verb meaning 'bring up, nurse' ( $W b$. II, 436, i4). For the latter written with man with hand to mouth determinative, see Gardiner, $\mathcal{Y} E A 32$ (1946), 55 n . (v). One may compare the divine name $r n n h r . w$, 'nourisher of limbs', cited in $W b$. if, 436, 15 .
p. 39: imy in pl. 18B, line 23 should be translated 'which are in', not '(those) they have in'. N. 26 suggests that ' $I m n t$, 'West', is to be restored in the break after imy. A better restoration is surely $t 3 n t r$, 'God's land', in agreement with the parallels on the sarcophagus lids of Aspalta and Anlamani cited in pl. 32, lines 6-7. The significance of the term $t ; n t r y$ in this passage has been explained by Assmann in Der König als Sonnenpriester, 30-31, n. 14.
isw.ty in pl. 18B, line 24 is 'the two crews', not 'the crew'. The crews in question are those of the 'imperishable (i.e. circumpolar) stars' (ihm.w sk), who row the solar bark during the day, and the 'unwearying stars' (ihm.w wrd) , who drag the bark during the night. On the passage, see Assmann, op. cit. 32 , n. 16 .
$i w r d i . n R \subset N . t p t s n \subset n h . w$ in pl. 18 B , line 26 is 'Re has placed N. on earth for the living', not 'Re has given N . to the living.'
p. 40: ntr.w imnty.w in pl. 19, line I is 'the western gods', not 'the gods of the west'. $i ; w$ in the same line is 'praises, adoration' or the like, not 'prayers'.
p. 41: $r$ wi.t nfr.t $n t i t=f R r-H r-3 h . t y$ in pl. 34 , lines 11 and 13 is 'to the beautiful way of his father Re-Harakhty', not 'on this right way, his father Re-Harakhty'. The latter translation is the result of a misreading of the $t$ of $n f r . t$ and the $n$ of $n t$ as the demonstrative adjective $t n$.
p. 42: $i$ in pl. 20A, lines 3 and 6 is perhaps vocative ' $o$ ', rather than 'saying'. ssb.w $d d$ г in line 8 of the same plate is 'the jackals who give assistance', not 'the jackals give assistance'.
p. 44: $m s$ bik ‘hm. $w=s n$ in pl. 35 , line 16 is 'whose images the hawk made', not 'whose hawk makes the image'.
p. 45: shr $\subset p p$ šp $=f t m s w$ in pl. 20B, line 3I can hardly be 'to overthrow Apophis and to overcome him when he is annihilated'. 'To overthrow' would be expressed in Egyptian by $r$ shr $r$, not $s h r$. Moreover, $s^{\prime} p$ is not 'overcome', but rather 'flow out' or, by extension, 'perish'. For the meaning of this intransitive verb, see $W b$. iv, 444-5; P. Bremner-Rhind, xxvi, 17 and 20 , and xxviii, $15 . \mathrm{tm}$ sw might conceivably mean 'when he is annihilated', if one assumes that the words form a subordinate clause of which participial tm is the predicate and dependent pronoun $s w$ the subject, but it would be more natural for this to be expressed in Egyptian with one of the forms of the suffix conjugation. The words $s h r \subset p p s ̌ p=f t m s w$ are addressed to Re, so $s h r$ may well be an imperative. (Cf. P. Bremner-Rhind, xxvii, 20 , where it is said of Apophis: $s h r s w r\ulcorner d s=f$, 'Re himself will overthrow him.') $t m$ might also be an imperative. If so, then the problematic passage ought to be rendered: 'Overthrow Apophis. Let him perish. Annihilate him.'
$m i p \underline{h} r=k m-s^{3} q[r] . t y$ in pl. 20 B , line 32 is 'as you seek after the two caverns' or the like, not 'as thou turnest after coming out of the two caverns'. For the idiom $p \underline{h r} m-s^{3}$, see Gardiner, $E G^{3}, \S 178$.
p. 5 I : The reading of the words discussed in n .3 I on this page, as well as in n .49 on p .65 , is $t p$ sw 10 rather than $t p h r w$ ı. See Miosi, $Z A S$ ioi (1974), r50-2. The demotic evidence on this point is unequivocal; see, for example, P. Berlin 835 I, ii, I, 5 (bis); P. Harkness, ii, 9, iv, I3; P. Louvre SN 69, 14.
p. 53: $m$ sn=f in $n \underline{t r} . w$ in pl. 22, line 12 ( $=$ plate 23 , line 1 ) is a label: 'Seeing him (scil. Horus) by the gods', not 'when he is seen by the gods'. For min as a writing of the infinitive of the verb m3s, see Gardiner, $E G^{3}, \S 299$.
p. 54: 'Itm 'Iwnwy in pl. 22, line 36 is 'Atum the Heliopolitan', not 'Atum in Heliopolis'. Note the seated god determinative which follows the second word. Translate 'Atum the Heliopolitan' also in pl. 16B, instead of 'Atum, [lord] of Heliopolis' (so already Leclant, Recherches sur les monuments thébains, 306).
p. 57: $s$ 3=n $p w m r=n s w$ in pl. 24, line 3 is ' He is our son for we love him' or, alternatively, 'He is a son of ours whom we love', but not 'It is our son whom we love.' This last would be expressed in Egyptian without the dependent pronoun $s w$.
p. 58: The signs preceding $n \underline{t r}$ in pl. 24, line 17 are to be read $h r w$, not $h r w t p i$ as in n. 41.
p. 59: $n b \check{s} \breve{s} \check{s} 3 \underline{h} r . t=f$ in pl. 24, line 22 is 'lord of fate who assigns his possessions', not 'lord of fate who creates his possessions'.
p. 67: cḥ N. $h \underset{r}{ } \underline{t} s . t=f$ iry $=f \check{s}\ulcorner. t=f$ in pl. 26 , lines 4,9 , 13 , and 15 is a label: 'Elevation of N. on his $\underline{t} s . t$-support that he might carry out his massacre', not ' N . is raised on his $\underline{t} . t$-support; he is going to carry out his massacre.' For the interpretation of initial che here as an infinitive, see Leclant, Recherches sur les monuments thébains, 298. Contra note i9, there is nothing specifically Late Egyptian about the prospective $s \underset{\sim}{d} m=f$ form iry. The same is true of the other forms so labelled in $n .40$ on p. 64 and in n . 2 I below.
p. 70: ht $n b n f r w r b$ in pl. 27, line 1 is 'every perfect and pure rite', not 'all the perfect rites of purification'. The latter would be expressed in Egyptian by ht nb nfr $n$ wrb.
inn $m-q d=[s n]$ in pl. 27, lines 6-7 is perhaps 'who are represented with [their] images' or 'who are represented in [their] entirety' rather than 'when [their] images are reproduced'. For $m-q d$ as a variant of $m i-q d$, see $W b, ~ v, 76$, 15. Yet another possible translation would be 'to [whose] images one has recourse'; cf. Gunn, RT 39 (1921), 105-7.
p. 71: The verb near the end of line 9 in pl. 27 appears to be $\check{s} d$, 'recite'; cf. Wb. IV, 563-4. ntsn šd=sn $r n . w$ can be translated 'It is they who will recite the names.'

Goyon's arrangement of the constituent elements of the stanzas of the morning hymn to Amun reproduced in pl. 27 is not very satisfactory. According to him, the refrain which introduces each invocation starts at the beginning of line 13 , leaves off shortly before the end of it, and then jumps to the end of line 15 . Similarly, the closing refrain begins near the end of line $1_{13}$, jumps to the beginning of line 15, and finishes midway through it. This arrangement is needlessly complex. Since the invocations occupy a series of vertical columns which are framed by the horizontal lines I 3 and I5, it is logical to assume that the upper horizontal line contains the introductory refrain and the lower one the closing refrain. This permits the stanzas to be read in a much more straightforward manner: [rs.ti $h t p . t i r s=k m$ ] htp rs 'Imn $m$ ‘nh $r s$ N. $m h t p r s=k\langle m\rangle h t p$ ( N . in each stanza $=$ an epithet or series of epithets describing some aspect of the god). Translate: '[Awake. Be at peace. May you awake in] peace. May Amun awake in life. May N. awake in peace. May you awake 〈in〉peace.' This arrangement is more or less identical with the one adopted by Assmann in his translation of the Hibis version of the morning hymn (see Agyptische Hymnen und Gebete, 288-90). The Hibis version differs slightly from the present one in that it inserts $m h t p$ after $m \subset n h$ and omits the final $r s=k\langle m\rangle h t p$.
‘ $n h m s . w$ in pl. 40 , line 13 is 'living of (re)births' or 'with living (re)births', not 'he who lives again of births'.
iwty ©nh $m$ hb $=f$ in pl. 40, lines 17 and 19 is 'in ignorance of whom there is no life/living one', not 'who does not leave anything living without knowing it'. Cf. Assmann, Ägyptische Hymnen und Gebete, 289 .
p. 72: ‘q $m$ n.t in pl. 27, line 23 is 'who enters as the inundation', not 'who enters the inundation as water'. For the correct translation, see Barucq and Daumas, Hymnes et prières de l'Égypte ancienne, 312, n. (q).
p. 74: Line 5 of pl. 42 is an inaccurate reproduction of Davies, The Temple of Hibis ini, pl. 31, middle register, lines $18-19$. The original has ‘py wr hnt Nw.t nd.t $[d i n]=f$ p.t $t ; ~ m i-q d=s w$, which should be translated: 'the great winged scarab within/before Nut the protectress, he [to] whom heaven and earth [were given] in their entirety'. For the reading nd.t (not $w \underline{d}=s$ ) after $N w . t$, and for the restoration of [di $n$ ] (not [n]), see Enchoria 7 (1977), 129-30; Junker and Winter, Das Geburtshaus des Tempels der Isis in Philä, 427.

Restore $h p r[w=f t p] m H r$ at the beginning of pl. 42, line 9 . Translate '[his first] form as Horus'. For the restoration, see Enchoria 7 (1977), 132.
wr mer.t=fnt-ᄃ=fp’.n=fmnwih in pl. 42, lines $\mathrm{II}_{\mathrm{I}-12}$ is 'Great is his prosperity. As for his habit, it has endured and endured', not 'He performs perfectly his duties that he made endure and last.' For the form $p^{3} . n=f$, which is not causative, see Gardiner, $E G^{3}, \S 484$. On the passage as a whole, see Enchoria 7 (1977), I 33-4.
$m r \operatorname{shn} W \operatorname{sir} m h q$ s igr.t in pl. 42, lines $\mathrm{I}_{3}$ and $\mathrm{I}_{5}$ is 'being desirous of alighting (upon) Osiris as ruler of the netherworld', not 'as Osiris rests (there), as ruler of the netherworld'. The latter rendering ignores the verb $m r$ which stands before shn. For the translation, see Enchoria 7 (1977), 135-6. On the theme of the union of Amun with Osiris in the underworld, see de Wit, Les Inscriptions du temple d'Opet, à Karnak 1iI, 147-57.
$H r w n n=f p w$ in pl. 42, line 17 cannot mean 'for he is Horus indeed'. $\mathrm{H} r$ stands in apposition to the preceding $s ;=f$ and marks the end of a sentence. $w n n=f p w$ begins a new sentence: wnn=f $p w w n n=f h r$ wbn htpr $n b$, which should be translated 'This is his existence, that he is rising and setting every day' or, alternatively, 'So long as he exists, he is rising and setting every day.' For the nominal pattern involved, see Gardiner, $E G^{3}$, § 130 . Compare de Buck, Coffin Texts i11, 178b: hqr Re pw hqr=i, 'Whenever Re hungers, I hunger.' This sentence is discussed by Gilula in $\mathcal{F} E A 62$ (1976), 170 , who notes the existence of parallels in which the $p w$ is omitted.
'Imn bs imy wnm.t=f $m$ itn=f $m p . t$ in pl. 42, line 19 is 'Amun, ba who is in his right eye, in his disk in heaven', not 'Amun, the ba-soul whose right eye is his disk in heaven'. The latter translation is the result of a misreading of imy as part of the following wnm.t. The Philae parallel discussed in n. 25 substitutes $\underline{h} n$ itn $=f$ for $m$ itn $=f$. In view of this, perhaps $\underline{h} n$ itn $=f$ should be rendered 'within his disk' rather than 'whose disk travels'.

The signs immediately after $m ; w y$ in pl. 43, line 5 are to be read $m s w . t=f$, not $m s . t w=f$. The plural strokes beneath the quail chick in the damaged parallel assure the reading. For the graphic transposition of $t$ and $w$, see Gardiner, $E G^{3}, \S 56$. miwy msw. $t=f$ means 'he whose birth is radiant' or the like.
p. 75: $r n m t . t=f$ hft $R \subset$ in pl. 43, line 7 is 'according to his movement in relation to the sun', not 'when he comes at the same time as Re'. Reference is made here to the lunar form of Amun which is seen travelling through the night sky at the time when the sun is passing through the underworld. On the moon as the nocturnal counterpart or representative of the sun, see Assmann, Der König als Sonnenpriester, 34, and literature cited there.
The demotic version of the hymn to the bas of Amun has $n p . t$, 'of heaven', after $n n k y$. This ought to be restored in both hieroglyphic versions of the hymn as well. The bottom of the $p . t$ sign in the Karnak version is actually visible in plate 28A, line 19 . In the Hibis version, there is ample space for $n$ $p . t$ in the gap between $n n k y$ and $h r h w=f$; more has been lost there than is indicated by the hand copy in plate 43, line 7, as may be verified by reference to the facsimile published in Davies, The Temple of Hibis ini, pl. 31, middle register, line 33. For the relevant portion of the demotic text, see Enchoria 7 (1977), 126 and pl. 18, line 23. $n n k y$ [ $n p . t] h r h w=f$ should be translated 'There is no other [of heaven] like him.'
The sign following $n \underline{t} r$ in pl. 43, line 7 should be read $m n h$, not $m d w$ or $c^{3}$. The reading $n \underline{t r} m n h$, 'beneficent god', is assured by the fuller writing of that epithet which occurs in the demotic parallel. See Enchoria 7 (1977), pl. 18, line 24.
$h \subset \subset=s n n=f r s \check{s} w t n w$ i $y=f n=s n$ in pl. 43, line 9 is 'for whom they rejoice more than for the sunlight each time that he comes to them'. The reading of the sign before $s w w$ as $r$ is supported by the $r \underline{h y}$ of the demotic parallel; see Enchoria 7 (1977), 127 and pl. 18, line 25 . This reading is undoubtedly the correct one, and there is no need to resort to the emendation ir $\check{s} w$ which is advocated in n .35 .
$n h h h_{r} r h r=f$ in pl. 43, lines in and 13 cannot be 'his duration is eternity'. The words are part of a longer sentence: $\underline{d} d . h r . t w n h h r r h r=f \underline{h} r w b n h t p[n n s b \subset n h] d \underline{d} t$, 'So his lifetime is called "eternity", rising and setting [without cessation, living] forever.'
$m ; i n b$ shm in pl. 44, line I is 'every powerful lion', not 'every living lion'.
smn ib $n b k ; h r m s . w$ in pl. 44, line 5 is 'the one who fortifies the heart of the pregnant woman during parturition', not 'the one who comforts the heart of the one giving birth'. ms.w is the substantive 'Gebären' of $W b$. II, 140-1; there is no possibility of interpreting $b k$; $h r m s . w$ as the pseudo-verbal construction.
p．76：h．t $t=$ following $s s=s$ ，＇her son＇，in plate 28 ，line 43 is perhaps an unetymological writing of $\underline{h} . t=s$ ， ＇her womb＇；the remains of the surrounding text are insufficient to permit one to be certain on this point．For other hieroglyphic examples of h．t written h．t，see de Morgan and others，Kom Ombos I ， 323，no．439；II，169，no．754；de Wit，Les Inscriptions du temple d＇Opet，à Karnak I， 19 I（middle）and 199 （right）；Rochemonteix and Chassinat，Edfou I，17，17；Sauneron，Esna iI，16，no．6，14；Esna iII， 131，no．250， $8 ; 328$ ，no． 366,$2 ; 348$ ，no． 377,4 and 6 ．The same writing occurs in demotic．See，for example，P．Harkness，ii，24；iv，4， 30 （bis），and 34 （ $=$ Studies in Honor of George R．Hughes， 152 and 156）．

The concluding essay by Goyon offers an interpretation of Taharqa＇s edifice，according to which the building played an important part in the celebration of the festival of the decade．The evidence for this is marshalled in a convincing manner．Only one or two points call for comment．The view that the edifice was dedicated to Amun $\underline{d} s r-\Gamma$（p．85）is contradicted by a fragmentary inscription on an architrave which records that Taharqa caused the monument to be built＇for his father Re－Harakhty who is on the roof of the temple of the domain of Amun＇（see p． 21 with figure io）．Nor is it correct to say that the inscriptions of the edifice＇reflect the neo－Egyptian stage of the language＇（p．86）．On the contrary，the texts throughout are written in relatively pure Middle Egyptian．${ }^{1}$

In appearance，The Edifice of Taharqa is pleasing and attractive，like other volumes in the series of which it forms a part．The number of printing errors is rather larger than in previous volumes， however．${ }^{2}$ A particular problem occurs in connection with the square brackets which have been used to mark restorations in the translations of the monument＇s inscriptions．These have been inserted very carelessly．The present reviewer has noticed nearly fifty instances in which brackets have been omitted where they should have been employed，employed where they should have been omitted，or simply placed in the wrong position．

The same problem affects pls．31－44 at the back of the book，in which hand copies of texts from Taharqa＇s building are set out alongside parallels from papyri，sarcophagi，private and royal tombs， and other temples．Here，there are a further twenty－five instances in which the square brackets have been omitted or used incorrectly．The hand copies are inaccurate in other respects as well．Some signs have been miscopied，omitted，or added gratuitously；others have been reversed or reproduced in the wrong sequence．${ }^{3}$ As a result，the value of these plates is greatly diminished．One cannot really use

[^172]them without referring at the same time to the plates of the original publications on which they are based.

Much of this review has been devoted to remarks of a critical nature, chiefly concerned with matters of translation and interpretation. Such remarks are not intended to impugn the genuine merits of the translations and commentaries in the volume under consideration. Both of these, particularly the latter, contain much that is praiseworthy. Still, it is fair to say that the chief merit of The Edifice of Taharqa lies in its plates of facsimile drawings. These, rather than anything which has been written about them, impart to the book a lasting worth. Gardiner summed it up well in an earlier number of this fournal: 'Whereas pure scholarship dates rapidly, faithful copies grow in value according as destruction exacts its relentless toll.'1

## M. Smith

Die Darstellungen und Texte des Sanktuars Alexanders des Grossen im Tempel von Luxor. By Mahmud Abd el-Razıq. Deutsches Archäologisches Institut, Abteilung Kairo, Archäologische Veröffentlichungen i6. $350 \times 250 \mathrm{~mm}$. Pp. 62, figs. 4, pls. 16. Verlag Philipp von Zabern, Mainz am Rhein 1984. ISBN 380530045 . Price DM 88.

Walking through the temples of Karnak and Luxor together with a non-Egyptologist one can hardly avoid the question, how much unpublished material still awaits expert treatment. If it is admitted that a great many of the reliefs and inscriptions so far have not yet been edited, the next question usually is what on earth Egyptologists have been doing during the past 150 or so years? Under such provocative circumstances we are, indeed, glad for any addition to our list of qualified editions, and even more so if the quality is that of an editio princeps, as is the case with the Tübingen thesis of Abd el-Raziq presenting a small part of the Temple of Luxor. The section published in this thesis was inserted into the main building at a much later date, a fact which clearly justifies a separate edition.

The end of the fourth century вс, i.e. the beginning of the Macedonian government, sees the nearly simultaneous rebuilding of the sanctuaries of the temples of Karnak and Luxor, and we may suppose that this was in response to a distinct political will. Comparable political motives were 300 years later at the beginning of Roman rule to be the stimulus to a further intensive building activity in the temples of Lower Nubia. As explained on p. 11, scenes of the outer walls of the sanctuary of Alexander were taken from the cycles of 'the daily ritual of the cult statue' and of the 'offering liturgy' beginning with the lowest register of the eastern wall and ending with the highest register of the western wall. In the same way the arrangement of the inscriptions of the lateral end-lines of scenes is in strict adherence to tradition, with stereotype contents and without connection with the adjacent scenes, something which only developed gradually three generations later.

The hieroglyphic spellings do not in the slightest lead us to what we nowadays tend to call Ptolemaic writing. And the same applies to the theological content of the inscriptions in the sanctuary of Alexander as a whole. Anyone comparing these texts, for example, with those of the Euergetes-gate of Karnak-a sort of comparison only scarcely begun within Egyptology - cannot but be surprised at the richness of means of theological expression developing in temple theologies from the reign of Ptolemaios III onwards. Before we can intensify this line of study, we need more of such reliable separate editions as the one reviewed here.

Abd el-Raziq offers a careful description of the whole building and of every scene, without getting lost in details. Every line of inscriptions is given in hieroglyphs and translations. This includes on pp. 56-60 the texts of the room of barks surrounding the sanctuary of Alexander, texts which were restored under his rule. All texts whenever necessary are accompanied by detailed grammatical footnotes. A final section gives indices of titles of scenes, of names of gods, and of their epitheta, something for which readers will be thankful.

As the whole thesis is a thorough piece of work, it is not easy to find minor faults. Page 56 to
to p. 76, pl. 28B, lines 42-3 $\neq$ Davies, The Temple of Hibis III, pl. 31, middle register, line 42, but belongs to a subsequent section of the same text.
${ }^{1} \mathcal{J} E A 28$ (1942), 60 .
the right, third paragraph, line 3 should read 'Amenophis III' instead of 'Alexander', and the reference p. 39 n. 24 , last line remained obscure to me. Note 40 , which should have been on p. 60 instead of on p. 59 refers to p. 38 pl. i I, and p. 55 n .34 should read 'Abschnitt C I c (2)' instead of 'Abschnitt D I c'.

A critical remark is required concerning the pictorial material of the southern wall of the sanctuary. Probably this southern wall could not be photographed properly, because it is built too closely against the wall of the room of barks. Of it, the author remarks on p. 40 that the king in scene E 174 is wearing the crown of Upper Egypt, which does not correspond with pl. I2. The reason is that pl. 12 is the only piece which turned out badly in this otherwise carefully written book. Research suggests the following conclusion: the text of Abd el-Raziq is correct for all descriptions and inscriptions of the southern wall, and as far as can be made out from the material available to the reviewer all differences between them and the drawing of pl. 12 are due to the person who drew the draft of pl. ı2. To make things even more complicated the drawing of pl. 12 in print was printed in reverse. Once this mistake is recognized, the king in scene E 174 does wear the crown of Upper Egypt. The fact is not without importance, because, as Abd el-Raziq stresses correctly, the whole eastern section of the sanctuary is associated with Upper Egypt, while the western half is connected with Lower Egypt.

Plate 16 is excellently drawn, but not easy to join to the text. The upper three lines correspond with p. 4 I right column 'Inschriften (a)-(d)'. The next three lines (of $\mathrm{pl} . \mathrm{I} 6$ ) are from the inner side of the same door (of the sanctuary) and are to be found again on p. 56. The lowest two lines of pl. i6 refer to pp. 4 If . '(c) Die Tür'.

With the exception of this southern door, all scenes and inscriptions can be verified on the plates on excellent photographs, and we can only combine our thanks with those of the author, who in his introduction expresses his gratitude to the Chicago Institute of Luxor for letting him print these photographs. The Zabern-Verlag added to this its editorial technique, resulting in a documentation which will be gladly accepted by scholars. We can only hope for further temple editions of this quality.
E. Winter

Karanis: An Egyptian Town in Roman Times. Edited by Elaine K. Gazda. $215 \times 280 \mathrm{~mm}$. Pp. vi +50 , figs. 75. Kelsey Museum of Archaeology, Ann Arbor, 1983. Price not stated.

Karanis: An Egyptian Town in Roman Times was produced as an exhibit catalogue for a 1983 show of the same name at the Kelsey Museum in Ann Arbor, Michigan. It is a nicely produced, short work with numerous plans and photographs. The catalogue begins with a general discussion of the ancient city of Karanis and its excavation by the University of Michigan in the 1920s, and then focuses on the three main aspects of daily life in Karanis presented by the exhibition: the economic, domestic, and religious life of the community.

The economy of Karanis was based on agriculture, particularly the production of durum wheat, and granaries played a dominant role in the life of the city. Second in importance to grain was the textile industry, the most important craft practised in Karanis. The catalogue section on domestic life centres on the house and its furniture, as well as on objects of daily life. A corpus of daily life objects from Egyptian sites of the Roman period would be enormously helpful, as the authors had to fall back on New Kingdom parallels. Hundreds of multi-storied houses were unearthed, permitting a rather clear reconstruction of the Karanis type of town house. The third section on religious life and the gods, describes the temples, the gods worshipped, and the ceremonies involved. As a town in the Fayum, the crocodile god was, of course, the most important deity in Karanis.

Specific studies on objects from Karanis such as coins, glass, pottery, lamps, and textiles have already appeared. The stated purpose of this exhibit catalogue is to present ancient life at Karanis to the community at large. The catalogue attempts not only to present objects, but to place them in their context in ancient life as well. Most popular works on Roman Egypt are based almost exclusively on written evidence, i.e. deeds, wills, tax lists, bills of sale. Karanis: An Egyptian Town in Roman Times is balanced in favour of the archaeological evidence from the site. The addition of object numbers would have made the catalogue more useful to scholars.

## L. K. Sabbahy

The Grand Procession of Ptolemy Philadelphus. By Ellen E. Rice (Oxford Classical and Philosophical Monographs). $215 \times 135 \mathrm{~mm}$. Pp. viii +225 . Oxford University Press, 1983. ISBN ○ 19814720 I. Price not stated.
This book has grown out of a doctoral thesis supervised by P. M. Fraser. It deals with the selective account of the pompé of Philadelphus by Kallixeinos of Rhodes which is preserved in Athenaeus V ${ }_{197 \mathrm{C}-203 \mathrm{~B}}$ ( $=$ FGrHist 627 F 2). The brief introduction is followed by the text with facing translation. The main part of the book (pp. 26-133) is a kind of commentary, or rather a discussion of the main elements of the procession. Then follows a chapter (pp. 134-79) on Kallixeinos, his date, sources, and style. The Conclusion (pp. 180-92) deals chiefly with the probable date and occasion of the procession. At the end there are three Appendices (I. Text of other fragments of Kallixeinos, II. The double cornucopia, III. Discussion of the Lindian inscription, ILindos 137 , which mentions a Kallixeinos son of Megakles, priest of Athena) and indices. The book is well produced; misprints are very rare. ${ }^{1}$

The text is essentially that of Kaibel's Teubner edition which has also been adopted by Jacoby in FGrHist 627. Occasionally, R. departs from Kaibel's text; she rightly accepts L. Robert's
 in 198b, but rejects Rohde's iepoбтo入ıбтaí in 198e (see p. 61 n . 77), leaving the textual crux

 $\left.\theta_{\eta \sigma a \nu}\right)$ are likely to be correct. The translation is accurate and reads well (one may quarrel with
 certainly more than 6 feet tall).

The main part of the book, however, is curiously frustrating. It suffers from three main weaknesses: (I) What the author herself (p. 180) calls a commentary is, unfortunately, not the line-by-line commentary of the traditional type which one might have hoped for; as R. explains (p.5), 'it is not its purpose to list all the relevant material which might illustrate specific details. It concentrates only on certain points of special historical, mythological, or artistic interest'. This is to be regretted; a conventional commentary would have been more useful, and easier to use than the uneven discussion of selected topics which the author has supplied instead. (2) The author does not seem sufficiently familiar with the archaeological evidence. To give but one example, in her discussion of the statue of Dionysos (198C-D, pp. 59-60) she says nothing about the iconography of Dionysos in the third century bc. ${ }^{2}$ In Hellenistic art, Dionysos-unlike Sarapis!-is represented in extremely divergent ways; the wide range of possible types may be indicated by the West frieze of the Great Altar of Pergamon ${ }^{3}$ which R. refers to on pp. 112-13, and the smaller Telephos frieze; ${ }^{4}$ the relief in the British Museum 2190; ${ }^{5}$ the 'archaizing' relief in Paris, Louvre 968; ${ }^{6}$ the statue from the Thrasyllos monument, British Museum 432;7 or the mosaic in the 'House of the Masks' at Delos. ${ }^{8}$ Yet another type lies behind the terracotta figure Alexandria $9415 .{ }^{9}$ One wonders whether the

[^173]types known from Pompeian wall-paintings ${ }^{1}$ were also represented in early Ptolemaic Egypt. An investigation into the iconography of Dionysos in Ptolemaic Egypt would be interesting and might produce some idea of the type of statue that was carried in the pompé.-(3) Most of the discussion is purely speculative; characteristically, on pp. 56-7 the word 'may' occurs thirteen times, on p. ir 8 alone eight times! It is, of course, often necessary to speculate; but when, as in R.'s book, a possible but hypothetical assumption ('If Eniautos was a Guild member . . '', p. 57) leads to a long chain of equally hypothetical suggestions, the degree of plausibility will diminish with each element of the chain, unless supporting evidence can be found. As a result, most of her discussions remain inconclusive. For instance, her suggestion (p. 37) that Eosphoros (197D) may have been 'holding his torch aloft to symbolize the approaching dawn' is backed by nothing but a reference to $R E$ s.v. Hesperos, 1252-3. Similarly, her discussion of elephants and camels (pp. 91-3) does not lead to any tangible results. On pp. II4-15 she deals with the kitharistai of 201F without reaching any conclusions or developing any arguments to back any one of several possible explanations. Her
 is similarly fruitless, since her reference to $R E$ s.v. Kranz 1599 f. does not prove her point (if the phrase referred to 10,000 gold coins, its value would presumably have been given as 13 talents 2,000 drachmas). On p. 123 we are told that the golden aigis (202D) 'may also be symbolic of Ptolemaic power because of its association with Zeus'-again, no evidence is quoted to support this idea. Pages 156-9, on the quotation of a Kallixeinos by Sopater, preserved in Photios, are inconclusive-it cannot be proved that this K . is identical with the author of $\Pi \epsilon \rho i \dot{A} A \lambda \epsilon \xi \alpha v \delta \rho \epsilon i a s$. Similarly inconclusive is the discussion of the date of Kallixeinos (pp. 164-71). Most of the section on the sources of Kallixeinos is highly speculative-perhaps inevitably so, but what's the point?

A number of statements are questionable or positively unlikely. As 'the most interesting parallel to Nysa' (p. 65), R. quotes the snail of Demetrius of Phaleron; that, however, seems to have had a treadmill inside it, and so would have operated quite differently. The prominence given to wine in the procession reflects, according to R. (p. 69), its importance for the Ptolemaic economy; it seems far more likely that the importance of Dionysos and his cult accounts for it here (wine was produced on a minor scale, mainly for home consumption, and played no role in the Ptolemies' foreign trade). The suggestion (p. 73) that the silver available in Egypt at the time of Philadelphus came 'at least in part from Ptolemy I's share of Alexander's eastern booty' takes no account of either the so-called 'Athenian' tetradrachms of the fourth century, a large proportion of which were struck in Egypt, or the extensive metalworkers' workshops and the plaster casts found in them at Mit Rahine (Memphis). ${ }^{2}$ The suggestion (p. 40) that the omission of Arsinoe I 'may perhaps even be explained as the result of a later, otherwise unattested damnatio memoriae' is absurd. Much is made
 no more than a way to avoid the awkward phrase $\dot{\eta} \tau \hat{\omega} \nu \tau \hat{\omega} \nu \beta a \sigma \iota \lambda \epsilon \in \omega \nu$ रov $\epsilon \omega \nu \pi o \mu \pi \eta$. The idea (p. 173) that roa申aí (197D) may be illustrations in papyrus rolls which Kallixeinos (who was probably not an eyewitness of the procession) used is extremely unlikely; most of the surviving illustrations in Greek papyri are of much later date; R. does not support her idea by any factual arguments but merely adds speculative considerations of the 'may have been available' or 'must have existed' type. The discussion of Egyptian processions appears irrelevant in the light of the author's plausible conclusion (p. 181) that the Grand Procession was 'wholly Greek in iconography and religious significance'. The statement on the double cornucopia (dikeras, Appendix II, p. 208) that 'the earliest archaeological evidence for this symbolism at a mature stage of development may be seen in the coins of Philopator' seems questionable in the light of the well-known pair of bronze statuettes of Philadelphus and Arsinoe II in London, ${ }^{3}$ of the coins of the deified Arsinoe II, such as the gold octadrachms Alexandria 25022 and $25303,{ }^{4}$ and the oinochoai of the same queen. ${ }^{5}$ In discussing the statue of areté (201D), R. rightly stresses (p. I Io) that the rendering 'virtue' is too narrow, but fails to come up with any plausible suggestions as to what the areté of the Ptolemies was meant to be. The wreath of golden olive leaves, by the way, was pretty certainly not on her head but in her hand

[^174]( $\epsilon i \bar{\chi} \epsilon \nu$ ); if so, she must have been handing it to the king-the Nike of Paionios at Olympia may give a good idea of the type of statue, and the gesture. In general, Kephisodotos' Eirene may be regarded as an illustration of this kind of allegorical statue.

As regards the occasion of the Grand Procession, commonly believed to have been a celebration (perhaps the first) of the Ptolemaieia, the author's only objection (p. 185) to this identification is the apparent lack of emphasis on Soter in the account of Kallixeinos, even though she admits that 'the references in the text to the deified king are indeed clear but hardly sufficient', etc.; she calls the arguments in support of the identification 'subjective' but her objection to it is clearly no less subjective. It is meaningless to say (p. 186) that 'the burden of proof must still lie with those who maintain that the description . . . did not concern (Soter) . . . to any significant or identifiable extent' in a matter where positive 'proof' is not possible on the existing evidence. The Ptolemaieia, even though founded in honour of Ptolemy I Soter, were obviously designed to enhance the prestige of the dynasty and not just that of its founder; the two objectives would in any case have been perfectly compatible. If the glorification of the dynasty was the principal aim, R.'s objection to linking the pompe to the Ptolemaieia loses much of its weight. Positively speaking, there is still much to be said for the identification: The Ptolemaieia were inaugurated in $279 / 8 \mathrm{Bc} ;{ }^{1}$ the absence of any references in Kallixeinos' account to Arsinoe II suggests, as R. rightly stresses, a date in the early 270 (prior to $c .276$ ); the $\pi \epsilon \theta \theta \epsilon \tau \eta \rho^{\prime} i^{\prime}$ attested by P. Ryl. IV, 562 (a letter to Zenon dated 16 August 251, informing him of provisions for cavalrymen who were going to Alexandria to take part) will have fallen in $25 \mathrm{I} / 250$, a year compatible with a penteteric cycle beginning in 279/278 ${ }^{2}$-it would be a very strange coincidence if the penteteris of P. Ryl. 562 were NOT identical with the Ptolemaieia held at Alexandria in the same year! This suggests that the penteterides referred to in the documents ${ }^{3}$ were in fact the great festival officially called 'Ptolemaieia', of which the pompé (which included a statue of Penteteris, 1988) formed part.

In conclusion, it must be said that R.'s book is of very limited use. The Greek text is good, the translation is welcome, her remarks about Kallixeinos' style and his place in Alexandrian literature (pp. 176-9) are probably the best pages in her book. But the commentary is, to a large extent, a wasted opportunity, and a waste of the reader's time.

## H. Maehler

OIKIA. Le Vocabulaire de la maison privée en Egypte d'après les papyrus grecs. By Geneviève Husson. Pp. 343. Publications de la Sorbonne, Série 'Papyrologie' 2. Paris, 1983. ISBN 285944063 I. Price not stated.

Mme Husson's articles on various topics concerned with houses and buildings have long been known to, and much appreciated by, papyrologists and others interested in the social and economic history of Graeco-Roman Egypt. It is a pleasure to welcome the appearance of her book on this subject, which is sure to remain a standard work of reference for a long time to come.

The subtitle is important in indicating what and what not to expect from the book. It is not a study of houses along the lines of Luckhard's work or that of Nowicka; it is instead a detailed examination of the terms used to describe houses or part of houses in the Greek papyri, and the greater portion of the book (pp. 27-299) may be described as a lexicon of these terms. As the subtitle also indicates, Husson is concerned only with 'la maison privée'; public buildings are not considered (e.g. baths are only studied in the few papyri where they belong to private houses). Essentially the study is based on Greek papyri, but Husson takes account wherever possible of other relevant evidence, notably that of archaeology, of literary sources and inscriptions, of Egyptian, Coptic, and Arabic documents, of the Greek world outside Egypt, and of the information to be deduced from present-day Egyptian buildings. The book is illustrated throughout by photographs and drawings (though more would have been welcome). Husson's work is admirably thorough, clearly expressed, and sensibly argued. It is particularly helpful to have the difficult technical passages translated. Husson is able to solve a number of problems and advance our understanding in various ways-in several places she corrects entries in $L S \mathcal{F}$; but she is never afraid to admit that often we simply do not know the answers, e.g.

[^175]
 of special interest, which do not always lead to the expected conclusions, are to be found under $\dot{a} \eta \dot{\rho}$ (where Husson's conclusions are slightly modified in the interesting paper presented to the Athens Congress by J. Joel Farber), $\delta \hat{\omega} \mu a$, кє́ $\bar{\lambda} \lambda a, \pi v \lambda \dot{\omega} \nu$, $\sigma v \mu \pi o ́ \sigma \iota o v, \phi \omega \sigma \phi o \rho i ́ a, ~ a n d ~ \dot{\varphi} \kappa о \delta o \mu \eta \mu \epsilon ́ v \eta$ (pp. 193-4), and on the subject of houses in a dilapidated state (pp. 199-204).

After the 'vocabulaire' Husson has added a detailed examination of seven houses which occur in the papyri (pp. 300-20). Note especially the study of the house of Apollonios, strategos of the Apollonopolite Heptakomia, and of the drawing preserved in P. Oxy. 2406. It is instructive to compare Husson's views on this with those recently published by H. Maehler in 'Häuser und ihre Bewohner im Fayum in der Kaiserzeit', Das römisch-byzantinische Ägypten = AegTrev II (1983), 136-7 (the whole of this article, pp. 119-37, must now be added to Husson's bibliography). Both Husson and Maehler find great difficulty over the word $\dot{\alpha} \tau \rho \epsilon \hat{i} \nu$, since a Roman atrium seems impossible. Maehler suggests it is a blunder for aî $\theta \rho o v$.

The strictly alphabetical arrangement has often to be rejected in favour of a more logical approach (e.g. $\mu \epsilon \sigma a v ́ \lambda \eta$ is discussed under aù $\lambda \dot{\eta}$ and $\delta о к о i ́$ under $\xi u ́ \lambda o \nu$ ); any difficulty this might have caused is easily removed by consulting the Index of Greek words on pp. 321-4. This is one of four indexes, which are mostly admirably comprehensive. However, Index 3, 'Index des textes corrigés' is much too modest. I have noted many more places in the book where Husson offers attractive improvements to texts: SPP XX 74 (p. 61), P. Oxy. 489 (p. 72 n. r), P. Oxy. r699 (p. 97), P. Mich. 620 (p. 138), O. Strass. 793 (p. 141 n. 1), SB 9448 and SPP XX 3 I (p. ı6o n. 5), P. Tebt. 793 (p. 176 n. 2), P. Cair. Masp. 67058 (p. 182 n. 2), P. Ross. Georg. III 38 (p. 188 n. 3), and SB 10728 (p. 198). Husson has often verified her suggestions on the originals or on photographs, but one feels that she might have attempted to do this more often, e.g. with P. Lond. 1715 (p. 103) and SPP X 219 (p. 145 n. 4).
J. David Thomas

Festschrift zum Ioo-jährigen Bestehen der Papyrussammlung der Österreichischen NationalbibliothekPapyrus Erzherzog Rainer (P. Rainer Cent.). $33.4 \times 24.2 \mathrm{~cm} .2$ vols. Pp. xxiv +5 18; Pp. vi + Tafeln $129+\mathrm{i}+$ microfiche. Wien. In Kommission bei Verlag Brüder Hollinek, 1983. ISBN 3851191978. Price DM 290.
In 1983 the Papyrus collection of the Austrian National Library achieved its Centenary. The Library published for the occasion two handsome memorial volumes of studies, texts, and plates. The collection still bears the name of the Archduke Rainer, the Emperor Franz Joseph's cousin, who sponsored the purchase of Graeco-Egyptian antiquities by Joseph Karabacek and Karl Wessely from the Viennese merchant Theodor Graf. Graf aquired papyri mainly in the Fayum and in Middle Egypt. The collection was housed in the Imperial Palace adjacent to the Imperial Library. Eventually, on 18 August 1899, the Archduke, perhaps finding the maintenance of his collection an increasing expense, presented it to his cousin the Emperor as a birthday present. Since then, its maintenance and publication have been a state responsibility. The range of material is extraordinary and this is reflected by the variety of languages included in these manuscripts. The early date of the Archduke Rainer's acquisitions is before the time of systematic scientific excavation for papyri. Most of the papyri probably derive from the sporadic activities of sebakhin searching ancient mounds for fertile earth to use as fertilizer. Their finds were acquired by Theodor Graf. Since much of their digging was in the surface levels, late Greek, Roman, Byzantine, Coptic, and Arabic papyri predominate in the collection.

The first section is devoted to studies on the history of the collection. Helene Loebenstein discusses the administrative history and persons connected with the collection, while Eve Reymond surveys the different genres of Demotic literary works which it contains. A signal service is rendered by Hermann Harrauer and Klaas Worp, who give a clear explanation of the complex succession of inventory numbers which Wessely applied to different parts of the Greek collections. It has long been a matter of difficulty to identify the same piece under its various metamorphoses. Tito Orlandi gives a similar exposition of the inventory of Coptic literary texts.

The manuscript tradition of the 'Shepherd of Hermas' and the unity of composition of the work is discussed by A. Carlini. The author could not take into account the texts of Oxyrhynchus Papyri L

3526-8, which appeared in the same year. P.Oxy. 3527 of the third century aD contains a number of unique readings, while 3528 proves that in Egypt, at any rate, the Similitudes circulated independently of the Visions and the Mandates.

The progress of work on newly acquired carbonized Greek papyri of the early third century AD in Cologne and Vienna is described by Dieter Hagedorn. These promise to yield information from the bureau of the strategos of Bubastis in the Delta. The new details of the administration will be particularly welcome, as nearly all our contemporary evidence comes from Upper Egypt alone.
R. G. Khoury shows the connections of some Viennese literary and exegetic Arabic papyri with those in the Chester Beatty Library in Dublin. The paper by P. W. Pestman on 'the Official Archive of the Village Scribes of Kerkeosiris' usefully complements J. G. Keenan's and J. C. Shelton's introduction to P. Tebtynis IV and Dorothy J. Crawford's Kerkeosiris (Cambridge, 1971), discussing the relatives of Menches the village scribe. Richard Seider provides a careful palaeographical analysis of the earliest Latin papyri in the Vienna collection, taking issue with some of the conclusions of J.-O. Tjäder. It is a pity that he could not discuss the Latin document from Qaṣr Ibrîm found by the EES in 1978 and published by P. J. Parsons as 164 in this present volume. It is highly relevant to his investigation. In a posthumous paper Sir Eric Turner shows that the Ptolemaic edict BGU VI 12 II should be redated before $215 / 14 \mathrm{BC}$ and is written across the fibres 'transversa charta'.

The second section (pp. 153-498) is devoted to the edition or re-edition of texts in Egyptian, Persian, Hebrew, Greek, and Latin, being mainly items in the Vienna collection. This is greatly enhanced by the provision in the second volume of fascimile size plates of every item, which makes this an important reference work for palaeographical dating and parallels.
K. Th. Zauzich publishes as 3 newly joined fragments of the Demotic prophecy of the Ram of Bocchoris (P. Vindob. D ıо०००), and E. Bresciani discusses a Demotic document (4) from Dime of ad 76 on the duties of a temple scribe. Among the Coptica K. H. Kuhn publishes two new homilies of Shenoute (8-9), the latter on keeping the Lenten fast.

As item 13 Dieter Weber edits a series of Persian papyri from the third Persian domination of Egypt by Chosroes II between ad 619 and 629 . Of particular importance among these are 13-28, written across a vellum leaf of the Greek text of St Paul's 2 Corinthians (Van Haelst 5 15) in a biblical uncial, which provides a terminus ante quem for the Greek script, and 13-29 written across a Coptic vellum text of the 2nd Epistle of Peter supplying similar firm dating evidence for the Coptic. In 14-17 N. Allony publishes Hebrew grammatical and exegetic texts from the Cairo Geniza.

The greater part of the volumes, items 20-162, is concerned with Greek literary texts and documents. L. Koenen edits as 21 a codex fragment of Demosthenes' 2nd Philippic in Michigan (inv. 1359) of the third-fourth century ad, which H. Harrauer observed while the volume was in proof joins directly to P. Köln IV 183 just published. Item 30, identified by Jean Lenaerts, is the second papyrus of Eusebius' Ecclesiastical History to appear. It is a papyrus codex of the sixth-seventh century in a Coptic uncial hand. The bottoms of two bifolia survive, which were written in twin columns. The $\zeta$ in the outer left-hand bottom margin of p .3 cannot be a quire signature, as it is not on the outer page of the quire, but may possibly stand for $\zeta(\dot{\eta} \tau \epsilon \epsilon)$, for which see E. G. Turner, Greek Manuscripts of the Ancient World ${ }^{2}$ (London, 1987), 66.

The text of 31, which J. B. Bauer edits as 'Vienna liturgical papyri' of the fifth-sixth century, has subsequently been observed by W. Brashear to overlap the content of P. Louvre E.658ı and P. Berol. 21292. Brashear re-edits these texts as a 'Byzantine Christian Hymn', in ZPE 59 (1985), 91-106. J. Gascou and K. A. Worp re-examine and reread 35, an 'Invocation to Christ, Mary and all Saints', in ZPE 57 (1984), 105-10. They redate it to the seventh rather than the sixth century and show by comparison with SB I 4483 that this Notarial Invocation is not prior to the reign of Phocas (AD 602-IO).

As item 39 R. Daniel re-edits P. Vindob G. 330, the 'Testament of Solomon' XVIII, originally published by K. Preisendanz, and adds two additional fragments. He shows that the longer version preserved in this fifth- to sixth-century papyrus is prior to the short version in the medieval manuscripts. Its format is interesting, for it is written across the fibres in the form of a rotulus analogous to that of the 'Will of Abraham, Bishop of Hermonthis' (P. Lond. I 77). Noteworthy is the use of $\rho \hat{\eta} \xi=$ rex in addressing Solomon. This vocative had become transformed into the unintelligible $\dot{\rho} \dot{\xi} \xi$ or $\rho 0 u \not \xi$ in the medieval manuscript. In this chapter the Decans tell Solomon what ills they cause and by what means they may be averted.

Among the documents, 50-6, 'Petitions to Apollonius, syngenes and strategus', published by G. Bastianini from cartonnage of the late first century BC, confirm the existence of the nome of Pthemphouth in the central Delta as an administrative unit in the Ptolemaic period. D. Hagedorn corrects the interpretation and reading of 57 in ZPE 53 (1983), 235, showing that this official document of ad 49 from Sacnopaeou Nesos is to do with the $\mu \circ \subset \chi \circ \subset \phi \rho a \gamma i c \tau a i$ (sealers of calves). Item 59, a 'Census return' from Memphis in ad 6o, published by Jean Bingen, is made by a 14-year-old boy. The editor shows that it belongs with P. Lond. III 905, a return made by the boy's father on the same day. A series of letters from Hermopolis, now in Berlin, is edited by Herwig Maehler as $\mathbf{7 0 - 8 1}$. They illustrate the development of epistolatory style from the third to the sixth century ad. An improved reading of 79 is given by D. Hagedorn, art. cit. 236-7.
J. D. Thomas shows that 83, 'Copies of receipts issued to Tax collectors' (Hermopolis, AD 311 ), comes from the same roll and is in the same hand as P. Cairo Preis. 34. Together they provide evidence for the organization of water transport. As item 122 R. S. Bagnall publishes P. Yale inv. 1648, a 'Nomination of a goldsmith to collect taxes' from Oxyrhynchus of AD 429. By coincidence a parallel text, also from Oxyrhynchus, was published by G. Casanova in Aegyptus, 62 (1982), 65-8 at almost the same time. As a result, Bagnall re-edits both pieces with K. A. Worp in ZPE 59 (1985), 67-70, giving improved readings.
P. J. Sijpesteijn publishes 125, a 'Notice of the rising of the Nile' of the sixth century ad from Memphis, which is closely paralleled by P. Oxy. XVI, 1830 , analysed by D. Bonneau, Le Fisc et le Nil (Paris, 1971), 40-2. The chancery style in the Arsinoite nome in the seventh century ad, as exemplified by the practice of Justus the symbolaiographus is discussed by J. M. Diethart in connection with 127-31. W. Brashear in ZPE 56 (1984), 61-3 shows that 159 (Hermopolite nome, sixth-seventh century AD) is to be interpreted as a 'Monastic census' similar to SPP XX 259. As 161 J. R. Rea re-publishes with additional fragments CPR V 22, originally edited by himself. It provides the new word $\delta u \psi \dot{\epsilon} \lambda \lambda \iota o \nu-a$ 'double armlet'.

In the final section (pp. 466-98) four Latin papyri are discussed. Their relative rarity makes them important for linguistic, phonetic, and palaeographical purposes. Jerzy Axer provides as $\mathbf{1 6 3}$ a revised edition of the bilingual word for word, Latin-Greek, double twin-column codex of Cicero, 'In Catalinam' I (Pack ${ }^{2}$ 2922), originally published by H. Gerstinger in 1937. A number of such bilingual texts of Cicero and Virgil of the fourth-sixth century ad survive from Egypt, where they were used for teaching Latin to Greek speakers. There was an increasing demand for Latin in the administration of the later empire. The juxtaposition of the Latin with a Greek text, which is much easier to date, gives a control in dating the Latin script. A further example of such a glossed Virgil text not in the editor's list is P. Oxy. L 3553, a fifth-century vellum text of Aeneid, i.

Item 164 referred to above is a Latin letter from Valerius found in the EES excavations at Qaṣr Ibrîm on 21 March 1978. It was in the same deposit as the Gallus epigrams published in $\mathcal{Y} R S 69$ (1979), 125-54. P. J. Parsons shows that the date of this text must be inferred from the archaeological context, which is not stratified. Everything must be later than $25 / 24 \mathrm{BC}$, when the Romans occupied the site. A Greek letter dated 22/2I BC was found in the same area, and hence $\mathbf{1 6 4}$ should belong to the last quarter of the first century bс. This letter is addressed to a centurion, presumably at Qaṣr Ibrîm, and so was written elsewhere. The left-hand side has suffered severe abrasion. The editor gives a detailed analysis of the hand, written with a broad nib at a stage when literary capital and capital cursive are still close. A discovery of considerable interest is that the valedictory formula in lines 15-16 ual[ | sa]luom cupimu[s antedates the Greek formula $\epsilon^{\epsilon} \rho \rho \hat{\omega} с \theta a i ́ c \epsilon \epsilon \ddot{\prime} \chi о \mu a \iota$ by a hundred years, and thus the Greek represents a borrowing from the Latin.

Item 165 is a copy of a 'Letter of discharge of Veterans' of AD 40 I . Its editor, H. Hunger, observed its connection with a military dossier published by J. R. Rea as CPR V 13 in 1976, but Rea has noted in ZPE 56 (1984), 79-88 that the documents join physically. They supply copies of three letters, each from a different comes et dux Aegypti to three different prefects of the camp at Psoft(h)is. They deal with the promotion of Sarapion from (eques) to cataphractarius, then to decurio and his eventual discharge after eighteen years service, suffering from colic. The site of Psoftis is almost certainly to be identified, as Rea states in CPR V 13 , 3 n, with the Sosteos (Notitia Dignitatum-Comes limitis Aegypti. Or. XXVIII. 33), where the Ala secunda Assyriorum was stationed, but whose location has not yet been securely determined. Professor J. C. Mann points out to me that col. iii ( $=\mathbf{1 6 5}$ ) is presumably a copy of the type of epistula specified in Theodosian Code VII 20.4.I (7 June ad 325)
'Veteranos autem post emeritae missionis epistulas tam suum quam uxoris caput excusare sancimus'. It is the first example to survive.

Item 166, a 'Document of Sale' of the sixth-seventh century ad from Ravenna, survived the Middle Ages in Europe, being edited as P. Marini 24 in 1805, when it was in Padua. It was rediscovered in the store of the Egyptian and Oriental department of the Kunst-historisches Museum in Vienna in 1980. J. Frösén provides a corrected transcription with an updated commentary.
These are two splendid volumes, which do great credit to the Austrian National Library. The general editors of the volume deserve specific acknowledgement.
W. E. H. Cockle

Dictionnaire étymologique de la langue copte. Par Werner Vycichl. $280 \times 210 \mathrm{~mm}$. Pp. xxviii +52 I . Leuven, Peeters, 1983. ISBN 280170197 I. Price FB 5.000.
This important new work opens with a Preface by Professor R. Kasser who, as is well known, is himself preparing a new Coptic Dictionary. Professor Vycichl has been permitted to consult the documentation assembled for this purpose at Geneva, but Professor Kasser emphasizes that, apart from this, the book under review is the product of the author's own labours over the last fifty years in the field of Hamito-Semitic studies. He goes on to offer a brief characterization of the volume and, in so doing, compares it with the etymological dictionaries by Černý (1976) and Westendorf (1977), underlining Vycichl's extensive knowledge of a great number of languages, both African and Semitic, and his originality in presenting new etymologies, and suggesting that his approach is the very reverse of a pedantic and uncritical compilation of others' suggestions. This very acute summing up of the book is borne out by a study of it.

In his own Introduction, Professor Vycichl explains the general arrangement of the volume. Although we are told that the Dictionnaire is confined to the indigenous vocabulary derived from Egyptian, this is actually not so. In the body of the book there are numerous entries devoted to Greek words, but these seem to have been selected at random. They are neither confined to Greek loan-words adopted in the pre-Coptic period, nor are they limited to Greek words which acquired a special meaning when used in Coptic. There follow a number of brief discussions of, for example, the place of Egyptian within the Hamito-Semitic languages and a list of the Coptic dialects, which is based on Professor Kasser's fundamental work on the subject. The Bibliography which concludes the introduction indicates the wide and varied interests of the author; it includes general and historical works.

The body of the book offers much more than one would expect to find in an etymological dictionary. Many entries assume the form of short essays. The author allows himself the indulgence of giving substantial quotations from other scholars' works. The whole style is noticeably pedagogic, and basic and background information is frequently offered which the student might better seek elsewhere. When an etymology previously proposed is rejected, the author very often argues his case in considerable detail. His linguistic competence in a great number of languages is truly impressive, and a special feature of the book is the many references to the African languages which he has mastered as well as Egyptian and the Semitic family of languages. The author has a particular preoccupation with questions of word-formation and phonetic structure. This, of course, embraces the problematic subject of the vocalization of Egyptian. In addition to the use of conventional scholarly transliterations, in the vast majority of entries the author cites hypothetical or reconstructed forms which are vocalized: these are marked by symbols, and the procedure is discussed on $p . x$ (the author is proud of following in this 'une système cohérent': there is also a glossary of 'terminologie phonétique' on pp. xxvii-viii). Non-specialist readers will no doubt be well enough aware that these are not matters about which scholars have reached general agreement. It is not surprising to see that, apart from the publications of Vycichl's obvious predecessors in the fields of lexicography and etymology, there are frequent references to the works of Vergote, and, to a lesser extent, to those of Edel (each of these two scholars has interests and approaches which are shared by Vycichl); Fecht's Wortakzent receives several mentions, and Osing's Nominalbildung appears many times-the reader will quickly notice that this last work is never cited except in order for its suggestions to be castigated. The author tests every Egyptian etymology against the yardstick of his own views of the history of Egyptian
word-structure: the merits of his arguments will have to be judged in each individual case, but his reluctance to accept tempting etymologies without subjecting them to critical philological examination must command admiration, and his opinion can never be lightly ignored.

Scattered through the Dictionnaire, some fifty entries (which cannot well be listed or summarized here) contain points relevant to historical grammar, on which Vycichl holds firm opinions, a few of which are markedly at variance with present-day orthodoxy. Nowhere is this more striking than in the case of the development of the Egyptian suffix conjugation. Vycichl has his own ideas on features of gemination, the prothetic yod, and 'emphatic forms', ideas perhaps chiefly stemming from considerations of comparative grammar. To avoid misunderstanding, it is well to bear in mind that he is often not greatly concerned with the use or meaning of verbal forms, but is addressing himself strictly to their structure and history. It may be noted that the standard Late Egyptian Second Tense $i-i r=f s d m$ for Vycichl is not 'emphatic' in form (that is, in origin), but is merely a writing of the periphrastic past tense $i r=f s d m$; for him it is the origin of the Coptic First Perfect tense (see, for example, 1-2). He takes little account of recent (more recent, that is, in many cases, than Polotsky's Études de syntaxe copte of 1944) work on the Egyptian verbal system, in which the study of syntax has played the largest part, and this makes his comments difficult to read as a contribution to current debate. In the case of the Egyptian Second Tenses, there is, of course, still room for the odd protest against the growing consensus, but it is a little distressing to see that Vycichl is apparently quite unaware-or perhaps indifferent-that the suffix-conjugation form int $f f$ would now universally be explained as a Prospective form: yet surely few more indisputably correct suggestions can ever have been made (see 64 s.v. EIHNTG and EINE).

But the Dictionnaire does not contain linguistic material only. There are entries on Egyptian gods, e.g. AMOYN (IO-II), ANOYП (13), BHC (3I), and HCE (55); information on wine-making (55) and beer-brewing (305); and even a recipe for the making of a cake (351). There is an interesting entry on Remoboth ( $173^{-4}$ ), the term which Jerome used to describe a certain category of monks. A fascinating entry under M -(103) deals with the phonetic principles underlying various magical turns of phrase (although the ground had already been covered by Vycichl's articles on the 'Aleph-Beth-Regel', and his conclusion that $m$ - is in origin negative is not totally compelling). The Dictionnaire also includes many references to Coptic personal names and place-names. As can be seen from these few examples, the fare is rich but, by touching on so many subjects, the author lays himself open to criticism: his selection appears arbitrary and the whole book, it must be said, is highly idiosyncratic. In some ways, of course, this adds to its interest and to its charm. The volume is furnished with a series of indexes, which includes an Index of French words, and a full Coptic Index, arranged in strict 'alphabetical' order, whereas the body of the dictionary is organized in the normal manner. Users should not overlook the 'Notes Additionnelles' (516-19)-and a single loose sheet of 'Addenda et Corrigenda' is distributed with the volume.

In covering so vast a field the author cannot be a master of every subject and every specialized topic. He relies to a considerable extent upon the available dictionaries and reference works for information. The impressive apparatus of hieroglyphic copies, transliterations, and translations at the start of most entries is generally dependent upon the Berlin Wörterbuch and Erichsen's Glossar, and hence is something of a luxury. Although the author is, of course, sufficiently aware of the problems posed by our conventional scholarly transliterations of Egyptian, he does not always adopt a sufficiently critical attitude towards transliterations of Demotic. The reader will not expect to find in the Dictionnaire the fruits of wide independent reading of Egyptian-or indeed Coptic-texts or of detailed study of aspects of Egyptian history and culture. The bibliography cited in these areas is naturally highly selective, but the selection made is sometimes strange, and often, frankly, out of date.

Many points of detail could, of course, be selected for discussion or criticism. Here are a few. Attention has already been drawn to the inclusion in the Dictionnaire of some Greek loan-words. This comprises uncommon words, as e.g. ג入גZגMスPN (8), and common words, as e.g. ג€ (35-6). Occasionally there are also discussions of the etymological origin of Greek words, as e.g. длдвдстрос (8) and ківфтос (72). The entry on $\boldsymbol{\lambda \epsilon}$ is perhaps somewhat misleading. The statement (35) that 'cette conjonction . . . marque les textes traduits du grec ou rédigés dans un style grécisant' cannot possibly be maintained. It occurs, for instance, frequently in the works of Shenoute and Besa, as can be seen from the indexes of Greek words in the CSCO editions of these works. The
etymology given for $\boldsymbol{\text { IIMHN (98) 'portrait' }}$ is very doubtful, see the recent article by G. Godron in $B S A C 25$ (1983), 1-52.

The explanation offered (II3) for the expression MMIN MMO =, for which no satisfactory derivation has yet been found, is unconvincing. The phrase MMINE MMO= ‘à [sa] propre manière' which Vycichl conjectures does not ring true, and he fails to do justice to the most common spelling of the expression in all the main Coptic dialects. The entry on TKOYP (213) should be deleted and replaced by an entry on TPOYP. Although Vycichl is aware that the existence of TKOYP has been doubted, he has obviously not checked the reading on the plate in E. M. Husselman's edition of The Gospel of Yohn in Fayumic Coptic. The attestation of TPOYP has recently been discussed by H.-M. Schenke, Das Matthäus-Evangelium im mittelägyptischen Dialekt des Koptischen (Codex Scheide), 45. In the entry on 61 N - (341) we are told that nouns formed with this prefix are masc. in Sahidic and fem. in Bohairic with certain exceptions, whereas in fact $\boldsymbol{\sigma} \mathbf{I N}$ - is fem. in S.A.A. ${ }_{2}$.F., while the Bohairic form is mostly masc., see Till, Koptische Dialektgrammatik, section 93. A very tentative etymology may be suggested for cyailoy (261): could it possibly be connected
 field of this Hebrew word is wéll' summarized̉ in Kittel, Theologisches Wörterbuch zum Neuen Testament, 1, 414.)
Occasionally, incorrect or unsatisfactory references to texts are given. For example, in the entry on $\boldsymbol{\epsilon} \boldsymbol{P}$ (45) something has gone radically wrong in the section on dialect forms. The Bohairic version of the Gospel of John is contained in Pap. Bodmer III (not XVIII). Although this version of the Gospel is referred to, and indeed contains the word, no examples of its attestation are given (for the evidence,
see CSCO 177, p. xi). Pap. Bodmer XVIII contains Deuteronomy, but in Sahidic. Finally, the examples quoted from the Gospel of John are actually in Subachmimic (not Sahidic); they are misspelt by Vycichl. The title of the book from which they are taken is wrongly given: it should be The Gospel of St fohn (p. xix). In the entry on $\boldsymbol{\lambda \in 2 H T}$ (ioz) the reference should be to the Gospel of Philip, not the Gospel of Thomas. In the entry on Tpiфıоץ (22I) we are told that this place-name occurs in one of Besa's letters. This information is taken from Amélineau, Géographie, 529, who in turn derived it from Zoega, No. CCXXXII, but the text has long since been edited by Leipoldt in his edition of the works of Shenoute (CSCO 73, p. 120, line 15), see also Muséon 66 (1953), 243. In the entry on $620 \mathbf{C}$ (350) we find a reference to ShBMOr88ı, no doubt taken from Crum's Dictionary, but once more the text has long since been edited among the works of Besa (CSCO 157, p. 83, line 12). The word in question occurs in a citation of Prov. 6: 5, as was indicated by Crum.

More cross-references would have been helpful to the user of the Dictionnaire. For instance, between rаqкач (35) and бавбав (336), and from хамн (326) to бахмн (351). In some cases, no effort has been made to co-ordinate the information given under related entries, for example $\mathbf{~} \mathbf{C} \boldsymbol{O} \mathbf{O} \mathbf{I}$ and $\mathbf{C T}$ - (17, 193; although here a cross-reference is provided from the latter, but not from the former). Not infrequently, the same basic information is given more than once, where cross-references would have sufficed. Sometimes there is a lack of organization even within a single entry, and some discussions leave the reader unsure which, if any, of the possibilities mentioned is favoured by the author.

There is an unpleasing number of printing errors in the book, which is hardly surprising, for its production, involving the use of complicated transliterations and so many Oriental scripts, must have posed many problems. The labour of proof-reading a volume of over 500 pages will have been unenviable: occasionally, for example, one hieroglyphic sign is found in place of another-errors that could be the consequence only of fatigue or enforced haste. It must also be said, however, that the author has not been overscrupulous in checking the minutiae of bibliographic details or references. Our purpose is not to compile a long list of such errors, but the baffled user may perhaps be saved some time by the few examples that follow: page xi(a): in section 4 the reference should be to W. H. Worrell, 'Notice of a Second-Century Text in Coptic Letters'. Page xvi(a): the first entry under Griffith should read: Griffith, F. Ll., Catalogue of the Demotic Papyri in the $\mathfrak{F}$ ohn Rylands Library. . . . In the entry on kace (88), the reference to Junker's work should be to Band 231, Abh. i (1957) in the series as given. Under $\boldsymbol{\lambda \theta \omega}$ M (4), the well-known Maidum/Moithymis is meant at the end of the entry, and it is presumably only a slip which places it near Luxor rather than Memphis; similarly, the geographical information given under maeYp (158) is confused, and again it is merely the well-known Gebelein/Pathyris south of Thebes which is in question. There are three misplaced
entries, each interrupting another entry: p. 155b, OKG; p. 171a, PO 'toron'; p. 266b, cyant=. It is irritating to see the name Steindorff spelt wrongly more often than correctly.

In spite of such blemishes the Dictionnaire is well worth studying. It will stimulate new discussions on many points, and it testifies to the truly encyclopaedic knowledge of its author, and his rigorous approach to lexicographic problems.
K. H. Kuhn and W. J. Tait

Nag Hammadi Codices: Greek and Coptic Papyri from the Cartonnage of the Covers. By †J. W. B. Barns, G. M. Browne, and J. C. Shelton. The Coptic Gnostic Library; edited with English Translations, Introduction, and Notes, published under the auspices of the Institute for Antiquity and Christianity. Nag Hammadi Studies; edited by Martin Krause, James M. Robinson, [and] Frederik Wisse 16. $245 \times 165 \mathrm{~mm}$. Pp. xix + ı62. Leiden, E. J. Brill, i98ı. ISBN 9004062777. Price Gld. 69.

This volume provides a full scholarly edition of the inscribed papyrus fragments discovered forming the stiffening or padding of some of the leather covers-the bindings-of most of the famous Nag Hammadi Codices (the decision to call this 'cartonnage' is a curious one, as English-speaking papyrologists normally reserve the term for papyrus extracted from mummy casings). Some codices now lack their bindings, and some of the surviving covers yielded no fragments, or only uninscribed scraps. No doubt all the codices originally contained cartonnage, and it is uncertain at what periods, ancient or modern, some of it was removed. Varying quantities of material from eight of the thirteen codices are represented here. The book has no plates: the fragments are exhaustively illustrated in excellent photographic plates in the corresponding volume of The Facsimile Edition of the Nag Hammadi Codices, Cartonnage (Leiden, 1979).

The literature devoted to the Nag Hammadi texts is now vast (see D. M. Scholer, Nag Hammadi Bibliography, 1948-69 (Leiden, 1971); there are annual supplements in Novum Testamentum, and vol. 28 (i986), 357 promises the publication of a Nag Hammadi Bibliography 1970-1985). The bibliography relevant to the bindings and to the cartonnage is duly provided, either in the volume under review, or in The Facsimile Edition Cartonnage volume, which has a substantial Preface, the English version of which is signed by James M. Robinson. It may now be pointed out that the final volume of The Facsimile Edition, Introduction has been published (Leiden, 1984), and this includes a chapter on 'The Covers' (pp. $7 \mathrm{I}-86$ ); also, the article mentioned by J. C. Shelton on p. i, n. i has now appeared: J. M. Robinson, 'From Cliff to Cairo, the Story of the Discoverers and the Middlemen of the Nag Hammadi Codices', Colloque international sur les textes de Nag Hammadi, ed. B. Barc (Quebec/Louvain, 198i), pp. 21-58.

The late Revd Professor J. W. B. Barns, apart from his other accomplishments, was an established editor of Greek documentary papyri, and a Coptic scholar with an unusually sympathetic feeling for the language. He became involved with work upon the Nag Hammadi cartonnage in 1971 . Sadly, his first analysis of the material (see 'Greek and Coptic Papyri from the Covers of the Nag Hammadi Codices: a Preliminary Report', Essays on the Nag Hammadi Texts in Honour of Pahor Labib; ed. M. Krause (Leiden, 1975), 9-II), in proof at the time of his sudden death in January 1974, was somewhat premature. It did not include the texts of any fragments, but it implied a few wrong readings, and the understanding of several texts has since been improved by better arrangement of the fragments-and, in any case, more cartonnage has subsequently been extracted. Also, Barns there expounded a coherent and robust view of the significance of the cartonnage for Nag Hammadi studies, but this has required considerable modification.

Barns's task and his notes passed into highly professional papyrological hands: first those of G. M. Browne, who was able to examine the material in person, including that which came to light only after Barns's death. Ultimately, J. C. Shelton undertook the publication of the Greek material, and Browne is responsible for the Coptic. The brief Foreword by J. M. Robinson deals with such matters as the history of the publication, and does not comment on its substance. The volume is divided into a Greek section and a (shorter) Coptic section (pp. II9 ff.), each with a separate index. The fragments are, reasonably enough, arranged codex by codex, and not grouped according to their contents. The Greek texts are numbered, without specific reference to the codex to which they belong, $1-153$, and
the Coptic $\mathrm{C}_{1}-\mathrm{C}_{19}$. Greek papyrologists will note that this form of numbering is accepted in the third edition of the Oates-Bagnall-Willis Checklist (BASP Supplements 4, 1985), which has assigned the abbreviation P. Nag Hamm. A concordance to the plates of the Facsimile Edition volume is given (pp. xi-xii): the fragments can be located by their inventory numbers, but this is not always an entirely straightforward matter, as in some instances the editors have subsequently modified the organization and arrangement of the fragments adopted in the plate volume. The Coptic section has its own short Preface, although Browne has left it to Shelton to provide, within the Greek section, an Introduction (pp. I-II) which discusses all the documents. Much of the material is of little or no interest in itself, and would scarcely have been published if it had not survived under such interesting circumstances. The editors rightly give the briefest practicable account of minor, uninformative fragments, and numerous further Greek scraps, dutifully photographed front and back in The Facsimile Edition, are merely mentioned and passed over. English translations are printed only of the few texts which yield something approaching connected sense. Shelton warns (esp. p. xvii) that he himself had not had sight of the original papyri, and occasionally suggests that more might be read of a text if the originals were re-examined. He sometimes cites his colleagues' readings in cases where he suspects they are wrong, but he cannot improve upon them on the basis of photographs. In fact, it is conceivable that weeks of unrewarding work might also effect joins between some of the smaller fragments. Essentially, however, the job that needed to be done on this material has been conscientiously carried out, and it is hard to believe that any further labour would materially affect the assessment of the cartonnage that scholars are now, thanks to this volume, able to make for themselves.
Attention may briefly be drawn to those texts which have some value in their own right. Of the Greek texts, $6_{3}$, a loan of wheat, contains hitherto unparalleled phraseology, no doubt because we do not have other examples from this part of the country. The letters 66 and $70-\mathrm{I}$ would earn a place in the average papyrus publication volume, and the same is true of the Sansnōs 'archive' (including 68-9, 72-3, and 75-8; cf. C5 and C8), mentioned again below. The two groups of fragments, 143 and 144, preserving tantalizing portions of Imperial Ordinances-or regulations, or, at any rate, 'directives of some nature' (p.87) -are of interest for administrative history. Among the Coptic texts, Browne briefly re-edits as C 2 two leaves from a Sahidic codex preserving Genesis 32: 5-21; 42: 27-30, 35-8. These have already been published, with the exception of two tiny scraps, in Le Muséon, 85 (1972), $65^{-89}$ by R. Kasser, whose elaborate edition it is still necessary to consult on a number of points. Browne provides minor improvements of reading (although Kasser's conclusion, that the text is essentially that of the classical Sahidic version with a few variations of little importance (see his p. 83), is not affected), English translation, and notes on queries concerning readings. After careful examination, Browne has found no support for Kasser's hypothesis that the two surviving leaves belong to the same original conjugate leaf. Owing to lack of time, Kasser had not himself been able to investigate this question thoroughly on the papyri. Thus Kasser's reconstruction of the make-up of the codex must now be laid aside. In writing 'The text should probably be assigned to the late third or early fourth century of our era', Browne does not disturb Kasser's assessment; but, despite Kasser's lengthy discussion, your reviewer would be happier with a date nearer the middle of the fourth century. The letters $\mathrm{C}_{4}-8$ (and also the puzzling $\mathrm{C}_{3}$; the reference given on p . 133 to Introduction IO-II should have been to p. 4-or perhaps a reference to pp. I i and 15 of Barns's preliminary report was intended) would always be worth publishing, although their interest is cruelly reduced if they do not concern the Pachomian hierarchy (see below).
The significance of the papyri for the Nag Hammadi corpus is the chief subject of Shelton's invaluable Introduction (pp. I-II). His numerous points cannot adequately be summarized here, but four comments may be offered, the first three, at any rate, in full agreement with his conclusions. (i) The few firm dates to be read in the cartonnage belong in the mid-fourth century AD and are all from Codex VII. This cannot have been bound before ad 348. One of the documentary dates restored by Barns, which would have been the only date from Codex VII falling outside the limits $34 \mathrm{I}-8$, is even less certain than he had indicated (p. 12 of his preliminary report), and Shelton's suggestion of a reading and restoration that would yield a date of 344 is attractive. The material as a whole may be dated, almost entirely on palaeographical grounds, between the late third and mid-fourth centuries; your reviewer would incline towards placing most or all of the texts nearer the end than the beginning of this range. (ii) The geographical source of some of the papyri from a few of the codices is Nag

Hammadi and its immediate neighbourhood: nothing in the others rules out the same source. (iii) Although there are ample indications of Christianity in the cartonnage, there is no secure evidence for the background of Pachomian monasticism which Barns-and others-have wished to see. It is not impossible that the letter C6, sent by a Papnoute to 'my beloved father Pahōme' is addressed to the Pachomius, but your reviewer shares Shelton's scepticism, and also finds the other suggestions for identifying known figures unconvincing. Certainly, these possibilities cannot provide a foundation for further argument about the context of the Codices. (iv) For long, scholars have attempted to detect distinctive groupings of codices within the Nag Hammadi corpus, on the basis of their contents, the identification of individual hands (this has proved surprisingly problematic), and the technical details of the bindings. The cartonnage may now be brought into consideration. There are no direct links between pieces from different volumes, but Shelton does allude to some similarities. However, he does not pursue the question of possible groupings systematically, perhaps because he is not convinced of the value of this line of argument. In p. 2 n. 4 , he rightly sees no need to assume a connection 'between scribes and bookbinders, nor between these two parties and the owners of the codices', and on P. II, in characterizing the contents of the covers of Codex VII, he says 'It is hard to think of a satisfactory single source for such a variety of documents except a town rubbish heap-which may indeed have been the source of all the papyri the bookbinders used'. This attitude is very salutary, and could be entirely correct, but it probably goes too far, and the last comment, taken out of context, could mislead, in that it might suggest that the nature of the documents themselves made it quite idle to look for any hint of the Codices' background in the cartonnage. The distribution of the cartonnage does not seem entirely random. In particular, it would not be unreasonable to argue that it provides a little support for seeing a connection between Codices IV and V, and between VI and IX-connections which many would find satisfactory on other grounds. Shelton properly warns that not all the relevant mentions of a Sansnōs need concern one and the same man, and would consider the possibility of 'at least two' archives, but it is perhaps a reasonable working hypothesis that Codex VII includes, among other material, a connected group of documents (Barns used the terms 'archive' and 'file'), in which a Sansnōs is prominent, a monk and presbyter, concerned in agricultural and other business affairs, who used Greek and Coptic, but wrote very poor Greek. Something can be made out concerning him and his associates-but to assume that they had anything to do with the Codices requires several further daring assumptions.

This book, which cannot have been an unalloyed pleasure to produce, is an excellent piece of work, and anyone who would adduce evidence from the cartonnage in a discussion of the Nag Hammadi corpus must pay close attention to the numerous points made by the authors.
W. J. 'Tait

Trees and Timber in the Ancient Mediterranean World. By Russell Meiggs. $220 \times 140 \mathrm{~mm}$. Pp. xviii +553 , pls. ı6, figs. 17 (incl. 7 maps). Oxford, Oxford University Press, 1982 . ISBN - i9 814840 2. Price £35.

The interruptions of war are seldom welcome, perhaps least of all to a committed scholar. But by a fortunate circumstance Russell Meiggs's official wartime work as a timber administrator from 1940 to i 945 awoke in him both an abiding interest in trees and forests and the resolve that when, as he says, 'pressures eased' he would combine this interest with his role as a classical historian by writing a book on timber in the ancient world. Pressures did not ease for him until 1972 and even then the work that he hoped would be completed in 1976 did not finally appear until 1982 . As will soon be evident, however, this long and thorough preparation has been exceptionally worthwhile.

Geographically, the ancient Mediterranean world of the title is the eastern and central Mediterranean, the world of the Greeks, Romans, and Phoenicians, from the earlier part of the 2nd millennium BC to the fall of the Roman Empire. Spain and Gaul, though also well forested, were not important sources of supply and were therefore deliberately excluded from this work. The emphasis of Trees and Timber in the Ancient Mediterranean World is on the economic and social importance of all the major aspects of the demand for and supply of timber throughout the chosen region over some two millennia, much of the evidence being culled from ancient documentary, epigraphic, and above all literary sources. Authors such as Theophrastus, widely accepted as the founder of botany,

Vitruvius, Pliny the Elder, and Strabo are naturally amongst the more important of these, together with the Old Testament, Greek, and Latin historians and such writers on agriculture as Cato, Varro, and Columella. Diligent searching of these and other less obvious Greek and Latin prose authors, not forgetting also much later secondary sources such as the 1679 edition (the last personally amended) of John Evelyn's Sylva, provided the backbone of the work. Though there is indeed a surprising amount of written evidence, much of it is also fragmentary, imprecise, contradictory, or ambiguous, and the Herculean task of sifting it is complicated not only by these difficulties, but sometimes by uncertainties of meaning as well. For instance, in a given context the Greek and Latin words $\kappa$ к $\delta \delta \rho v s$ and cedrus can both mean juniper as well as cedar. While both trees provide timber having similar properties, in other respects the distinction may often have been an important one. Similarly, the species to which some Assyrian names for trees refer are controversial, as is the identity of Egyptian imported ash-wood (whether fir or cedar), as will be discussed more fully later on.
What part in this, if any, has archaeological evidence to play? Under certain conditions wood is among the most durable of substances, perhaps more so than some 'man-made' polymers (plastics), and unfossilized wood of Tertiary age ( 5 million years or more) is known. The circumstances of its preservation archaeologically are, however, often quite special, for example anaerobically in waterlogged sites or, conversely, in very arid conditions. Otherwise, only the hardest, most resinous woods have any prolonged resistance to the ravages of attack by wood-boring insects and other invertebrates, moulds, and fungi. Finally, where it does survive wood tends to be reused. Few travellers to the countries bordering the eastern Mediterranean can have failed to notice the characteristic washed-out mud-brick walls of abandoned buildings, all that remains after a few seasons' exposure to rain following the removal of the roof timbers for reuse elsewhere. Thus, in contrast with such materials as pottery and stone or metals, the use of wood is often heavily under represented in the archaeological record and inferences drawn from the surviving evidence are liable to be misleading, support and corroboration from the literary and other sources upon which Meiggs has had to depend becoming all the more essential.

Nevertheless, there exists a very detailed excavation record from many important and early sites, the Minoan palaces of Crete for example, and where this is so Meiggs has made full use of it in the same rigorous and exhaustive way and with the same ingenuity of interpretation that he has applied to all the other sources of evidence he has used. In this connection his plea (p. 279) that much more could be learned if more (or all) wood from archaeological sources were to be microscopically identified is surely correct.

Finally, pollen analysis and dendrochronology have also provided supporting evidence, notably the 800 -year floating chronology established by P. Kuniholm for timbers (juniper) from the Phrygian Royal Tomb at Gordium, Anatolia. Meiggs is pessimistic, perhaps rightly, about the prospects for a master tree-ring chronology extending back to the Classical period or earlier in the eastern Mediterranean, again owing to the sparsity of surviving material.

The strength of this book lies in the clarity with which the separate but interconnected themes that constitute its thirteen chapters and nine appendices on specialized topics (the latter comprising almost one-fifth of the text) are developed. Following an Introduction to the book as a whole, in which Meiggs summarizes his objectives, and a chapter on the nature of the evidence he has used, is a short but important chapter on Mediterranean forests and the influences upon them of climate (in particular rainfall) and altitude, mountain ranges up to $2,000 \mathrm{~m}$ or more being the most important sources of timber in antiquity. Although much deforestation has taken place (most of it more recently than hitherto assumed) vegetation patterns today appear to correspond closely with the ancient records, implying that there has been no major change of climate in the region over at least the last two or three millennia. There follows a long chapter on the cedars of Lebanon of which some dozen remnant groups exist today over the entire range. Discussion of the probable identity of ash-wood is deferred to one of the appendices. Then, in turn, there are chapters on the use and importance of timber in the Aegean Bronze Age; the demands for timber made by the fleets and armies of the ancient world, and by the cities of Athens and Rome; timber for farms, parks, and gardens, and wood for furniture and sculpture, most of the surviving evidence for the last being from Egypt. The long and important penultimate and final chapters are devoted to the logistics of the ancient timber trade, and the history of deforestation in the Mediterranean region, respectively. The nine appendices deal briefly with woods from Ancient Egypt in the Ashmolean Museum; more fully with Egyptian
ash-wood and the timbers from the Royal Tomb at Gordium, both mentioned above, the forests of southern Italy, the uses and great importance of pitch in antiquity, records of tall trees and exceptionally long timbers, and Greek and Roman measures, coins, and weights; and very fully with the ambiguities of the names of trees mentioned in the ancient written sources. In the longest appendix of all (thirty-four pages) the highly informative inscriptional record of the use of timber, pitch, charcoal, and firewood provided by the temple accounts from Epidaurus, Delphi, Eleusis, and Delos (spanning roughly the fourth-second centuries BC ) is examined in detail. There are extensive notes both to the text and to the sixteen well-chosen plates grouped at the end of the volume, and a useful classified bibliography of some 250 additional references. Reference to all parts of the work is greatly facilitated by separate indexes to trees and their woods, classical authors, passages from the Bible, and inscriptions, as well as an excellent General Index. The work is also informed by first-hand knowledge, for not content with a purely scholarly approach and his previous acquaintance with trees and timber, whilst writing the book Meiggs went to see for himself the forests of south Italy, Cyprus, Turkey, and Lebanon.

An attack so concerted upon the subject has not surprisingly produced remarkable results. No comparable work having such authority, breadth, and force majeure exists or, it would seem, has been attempted, and any future scholarship in the same field must undoubtedly begin from here. Almost any desired historical fact relating to trees and timber can be found in this book, whether it be the age ( 600 years) at which cedars and junipers can still produce excellent timber (p. 56), whereas firs as comparatively little as 300 years old are rarely sound, or Sir Samuel Baker's vindication in 1879 of Pliny's claim that Cyprus was also the home of cedar (p. 135), or that the principle of plywood appears to have been discovered in the Old Kingdom (Third Dynasty) of Egypt (p. 297), only to be lost again until independently re-invented in modern times. A point of particular interest concerns the large bronze cross-cut saws found at Zakros, Hagia Triada, Knossos, and several of the other Minoan palaces and villas of Crete, which Meiggs cites as further evidence against Sir Arthur Evans's view based on changes in building practice that there was an acute shortage of timber in the late Minoan period. Later, before the importance of Mycenaean influence and the eruption of Thera were recognized, this even came to be accepted as the principal cause of the collapse of the Minoan thalassocracy. Probably, however, the timber resources of Crete were not seriously diminished until after the arrival of the Venetians in the thirteenth century ad. Some of these saws, of which the largest is 1.67 m in length, had originally been fitted with a handle at each end for two-man operation. As such they were a Minoan invention, perhaps deriving from smaller, single-handled, copper prototypes from Egypt and Mesopotamia. Their main function was almost certainly for use as masonry saws, for cutting gypsum and sometimes more indurate materials, as Evans emphatically states (The Palace of Minos, ii, part ii, 671), but the teeth of one at least have apparently been set to prevent choking by sawdust. The conclusion that these saws were also used for the squaring of large timbers and in the production of floor-boards, for which they would have been essential, and of which if so the Minoans were also the inventors, is hard to resist.

A question of especial interest to Egyptologists is the identification of ( $\check{-}$-wood, the most commonly occurring name for the imported timber of good quality that could not be supplied by any of the trees native to Egypt. The widely held traditional assumption that the name ash referred to cedar from Lebanon was challenged by Loret as long ago as 1916 and his very reasonable arguments in favour of fir (Abies) have since become widely accepted. In a short appendix on this question Meiggs sets out a convincing series of counter arguments which does appear to reinstate the synonymy of ash with cedar, making at the same time, but without weakening the argument against fir, the very tentative suggestion that the term might also embrace the three taller species of juniper which grow at the same altitude as cedar and have wood of similar qualities. His prediction in further support of the identity of ash with cedar, that most of the Egyptian coffins and sarcophagi in the British Museum would be found to be cedar has been largely borne out by wood identifications that have since been made at the Royal Botanic Gardens, Kew. A very broad summary of the results of these (to be published in detail elsewhere) is that during the prosperity of the Middle Kingdom coffins were generally made of imported cedar, but later, under Hyksos rule in the north, coffins in the south, including royal coffins, were made of native sycomore, Ficus sycomorus.

Ultimately, it is the broader issues that are of greatest interest and perhaps the most important of these is the history of deforestation. That this has undoubtedly been extensive in the Mediterranean
region has long been recognized and the traditional view has been that it mostly took place in the more remote past, beginning with forest clearance by the first agriculturalists in the Neolithic period. In a nicely balanced discussion Meiggs shows that, on the contrary, the most serious inroads were much more recent and were closely connected with the spread of railways in the late nineteenth century, which not only themselves consumed enormous quantities of timber, but above all, largely removed the difficulties of transporting heavy loads of timber that had previously always acted as a constraint against the over-exploitation of forests. Significant clearance of Mediterranean woodlands undoubtedly did take place during the Neolithic, but it seems doubtful whether it reached the higher slopes above about $\mathrm{I}, 000 \mathrm{~m}$ where at that time bears and wild boar would have abounded. Much heavier demands for timber extending to higher mountain zones followed in all later periods, but although heavy timbers were sometimes carried over land for impressive distances, the difficulties of transportation were always an important factor in saving the forests. Flocks and herds of grazing and especially browsing animals, and in particular goats, must have added to the pressures on the trees, but their most serious impact is on the prevention of regeneration rather than the destruction of well-grown and relatively unexploited forests. In this respect the forests of the eastern Mediterranean probably suffered most. Rainfall there is less, the summers longer and hotter, natural regeneration is slower, and the ravages of goats are correspondingly more serious. In comparison with these anthropogenic factors the destructive effects of the natural hazards, such as fire and flood, to which all forests are exposed, are of relatively minor importance.

The demands for timber for all purposes in the ancient Mediterranean world were heavy, and although trees such as olives were planted on a massive scale and must have produced wood for fuel, and coppicing of woodlands was practised, no attempt was made to replace forest trees. The use of timber in antiquity must sometimes have been profligate, and destructive practices such as the manufacture of pitch, in particular for lining wine amphorae, were widespread. Despite this, many parts of the Mediterranean world remained well forested until the mid- to late nineteenth or early twentieth centuries, as the accounts of many travellers clearly show. Meiggs quotes, for example, from Old Calabria by Norman Douglas (1915), in which he describes the soil erosion (landslides) and destruction of landscape resulting from clear felling in the primeval Sila forest in south Italy in the early years of the present century.

Much has been done and is being done to halt and reverse this situation, although as Meiggs points out (p. 402) forestation programmes tend to be among the first to suffer curtailment in times of war and recession so that the outlook at present for the continuation of the ambitious programme for the replanting of Lebanese forests, for example, is no longer so favourable.

The forests of the Mediterranean world are a legacy of the last glacial period. Their pedigree extends back at least 10,000 years and their continued survival is a vital responsibility. If this splendid book helps, as most certainly it should, to widen such awareness, then it will have far exceeded the modest aim expressed by Meiggs in the Introduction of tempting other historians into a field which, as he so rightly says, is far too important to be ignored.

Richard Burleigh

Wadi Qitna and Kalabsha South. Late Roman-Early Byzantine Tumuli Cemeteries in Egyptian Nubia. Volume I Archaeology. By Eugen Strouhal. Charles University, Prague, i984. Pp. 316, figs. i06, pls. 88. Price not stated.
The Czechoslovak Institute of Egyptology of Charles University, as a response to the UNESCO Nubian Salvage appeal, undertook the epigraphic and archaeological recording of a 37 km stretch of the Nile between Khor Kalabsha and Gerf Hussein. Both banks of the river were examined and Professor Z̆ába's publication of the epigraphic material ${ }^{1}$ was the first result of the expedition's enterprise. During the 1965 season, two burial sites were investigated. The first, on the sides of Khor Kalabsha, was a site only partly within the Czechoslovak concession, and was only partly excavated. The second, at Wadi Qitna, was excavated in its entirety. The subject of the volume presently under

[^176]consideration is the archaeological reporting of these two sites. A further volume will present Dr Strouhal's analysis of the physical anthropological material from the sites.
The expedition typifies the élan of the Nubian campaign, with its recording of about 550 tombs and other non-funerary structures in a short, hot season in April and May of 1965. The dedication and thoroughness of Dr Strouhal, who shared in the field-work and undertook the analysis and publication, is evident in the pages of this volume.
The organization of the publication is straightforward. Following the introductory matter, the tumuli and other structures are discussed and overall features analysed. Then, each object or material class-ceramics, stone, inscriptions, textiles, etc.-is treated in turn and comparative as well as internal analyses provided. For the sake of brevity, much of the material has been entabulated. All the data of each locus are presented this way, as well as the analyses of the various object classes and materials. As virtually every tomb had been found plundered, it was not considered necessary to present the information in the usual, longer form, and the treatment is more than adequate. It is a well-organized presentation and is, thereby, easy to use.

The cemeteries date to the period of $c$.AD $250-500$, and they belong to the X-Group or Ballana culture. Although much of the material is comparable with that of other Lower Nubian sites, there are sufficient differences to lead the author to identify a 'Kalabsha variant'. His theory, that the Dodekaschoinos was largely occupied by Nobadae settlers, is partly supported by his archaeological material, although extended comment ought to await the remainder of his supporting evidence, contained in the physical anthropological material destined for Volume II. Certainly, the various 'African' traits-the ' H '- and ' C '-ware pottery, the tumuli and graves, the crouched burial position-distinguish these cemeteries from those in neighbouring Egypt proper. More subtly, they are distinguished from the classical X-Group by a lack of 'the complete range of features' (p. 269), e.g. the absence of some pottery forms and the differences between these stone tumuli and the earth mounds further south. Many of the differences are ascribed to local conditions. For instance, the tumuli at Wadi Qitna are constructed of stone because the terrain of the region is rocky and there is little spare soil. Indeed, the identification of these local variants is most interesting and will, in the end, enable us to distinguish archaeologically between the Nobadae and the Blemmyes with certainty.

One or two small matters mar the overall excellence of this work. While the quality and size of the drawings is exemplary, it is regrettable that there is such a profusion of scales-1:1.5, $1: 3.3,1: 1.2$, I: 1.7, etc.-this makes the quick visual comparisons of, for example, the pottery much more difficult. While the English translation occasionally suffers a lapsus dictum, one is, nevertheless, very grateful that the effort has been made to provide it. Dr Strouhal is to be congratulated for this volume and we eagerly await the successor.
A. J. Mills

## Other books received

1. Die Bedeutung der feriseitsbücher fur der verstorbenen König. By Winfried Barta. Münchner Ägyptologische Studien $42.240 \times 170 \mathrm{~mm}$. Pp. xv +208. Munich, Deutscher Kunstverlag, 1985. ISBN 3422008365 . Price DM 52.
2. Sothis- und Monddaten. By Rolf Krauss. Hildesheimer Ägyptologische Beiträge $20.235 \times 170$ mm . Pp. xii +219 including 2 pls. Hildesheim, Gerstenberg Verlag, 1985 . ISBN 380678086 X. Price DM 34.
3. Die Kölner Mani-Kodex. By Ludwig Koenen and Cornelia Römer. Papyrologische Texte und Abhandlungen $35.275 \times 195 \mathrm{~mm}$. Pp. xxix +348 including pls. Bonn, Dr Rudolf Habelt, 1985. ISBN 377492146 6. Price DM 168.
4. Science in Egyptology. Edited by A. R. David. $240 \times 160 \mathrm{~mm}$. Pp. x +525 , numerous figs. Manchester, Manchester University Press, 1986. ISBN o 7190 22045. Price $£ 45$.
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6. Avaris and Piramesse. By Manfred Bietak. Revised edition. $250 \times 155 \mathrm{~mm}$. Pp. 74, pls. 38 . London, The British Academy, 1986. ISBN o 85672 201 4. Price $£ 6$.
7. Egyptian Antiquities in The Liverpool Museum I. A List of the Provenanced Objects. By Piotr Bienkowski and Edmund Southworth. $300 \times 210 \mathrm{~mm}$. Pp. xxvi + 105, pls. 7. Warminster, Aris and Phillips Ltd., 1986. ISBN o 85668 3760. Price £20.
8. Grabung im Asasif 1963-1970. Band III. Die Papyrusfunde. By Günter Burkard. Deutsches Archäologisches Institut. Abteilung Kairo. Archäologische Veröffentlichungen 22. $355 \times$ 255 mm. Pp. 88, pls. 86. Mainz, Verlag Philipp von Zabern, ig86. ISBN 380530037 9. Price DM 148.
9. Teeth. By S. Hillson. Cambridge Manuals in Archaeology. $250 \times 175 \mathrm{~mm}$. Pp. 376. Cambridge, Cambridge University Press, 1986. ISBN 052 I 304059. No price stated.
10. Archéologie du Nil Moyen. Edited by Francis Geus. Volume $1.300 \times 210 \mathrm{~mm}$. Pp. 160 including 15 tables, 21 pls., 19 figs. Lille, 1986. ISBN 29501261 a 3. Price 120 F (surface delivery).
ir. Living in a City of the Dead. By Raphael Ventura. Orbis Biblicus et Orientalis 69. $235 \times$ 160 mm . Pp. xiv +227 , figs. 3. Freiburg, Universitätsverlag, i986. ISBN 372780355 X. Price 64 Sw . f.
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12. Essays on Egyptian Grammar. By James P. Allen, Leo Depuydt, H. J. Polotsky, and David P. Silverman. Yale Egyptological Studies i. $255 \times 175 \mathrm{~mm}$. Pp. 4I. New Haven, Yale Egyptological Seminar, 1986. ISBN o 912532 900. Price $\$ 8.50$.
13. Ancient Pigments in Wall Paintings of Egyptian Tombs and Temples. An Archaeometric Report. By A. El Goresy. $290 \times 205 \mathrm{~mm}$. Pp. 45, figs. 20. Heidelberg, Max-Planck-Institut fur Kernphysik, 1986. No price stated.
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15. Sculptured Pottery from Koptos in the Petrie Collection. By Barbara Adams. $230 \times 160 \mathrm{~mm}$. Pp. ix +60 , pls. 30 . Warminster, Aris and Phillips Ltd., 1986. ISBN 085668389 2. Price $£_{1} 17.50$.
16. Blumen und Blumensträusse also Opfergabe im alten Ägypten. By Johanna Dittmar. Münchner Ägyptologische Studien 43. $240 \times 170 \mathrm{~mm}$. Pp. viii +178 , figs. 187. Munich, Deutscher Kunstverlag, i986. ISBN 3422008373 . Price DM 60.
17. Les Invocations à la Bonne Année au Temple d'Edfou. By Philippe Germond. Aegyptiaca Helvetica ir. $297 \times 210 \mathrm{~mm}$. Pp. 108. Geneva and Basel, 1986 . No price stated.
18. Les Termes de la Propagande Royale Égyptienne de la XIX ${ }^{e}$ Dynastie à la Conquête d'Alexandre. By Nicolas-Christophe Grimal. Mémoires de l'Académie des Inscriptions et Belles-Lettres, Nouvelle Serie Tome VI. $280 \times 225 \mathrm{~mm}$. Pp. vi +764 . Paris, Imprimerie Nationale, 1986. ISSN 0398 3595. No price stated.
19. L'hymne à la Crue du Nil. By Dirk Van der Plas. 2 vols. $265 \times 195 \mathrm{~mm}$. Vol. i, Pp. xvi + 219, 3 tables. Vol. 2, Pp. xiv +215 including 55 pls. Leiden, Nederlands Instituut voor het Nabije Oosten, i986. ISBN 906258204 4. No price stated.
20. Die Opferformel des Alten Reiches. By Günther Lapp. Deutsches Archaologisches Institut Abteilung Kairo. Sonderschrift 21. $300 \times 215 \mathrm{~mm}$. Pp. xxxvii +267 . Mainz, Verlag Philipp von Zabern. i986. ISBN 380530872 8. Price DM 135.
21. Das Dekorationsprogramm des Sarkophages Nektanebos' II. By Hanni Jenni. Aegyptiaca Helvetica $12.297 \times 210 \mathrm{~mm}$. Pp. 72 including 3 pls . Geneva and Basel, 1986. No price stated.
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25. The Pyramids of Egypt. By I. E. S. Edwards. Revised edition. $245 \times 185 \mathrm{~mm}$. Pp. 328 including 63 pls., 60 figs., plus 21 colour pls. London, Viking Press, i986. ISBN o 67080153 4. Price £i6.95.
26. L'Offrande du Lotos. By Marie-Louise Ryhiner. Rites Égyptiens VI. $230 \times 165 \mathrm{~mm}$. Pp. $\mathrm{x}+$ 281, pls. V. Brussels, Fondation Égyptologique Reine Élisabeth, 1986. Price FB 900.
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29. Temples and Tombs of Ancient Nubia. By Torgny SÄve-Söderbergh. $245 \times 185 \mathrm{~mm}$. Pp. 256, pls. 48, colour pls. 43, figs. 20. London, Thames and Hudson Ltd. and Paris, UNESCO, 1987. ISBN 0500 OI 392 6. Price $£ 25$.

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[^0]:    ${ }^{1}$ G. T. Martin, $\mathscr{f} E A 62$ (1976), 5-1 3 ; for the 1986 season idem, $\mathscr{f} E A 73$ (1987), 1-9.
    ${ }^{2}$ Idem, $\mathscr{F} E A 63$ (1977), fig. 1.
    ${ }^{3} \mathrm{~L} D, \mathrm{I}, 33$ and 42 (no. 27), iII, 240-2; Text, I, i82-4.
    ${ }^{4} \mathrm{~L} D, \mathrm{I}, 42$.
    ${ }^{5}$ Berlin, Staatliche Museen, Inv. 2088-9.

[^1]:    ${ }^{6}$ On the south end of the east wall of the second courtyard.
    ${ }^{7}$ See P. Munro, Die spätägyptischen Totenstelen (Glückstadt, 1973), group Memphis I.
    ${ }^{8}$ J. E. Quibell, Excavations at Saqqara 1908-9, 1909-10. The Monastery of Apa feremias (Cairo, 1912), pls. $65-6,69[5]=82[2], 70[4,6], 74[2,5], 8 \mathrm{I}[\mathrm{I}], 82[\mathrm{I}]$; Cairo JE 43272-4, T. 19.6.24.1, 19.6.24.10, 19.6.24.13. Also Toronto, Royal Ontario Museum 955.79.1, and Hamburg, Museum für Kunst und Gewerbe 1924. I23, possibly also from the Monastery. For all these, see E. Graefe, MDAIK 3 I (1975), i87-220.

[^2]:    ${ }^{9}$ Leiden, Rijksmuseum van Oudheden Inv. AST $1-3$, bought in 1828 in Leghorn from the collection of Giovanni d'Anastasi.
    ${ }^{10} \mathrm{~L} D$ Text, I, 184.
    ${ }^{11}$ Baltimore, Walters Art Gallery 22.86; Rochester (NY), Memorial Art Gallery of the University 42.55.

[^3]:    ${ }^{12}$ Cf. the pottery from the courtyard and chapels of the tomb of Paser, in Martin et al., The Tomb-chapels of Paser and Ra`ia at Saqqâra (London, 1985), 50-i.
    ${ }^{13}$ Kindly read by Dr J. van Dijk.

[^4]:    ${ }_{14}$ A. W. Johnston and R. E. Jones, Annual of the British School at Athens, 73 (1978), 103; E. Brann, The Athenian Agora, viII (1962), 32-4, with pls. 2, 42; Brian A. Sparkes and L. Talcott, The Athenian Agora, xiI (1970), 192-3, with pl. 64 and figs. 12, 20. For other examples found in Egypt see W. M. F. Petrie, Tanis, in (London, 1889), pl. 24[9, 1 I ]; idem, Qurneh (London, 1909), pl. 54[849-50]; Bulletin de Liaison, 10 (1985), 23.
    ${ }_{15}$ Petrie, Tanis, II (London, I 889), pl. 24[9, ir ].
    ${ }^{16}$ J. Bourriau, Umm el-Ga'ab: Pottery from the Nile Valley Before the Arab Conquest (Cambridge, i981), 122-3.

[^5]:    ${ }^{17}$ Sometimes incorporated into the Book of the Dead as Chap. 15g. See for this text J. Assmann, Liturgische Lieder an den Sonnengott (Berlin, 1969), 77-89, 409.

[^6]:    18 This might lend new support to an hypothesis advocated by Schneider, who would identify our Maya with the May who owned the unfinished tomb no. 14 at Amarna, which was apparently mutilated before the abandonment of the city, see H. Schneider, BSFE 69 (i974), 43-5.
    ${ }^{19}$ A similar phrase occurs elsewhere in the tomb, see LD, iII, 240a and Graefe, op. cit. 194, figs. 3a, 210.
    ${ }^{20}$ A parallel for this line is found in a recently published fragment of a late Eighteenth Dynasty crossword inscription now in Caracas, Venezuela, which gives more specifically 'the August Image of Atum' and 'his Eldest Son', i.e. Shu, see H. G. Fischer, L'Écriture et l'art de l'Egypte ancienne (Paris, 1986), 126-7, with fig. 49.
    ${ }^{21}$ Gloves are sometimes shown as part of the royal gifts in contemporary reward scenes, e.g. in the Amarna tomb of Ay (no. 25): N. de Garis Davies, The Rock Tombs of el Amarna, vi (London, 1908), pl. 28, or in the tomb of Neferhotep at Thebes. The latter is not shown or described in R. Hari, La Tombe thèbaine du pere divin Neferhotep (Geneva, 1985), but is visible on early drawings by Hoskins: A. Radwan, Die Darstellungen des regierenden Königs und seiner Familienangehörigen in den Privatgräbern der 18. Dynastie (Berlin, 1969), pl. 24, and Hay, see L. Manniche, City of the Dead: Thebes in Egypt (London, 1987), 62-3, with fig. 50.
    ${ }^{22}$ Cairo JE 43274: Quibell, op. cit., pls. 66-66A.

[^7]:    ${ }^{23}$ Three of the offering-bearers are named: they are the 'scribes of the Treasury' $R^{r}-n f r(c f . L D$, ini, 240d) and Sn-nfr, and the 'secretary of the overseer of the Treasury' Pth-ms (cf. Cairo JE 43274, see n. 22 above).

[^8]:    ${ }^{24}$ For this divinity see $H$. te Velde, in $L \ddot{A}$, III, 47-8, and E. Bresciani, in Hommages à François Daumas, i (Montpellier, 1986), 87-94.
    ${ }^{25}$ Among the few inscriptions on objects other than pottery we mention a faience djed-symbol (pl. III, 2), doubtless originally set in a 'magical brick', inscribed with the appropriate section of BD 137A/151A, and mentioning the name of Maya's father Iuy, thus settling the debate about the identity of the 'Memphite' and the 'Theban' Maya, cf. Hari, Orientalia, 43 (1974), 1 53-61.
    ${ }^{26}$ Invariably written with the signs for $r s$, 'he who awakes'.
    ${ }^{27}$ R. Germer, Untersuchungen über Arzneimittelpflanzen im Alten Ägypten (Hamburg, 1979), 283-6.
    ${ }^{28}$ In addition to the dockets on pottery jars one hieratic inscription was found on an alabaster pot. It mentions $m r h t$ imy-st-' [. . .], ' $m r h t$-oil of the heart(?) [of . . .], cf. the recent discussion of a similar, but apparently much later, docket by H-J. Thissen, in E. Feucht, Das Grab des Nefersecheru (Mainz, 1985), 139-40.
    ${ }^{29}$ Similar water dockets were discovered by this expedition in the area between the tombs of Horemheb and Tia, see the preliminary remarks by Raven, GM 75 (1984), 27-30.
    ${ }^{30}$ Hieratic graffito in the tomb of Tuthmosis IV (KV43), see PM I ${ }^{2}$, 560 (4).

[^9]:    ${ }^{1}$ See $\mathscr{f} E A 73$ (1987), 16.
    ${ }^{2}$ An excavation begun in February 1987 by Professor Gaballa of Cairo University (Survey code FAO) does in fact lie across the line of this feature, but is not yet deep enough to have exposed it (fig. 2).
    ${ }^{3}$ Cf. Level III, $\mathscr{J} E A$ 73, 16, fig. 2.
    ${ }^{4}$ Acknowledgements to Lisa Giddy for this suggestion. For river levels during the Middle Kingdom, see B. Bell, $A \mathcal{J} A 79$ (1975), 223-71, especially p. 260 .
    ${ }^{5}$ Cf $\mathscr{J} A$ 73, 15.

[^10]:    ${ }^{6}$ For a brief description of the pottery found this season, see Janine Bourriau's article in Bulletin de Liaison 13 (1988), forthcoming.

[^11]:    ${ }^{7}$ D. J. Thompson, Memphis, the second city, forthcoming.
    ${ }^{8}$ D. G. Jeffreys, Survey of Memphis (SoM) (London, 1985), I, 70, note to fig. 25.

[^12]:    ${ }^{9}$ JEA 69 (1983), 35-9; $A S A E 69$ (1983), 88-90, 92-4.
    ${ }^{10} \mathcal{F} E A 70$ (1984), 30-1. $\quad{ }^{11}$ fEA 73 (1987), 17-19.
    12 SCHISM (Systematic Corpus of Hieroglyphic Inscriptions and Sculptures from Memphis) 701, = BAA in Jeffreys, $S o M_{\text {I }}$.

[^13]:    ${ }^{13}$ Apart from lintels and similar architectural elements, Petrie published only one granite and one basalt block, in Memphis, I, pl. xxiv (the latter rediscovered by us as SCHISM 706), and four granite, one quartzite, and one limestone block, in Memphis, vi, pls. lv [ir] = Copenhagen, Ny Carlsberg Glypt. Æ.I.N. i5in; lvi [i8], lviii [32-3], lix [37] = Copenhagen, Ny Carlsberg Glypt. Æ.I.N. 15 13; lix [38]. Daressy gave the texts of eight fragments in $A S A E 3$ (1902), 28-30.

[^14]:    ${ }^{14}$ Petrie published a photograph of a seated statue in Memphis, vi, 33 [21], pl. lvi, but implies that it is a single figure, and fails to state its material. The 'fine, even ribbing of the waist-cloth' is also found on the new granite pair-statues, and so it is likely that even Petrie's statue is a sculpture of Ramesses II.
    ${ }^{15}$ Jeffreys, SoM I, 48-5I.

[^15]:    ${ }^{1}$ H. Junker, Denkschriften der Akademie der Wissenschaften Wien, Phil.-Hist. Klasse, LxviII (3), 14-24, 25-33, pls. ii-vi, xiv-xxv; idem, Anzeiger der Akademie der Wissenschaften in Wien, Phil.-Hist. Klasse, xvi-xviil ( 1929 ),
    
    ${ }^{2}$ K. W. Butzer, Science 132 (1960), 1617-24.
    ${ }^{3}$ In 1977 excavations were initiated by the German Archaeological Institute in Cairo: J. von Einwanger, MDAIK 34 (1978), 42; ibid. 35 (1979), 23-57; idem, Merimde-Benisalame I, die Funde der Urschicht (Mainz am Rhein, 1984).
    ${ }^{4}$ I. Olsson, Radiocarbon I (1959), 89-102.

[^16]:    ${ }^{5}$ P. E. Damon, C. W. Ferguson, A. Long, and E. I. Wallick, American Antiquity 39 (1974), 350-66.
    ${ }^{6}$ J. Klein, J. C. Lerman, P. E. Damon, and E. K. Ralph, Radiocarbon 24 (2) (1982), 103-50.
    ${ }^{7}$ Fekri A. Hassan and Steven W. Robinson, Antiquity 6ı (1987), ir9-35. ${ }^{8}$ Olsson, loc. cit.

[^17]:    ${ }^{9}$ Fekri A. Hassan, Norwegian Archaeological Review 19 (2) (1986), 63-76.
    ${ }^{10}$ H. M. Belquini, Cultivation of Egyptian Crops (in Arabic), part I (Cairo, 1946).

[^18]:    ${ }^{11}$ W. C. Hayes, Most Ancient Egypt (Chicago, 1964), 104.
    ${ }^{12}$ G. Caton-Thompson and E. W. Gardner, The Desert Fayum (London, 1934), pl. ix, 14.
    ${ }^{13}$ Ibid., pl. xxxix, $8 . \quad{ }^{14}$ Ibid., pl. vii, 2.

[^19]:    16 Ibid.
    ${ }^{17}$ Hassan, African Archaeological Review 3 (1985), 95-1 16.
    ${ }^{18}$ E. J. Baumgartel, $C A H$ i, ch. ix(a).
    ${ }^{19}$ Hassan, African Archaeological Review 3, 95-116.
    ${ }^{20}$ Hayes, loc. cit.
    ${ }^{21}$ Hassan, The Predynastic of Egypt: Subsistence in Settlement Studies in the Nagada-Khatara Region (1981). Report to the NSF, Washington, DC; M. A. Hoffman, The Predynastic of Hierakonpolis (1982). Egyptian Studies Association, Publication No. i. Cairo University Herbarium, Egypt.

[^20]:    ${ }^{1}$ Sir Robert Mond and Oliver H. Myers, Cemeteries of Armant, I (London, 1937), 1-9.
    ${ }^{2}$ Ibid. 78 . $\quad 3$ Ibid. 7.
    ${ }^{4}$ Karl W. Butzer, Early Hydraulic Civilization in Egypt (Chicago, 1976), 13.

[^21]:    ${ }^{5}$ Mond and Myers, op. cit. 163.
    ${ }^{8}$ Ibid. 9-1 I. $\quad{ }^{9}$ Ibid. 9.
    ${ }^{11}$ B. J. Kemp, $\mathcal{F E A} 68$ (1982), 10.
    ${ }^{6}$ Ibid. 2-3. $\quad{ }^{7}$ Ibid. 9.
    ${ }^{10}$ W. Kaiser, Archaeologia Geographica, 6 (1957), 69-77.

[^22]:    ${ }^{12}$ Kaiser, Archaeologia Geographica 6, 70.
    ${ }^{13}$ Ibid. 84-7; idem, $Z \ddot{A} S$ 81 (1956), 107.
    ${ }^{14}$ Idem, Archaeologia Geographica 6, 73-4.
    ${ }^{15}$ Idem, $Z \ddot{A} S$ 81, 92-5.

[^23]:    ${ }^{16}$ Guy Brunton and Gertrude Caton-Thompson, The Badarian Civilization (London, 1928), 79.
    17 Fekri A. Hassan, Current Anthropology, 22:5 (1984), 683.

[^24]:    ${ }^{18}$ Mond and Myers, op. cit. 9. ${ }^{19}$ Ibid. 26-31.
    ${ }^{20}$ Guy Brunton, Qua and Badari I (London, 1927), 49-50.

[^25]:    ${ }^{21}$ Winifred Needler, Predynastic and Archaic Egypt in the Brooklyn Museum (Brooklyn, 1984), 171.
    ${ }^{22}$ Mond and Myers, op. cit. 26-32. ${ }^{23}$ Ibid. 30-1.

[^26]:    ${ }^{27}$ W. J. Dixon (ed.), BMDP Statistical Software (Berkeley, 1981).
    ${ }^{28}$ E. C. Pielou, Mathematical Ecology (New York, 1974), 316.

[^27]:    ${ }^{29}$ James A. Brown, The Archaeology of Death (Cambridge, 1981), 27.
    ${ }^{30}$ Ibid. 29. ${ }^{31}$ Ibid. $29 . \quad{ }^{32}$ Ibid. 28-9.
    ${ }^{33}$ C. M. Firth, Archaeological Survey of Nubia. Report for 1908-1909, Vol. I (Cairo, 1912); and Hans-Ake Nordstrom, Neolithic and $A$-Group Sites (Stockholm, 1972).
    ${ }^{34}$ Kemp, in Ancient Egypt. A Social History (Cambridge, 1983), 164-6.
    ${ }^{35}$ Janet E. Levy, Journal of Field Archaeology, 6 (1979), 5 1.

[^28]:    ${ }^{36}$ Ibid. 51.
    ${ }^{37}$ Brown, op. cit. 29.

[^29]:    ${ }^{38}$ Joseph A. Tainter, For Theory Building in Archeology (New York, 1977), 123.
    ${ }^{39}$ Brown, op. cit. 29.

[^30]:    ${ }^{40}$ W. B. Emery, Archaic Egypt (Baltimore, 1967), 48, 64.
    ${ }^{41}$ Ibid. 53.

[^31]:    ${ }^{1}$ Y. Harpur, in $9 E A 71$ (1985), 27-42; $9 E A 72$ (1986), 43-60; MDAIK 42 (1986), 59-66; SAK 13 (1986), 107-23; f゙EA 73 (1987), 197-200.
    ${ }^{2}$ We should like to thank the following people for their assistance during the preparation of this paper: members of the Board of Management of the Gerald Avery Wainwright Near Eastern Archaeological Fund (Oxford); Dr Mohamed Saleh (Director) and staff of the Cairo Museum; Mr Mustapha Maksut (Head Photographer, Cairo Museum); Mr Charles Hunt (Curator, Anthropological Museum, University of Aberdeen); the Curator and staff of the Brooklyn Museum (NY); the Curator and staff of the Otago Museum (Dunedin, New Zealand); Dr Boyo Ockinga (Macquarie University, Sydney, Australia); Mr Paolo Scremin (Photographer, Department of Archaeology, University of Oxford). Special thanks are offered to Mrs Marion Cox (Griffith Institute, Oxford) for converting the plates to line-drawings with her usual skill.
    ${ }^{3}$ T. G. H. James, Corpus of Hieroglyphic Inscriptions in the Brooklyn Museum, I (Brooklyn, 1974), 16[42], pls. iii, xxi; D. Cohen, in Bulletin van de Vereeniging tot Bevordering der Kennis von de Antieke Beschaving, 7, no. I (June, 1932), 6-8; H. Asselberghs, in $\mathfrak{F E O L} 4$ (1936), 183, pl. xxi; J. Pirenne, Histoire de la Civilisation de l'Égypte ancienne, I (Neuchâtel, 196I), fig. 73, upper, facing p. 220.

[^32]:    ${ }^{4}$ One of the sailing boats depicted in the chapel of $3 h t j-h t p$ (Louvre) was used as a guide when reconstructing the fragments (Encyclopedie photographique de l'art. Les antiquités égyptiennes du Musée du Louvre, I (Paris, 1935), pl. 22).
    ${ }^{5}$ Like the Brooklyn relief, the craft scene in tomb 920 was assigned by some scholars to the temple of Sahure (see Harpur, in SAK 13 (1986), in4). Perhaps both Saqqâra reliefs were bought at Abusir.
    ${ }^{6}$ For the earliest preserved examples see W. M. F. Petrie, Medum (London, 1892), pls. xviii, xxviii [4]; W. S. Smith, The Art and Architecture of Ancient Egypt (Harmondsworth, Middlesex, 1958), 45, fig. 17.
    ${ }^{7}$ For selected references see $\mathrm{PM}{ }_{\text {III }}{ }^{2}, 755$, bottom.
    ${ }^{8}$ Good examples occur in the chapels of Mhaw, K ${ }^{3} \cdot j-j r r$, and Hitj-k $\cdot j$, e.g. H. W. Müller, Alt-Agyptische Malerei (Berlin, 1959), 44, pl. 8.
    ${ }^{9}$ W. Wreszinski, Atlas zur altägyptischen Kulturgeschichte, ІіІ (Leipzig, 1936), pl. 54; PM III ${ }^{2}$, 694-6.
    ${ }^{10}$ P. Duell et al. The Mastaba of Mereruka, II (Chicago, 1936), pls. 168-9.

[^33]:    ${ }^{11}$ A. Mariette, Les Mastabas de l'ancien empire, ed. G. C. C. Maspero, (Paris, i889), 3 I7.

[^34]:    ${ }^{12}$ See, for example, $L D_{\text {II, 19-23. Repeated 'baselines' carved in relief are preserved on some of the reliefs }}$ from the temple of Sahure, on display in the Cairo Museum. However, the best example is T.5.11.24.I7 (Special Register ${ }^{15303}$ ), now in one of the Museum's storerooms ( $\mathrm{R}_{37} \mathrm{~W}_{\mathrm{I}}$ ). This relief has seven carved 'baselines' below a fragment of a marsh scene which includes a magnificently carved crocodile, swamp weed depicted in an unusual rosette form, and part of a papyrus skiff. The quality of this relief, together with the estimated length of the papyrus skiff, suggest that the fragment belongs to an unusually large composition, probably from the tomb of an important official or (more likely) from a royal monument (e.g. the temple of Userkaf or Sahure). For a photograph of the relief, see Wreszinski, op. cit. 40 I.
    ${ }^{13} \mathrm{PM}_{\mathrm{III}^{2},}$, 582 and Plan LIX [D 52]; Mariette, op. cit. 316-21.

[^35]:    ${ }^{14}$ L. Borchardt, Denkmäler des alten Reiches (ausser den Statuen) im Museum von Kairo, II (Cairo, 1964), 14-15, Bl. 59 [1554].

    15 Ibid. I (Berlin, 1937), 243-4, Bl. 52.

[^36]:    ${ }^{16} \mathrm{PM}_{\mathrm{HII}}{ }^{2}$, 506.
    17 Wreszinski, Atlas zur altägyptischen Kulturgeschichte, I (Leipzig, 1923), pl. 393; Ägyptische Altertümer aus der Skulpturensammlung Dresden (Dresden, 1977), 32 [1 I], Abb. I. PM III ${ }^{2}, 309$ assigns the block to Giza for no stated reason, contra Wreszinski, loc. cit.
    ${ }^{18}$ For similar inscriptions see P. Montet. Scènes de la vie privée dans les tombeaux égyptiens de l'ancien empire (Strasbourg, 1925), 218-20.
    ${ }^{19}$ H. F. Petrie and M. A. Murray, Seven Memphite Tomb Chapels (London, 1952), pl. xvii [4]; PM $\mathrm{IHI}^{2}$, 578.
    ${ }^{20}$ J. Malek, in $B S E G 6$ (1983), 60-7 with figs.

[^37]:    ${ }^{21}$ Ägyptische Altertümer aus der Skulpturensammlung Dresden (Dresden, 1977), 32-3 [9-11], Abbs. 1, 12, 14. The last relief (Inv. Aeg. 751), which joins Museo Barracco no. i, is discussed in Harpur, $\mathscr{F} E$ A $_{71}$ (1985), 38-9, fig. 8.
    ${ }^{22}$ R. W. Reid, Illustrated Catalogue of the Anthropological Museum University of Aberdeen (Aberdeen, 1912), 194 [1555].
    ${ }^{23}$ W. C. Hayes, Scepter of Egypt, i (New York, 1953), ioı, fig. 57.
    ${ }^{24}$ Reid, op. cit. 193-4 [1553].

[^38]:    * The writer expresses appreciation to the Wilbour Library of the Brooklyn Museum and the Department of Egyptian Art of the Metropolitan Museum of Art for assistance and access to research materials. Comments on matters egyptological were generously offered by Drs Peter F. Dorman, Henry G. Fischer, Ogden Goelet, Jr., and Marsha Hill, but the writer alone is responsible for reinterpreting zoological aspects of the Meketre cattle models.
    ${ }^{1}$ H. E. Winlock, 'Digger's Luck. Remarkable Models Discovered in an Egyptian Tomb 4,000 Years Old', Scribner's Magazine, 69 (1921), 207-21; idem, Models of Daily Life in Ancient Egypt from the Tomb of Meket-Rēr at Thebes (Cambridge, 1955); W. C. Hayes, The Scepter of Egypt, I (New York, 1953), 263-4.
    ${ }^{2}$ A. Eggebrecht, Schlachtungsbräuche im alten Ägypten und ihre Wiedergabe im Flachbild bis zum Ende des Mittleren Reiches (München, 1973).
    ${ }^{3}$ W. Ghoneim, Die ökonomische Bedeutung des Rindes im alten Ägypten (Bonn, 1977).

[^39]:    ${ }^{4} \mathrm{G}$. Daressy, 'Trois points inexplorés de la nécropole thébaine', $A S A E 2$ (1901), 134-5.
    ${ }^{5}$ Winlock, Models, 12 ff .
    ${ }^{6}$ Ibid. 14.

[^40]:    ${ }^{7}$ Cairo Museum, JE.46724; described in Winlock, Models, 19-22, pls. 13-16, 58; also W. S. Smith, The Art and Architecture of Ancient Egypt (Harmondsworth, 1958), pl. 62A.
    ${ }^{8}$ Winlock, Models, i9-20. The cattle counting scene also serves in part as a device emphasizing Meketre's wealth and prestige. Egyptians generally held their cattle in high regard, and significant livestock holdings are usually recognized as a mark of affluence among pre-industrial pastoral societies, notably in the more urbanized market areas where increasing animal wealth can be diverted into other commodities of value. Cf. M. M. Horowitz, 'Ethnic Boundary Maintenance Among Pastoralists and Farmers in the Western Sudan (Niger)', in W. Irons and N. Dyson-Hudson (eds.), Perspectives on Nomadism (Leiden, 1972), 110-1 i; F. Barth, 'Capital, Investment and the Social Structure of a Pastoral Nomad Group in South Persia', in R. Firth and B. S. Yamey (eds.), Capital, Saving and Credit in Peasant Societies (London, 1964), 69-81. Plainly, Meketre could easily provision himself with beef, which also marks him as a man of means. His status and property holdings placed him well above the village pastoralist who, in order to cull animals for slaughter and consumption, would risk reducing his small herd's reproductive potential or diminishing its yield of dung, draft or burden power, or other renewable resources.
    ${ }^{9}$ Winlock, Models, 22.
    ${ }^{10}$ Winlock (ibid.) correctly estimated that few animals would have stood more than i m (39.37 in.) at the shoulders. Anthropological surveys of stature in recent, but pre-industrial, Egyptians show a range between

[^41]:    163.8 and 167.4 cm ( 5 ft .4 in . and 5 ft .6 in .) for various Nile populations, with small standard deviations in the range of 4.8 to 6.9 cm ( $1 \frac{7}{8}$ to $2 \frac{3}{4} \mathrm{in}$.). Batrawi, in citing these figures, judged them to be similar to those that would be obtained on average from dynastic period populations: A. Batrawi, 'The Racial History of Egypt and Nubia. Part II: The Racial Relationships of the Ancient and Modern Populations of Egypt and Nubia', fournal of the Royal Anthropological Institute, 76 (1946), 151.
    There is no guarantee that size relationships among pieces in the models are precise renderings of ancient Egyptian reality, but assuming that they are intentional approximations of the true proportions allows further inferences to be made about possible Egyptian cattle-keeping practices. As the validity of these inferences depends largely upon the reliability of the scale, which can vary in Egyptian representations, one must accept conclusions offered here with suitable caution. For the present analysis, maximum reliability has been assumed to afford a basis for maximum inference; many will judge some cases to be weaker and some stronger, according to their reading of the evidence.
    ${ }^{11}$ Cf. G. Dahl and A. Hjort, Having Herds. Pastoral Herd Growth and Household Economy, in (Stockholm, 1976), 28-33. Stockholm Studies in Social Anthropology.
    ${ }^{12}$ W. A. Beattie, Beef Cattle Breeding and Management (Sydney, 1980), 61, 73-5.
    ${ }^{13}$ Ibid. 74.

[^42]:    ${ }^{14}$ Winlock, Models, 22. Variation among ancient Egyptian cattle breeds is well attested in artistic representations and written documents: L $\ddot{A} \mathrm{v}, 258$; J. Vandier, Manuel d'archéologie égyptienne, v (Paris, 1969), 10; Ghoneim, op. cit., 47 ff.
    ${ }^{15}$ Winlock remarked about the crudeness of workmanship on this model (Models, 85). If the intention was not to depict deliberate modification of horn shape, then inferior craft may account for the presence of oryx-like horns on some of the cattle (cf. the African gemsbok, Oryx gazella).
    ${ }^{16}$ Ibid. 20. Similar counting scenes in Egyptian art frequently depict more than one scribe recording the proceedings. Dr Henry G. Fischer kindly offers the example of a cattle census in the tomb of Ti in which nine scribes are featured: H. Wild, Le Tombeau de Ti fasc. 3 (1966), pl. 168. Review scenes are sometimes identified in captions as occasions of livestock accounting, and in some cases it is clear that taxes are being levied. Dr Fischer adds that such a caption is associated with the closest parallel to the Meketre review: a Twelfth Dynasty tomb-painting from Deir el Bersheh, in P. E. Newberry, El Bersheh. Part I (The Tomb of Tehuti-hetep) (London, 1893-4?), pls. 18-19. The description is translated by Dr Fischer: 'Arriving at the pavilion of making a great census of herds on behalf of the king together with his (the nomarch's) herds of the funerary estate in the districts of the Hare Nome' (cf. ibid. 27).
    ${ }^{17}$ For example, M. Lambert, 'Le Premier triomphe de la bureaucratie', Revue Historique, 225 (1961), 37-44; J.-M. Kientz and M. Lambert, 'L'élevage du gros bétail à Lagash au temps de Lugalanda et d'Urukagina', RSO 38 (1963), у12-16; F. R. Kraus, 'Staatliche Viehhaltung im altbabylonischen Lande Larsa', Mededelingen der Koninklijke Nederlandse Akademie van Wetenschappen, Afd. Letterkunde, NR 29, no. 5 (1966).

    The extra 'paperwork' of pastoral record keeping, if it was done by the several scribes attending Meketre's review - or by the scribes in other Egyptian census scenes-need not have interfered with the model's more important function of depicting a tax assessment, and captions that underscore this latter aspect of the event in other representations might have been designed to honour the deceased as a dutiful supporter of pharaoh.
    ${ }^{18}$ MMA 20.3.9; Winlock, Models, 22-3, pls. 17, 59.

[^43]:    ${ }^{19}$ Beattie, op. cit. 166 ff .
    ${ }^{20}$ Winlock, Models, 22.
    ${ }^{21}$ Ibid.
    ${ }^{22}$ Dehorning is recommended between the second and fifth months, after horn buds have fully evolved and before the core's sinus cavity (cornual diverticulum) begins to expand from the cranial vault into the horn area. The procedure can be performed later, but care must be taken to protect the sinus from maggot infestation or infection. Cf. Beattie, op. cit. 65 f .

[^44]:    ${ }^{23}$ International Library of Technology, Principles of Animal Feeding, Principles of Animal Breeding, Dairy Barns and Equipment, Breeds of Dairy Cattle, Dairy-Cattle Management, Milk, Farm Butter Making, Beef and Dual-Purpose Cattle (Scranton, 1911-13), §51.50.
    ${ }^{24}$ Polledness in cattle is a heritable Mendelian factor that dominates over the normal horned condition: R. R. Shrode, in H. H. Cole and M. Ronning (eds.), Animal Agriculture (San Francisco, 1974), 244. As reported by Ghoneim (op. cit. 64-9), a hornless breed has long been suspected to have existed in Egypt. Andersson placed such animals within a separate race based on characteristic head form-e.g. E. Andersson, 'La Dénomination égyptienne des boeufs sans cornes', Sphinx, 16 (1912), 151-but Duerst suggested an evolution out of the long-horned variety based on similar general appearance-e.g. J. U. Duerst, Die Rinder von Babylonien, Assyrien und Ägypten (Berlin, 1890), 85. Unfortunately, judgement seems to be grounded on artistic evidence alone and not on the analysis of bone finds. Since representations do not explain why the horns are missing, researchers have been forced to look at other physical traits in an effort to assess the likelihood of separate breeds. Without a substantial body of faunal analytic data, it cannot be determined with certainty that cattle are hornless from birth or from polling, whereas the absence of a horn bud on the crania of young individuals would provide the most convincing testimony.

    Since none of the cattle reviewed by Meketre in the first model shows hereditary hornlessness, it seems unlikely that the hornless individuals in the stable model represent a genetically polled variant. An explanation for the selective horn mutilation remains elusive.
    ${ }^{25}$ Winlock presumed from lack of evidence that oxen were absent from ancient Egypt (Models, 21), but Boessneck and Vandier nevertheless strongly suspected their presence: J. J. Boessneck, Die Haustiere in Altägypten (München, 1953), 12; Vandier, op. cit. 9. Dr H. G. Fischer adds that the verb scb, formerly meaning 'circumsize', was the NK term for 'castrate'; cf. Wb iv, 43, II.

    Except where the kneeling animal obstructs the view, cattle of the stable and slaughterhouse models do not reveal the presence of a male organ as is seen on the animals of the review model. Since castration need not result in loss of the penis as well as the testes, it must be admitted that a model worker's inaccurate observation or labour short-cut may account for the organs' absence. It is, however, pertinent to point out that, as will be shown, castration tends to improve meat quality (according to modern standards). If Egyptians recognized and appreciated the same improvements, then the model builders might have incorporated an obvious visual cue to illustrate that Meketre's fare comprised the finer grade of beef from steers.
    ${ }^{26}$ A. A. Baîburtcjan, 'A New Method of Increasing the Productivity of Livestock [By Partial Castration]', Animal Breeding Abstracts 3 I (1963), 2.

[^45]:    ${ }_{27}$ J. D. Turton, 'The Effect of Castration on Meat Production and Quality in Cattle, Sheep and Pigs', Animal Breeding Abstracts, 30 (1962), 447.
    ${ }^{28}$ Ibid. 449-52.
    ${ }^{29}$ Ibid.; D. G. Topel, in H. H. Cole and M. Ronning (eds.), Animal Agriculture, 429-30; C. W. Emmens, in H. H. Cole and P. T. Cupps (eds.), Reproduction in Domestic Animals, 2nd edn. (New York, 1969), 89. In sheep also, castration of the young ram generally leads to reduced food conversion efficiency, muscle growth restriction, earlier maturation, and fattier body composition: J. B. Owen, Sheep Production (London, 1976), 66.
    ${ }^{30}$ Beattie, op. cit. 51.
    ${ }^{31}$ R. M. Koch, in H. H. Cole and M. Ronning (eds.), Animal Agriculture, 296.

[^46]:    ${ }^{32}$ M. H. French, 'Growth Rates of Sanga (Ankole) Calves’, Veterinary Record 55 (1943), 308.
    ${ }^{33}$ P. G. Snead, Beef Production in Zambia (Lusaka, 1972), 7 f.

[^47]:    ${ }^{35}$ Dr Ogden Goelet, Jr., has kindly pointed out that the Old Kingdom hieroglyphic rendering for a slaughterhouse combines the sign $n m \cdot t, \pi$ 'chopping block', with $q b h$, indicating 'cool'. Fischer suggested that $q b h$ might have been a titulary qualifier for a master butcher in the title list of $P h-r-n f r: H$. G. Fischer, 'The Butcher Ph-r-nfr', Orientalia, 29 (1960), i71-8. But the term makes sense also as a straightforward descriptive reference to the cooling process. Then as now, preservation of fresh killed meat depended upon draining the carcass of blood and quickly bringing down the body temperature. Hanging meat high above the slaughterhouse floor would expose it to free-moving currents of dry air, which would rapidly bring about moisture loss through evaporation, thus dissipating heat even in the extremely hot Egyptian climate. With proper insulation, and a sloping roof channeling warm air out the front windows, Meketre's butcher shop might have been quite cool by comparison to outside temperatures. See also Eggebrecht (Schlachtungsbräuche, 141) who translates 'der für die Kühlung des Schlachthauses sorgt'.

    The discovery of an Old Kingdom slaughterhouse associated with the royal mortuary complex of Raneferef invites comparison: M. Verner, 'A Slaughterhouse from the Old Kingdom', MDAIK 42 (1986), i81-9. The overall size of the Old Kingdom structure was $15 \times 27 \mathrm{~m}$, of 405 sq. m, fully twenty times the size of Meketre's structure. The Old Kingdom slaughtering floor was only a small fraction of the total plan, however, with place for perhaps three animals (judging from the three recovered binding stones that had been set into the floor to secure the beasts). Meketre's shop is nearly all work area and lacks the many storage magazines that made up the bulk of the royal installation. The three doors opening under the balcony of the Middle Kingdom model may have led in parallel manner to storage rooms, presumably for meat and meat products. Winlock (Models, 23) also assumed a storage function for this space but was unsure exactly what was stored.
    ${ }^{36}$ Fischer has commented that the colour of the substance cooking in the braziers, whitish with dabs of red, suggests something other than blood, perhaps fat: Fischer, '"Milk in everything cooked" (Sinuhe B 91-92)', in Fischer, Varia, Egyptological Studies, I (New York, 1976), 99 n. 14. The linkage between picture elements makes it more likely that fresh blood is being conveyed to the fire, since no indication of fat trimming prepares the viewer to interpret the activity as a rendering operation. Although the logical flow of the action presents a stronger case for blood, and the odd colouration might be explained as a paler froth covering the slowly boiling liquid underneath, there is admittedly no absolute certainty in either identification. But see Vandier (op. cit. 173-4) for tomb scenes in which the blood of slaughtered animals is collected in basins by attendants and carried away. Fischer (op. cit.) cites other examples of blood used as food by Egyptians.

[^48]:    ${ }^{37}$ V. Vinck, Manuel technique pour bouchers et charcutiers (Anvers, 1948), 3 18.
    ${ }^{38}$ A. W. Goedert and S. K. Maddux (comp.), The Packers' Encyclopedia, II. Pork Packing, rev. edn. (Chicago, 1932), 12.
    ${ }^{39}$ Vinck, op. cit. 32 I.
    ${ }^{40}$ Ibid. 318.
    ${ }^{41}$ Goedert and Maddux, op. cit. 333. ${ }^{42}$ Vinck, op. cit. 324. ${ }^{43}$ Winlock, Models, 23.
    ${ }^{44}$ E. Chassinat, 'Note sur le titre . . .', BIFAO 4 (i905), 223; Vandier, op. cit. 134-6; W. J. Darby, P. Ghalioungui, and L. Grivetti, Food: The Gift of Osiris, i (New York, 1977), i14; H. G. Fischer, op. cit. 98-9 n. 14 .

[^49]:    ${ }^{45}$ Winlock, Models, 25.
    ${ }^{46}$ Ibid.; Darby et al., op. cit. 147, cite more examples of elongated cuts depicted in butchering scenes, referring to them as 'filets'. Cf. also P. Montet, 'Les Scènes de boucherie dans les tombes de l'Ancien Empire', BIFAO 7 (1910), 4i-65.

[^50]:    47 Winlock, Models, 25.

[^51]:    ${ }^{48}$ For a recent treatise on the methods and potentials of faunal analysis in archaeology see B. Hesse and P. Wapnish, Animal Bone Archeology (Washington, 1985).
    ${ }^{49}$ Cf. A. von den Driesch and J. Boessneck, 'Schnittspuren an neolithischen Tierknochen: Ein Beitrag zur Schlachttierzerlegung in vorgeschichtlicher Zeit', Germania, 53 (1975), 1-23.
    ${ }^{50}$ Important reports on Godin Tepe include: T. C. Young, Jr., 'Excavations at Godin Tepe: First Progress Report', Royal Ontario Museum, Art and Archaeology Occasional Paper, 17 (Toronto, 1969); T. C. Young, Jr., and L. D. Levine, 'Excavations of the Godin Project: Second Progress Report', Royal Ontario Museum, Art and Archaeology Occasional Paper, 26 (Toronto, 1974); R. C. Henrickson, Godin Tepe, Godin III, and Central Western Iran ća. 2600-1500 BC, Ph.D. dissertation, University of Toronto (Toronto, 1984). Initial results of faunal analysis appear in A. S. Gilbert, Urban Taphonomy of Mammalian Remains from the Bronze Age of Godin Tepe, Western Iran, Ph.D. dissertation, Columbia University (New York, 1979). Both Henrickson and Gilbert dissertations are distributed by University Microfilms International, Ann Arbor.
    ${ }^{51}$ Eggebrecht, op. cit. 31-2.

[^52]:    ${ }^{52}$ Indian Council of Agricultural Research, Anatomy of the Ox (New Delhi, 1964), 509 ff .
    ${ }^{53}$ L. Klebs, Die Reliefs des alten Reiches (2980-2475v. Chr.) (Heidelberg, 1915), 124; idem in Die Reliefs und

[^53]:    Malereien des mittleren Reiches (VII.-XVII. Dynastie ca. 2475-158o v. Chr.) (Heidelberg, 1922), 172, Klebs states that Middle Kingdom ritual slaughter was similar to that of the Old Kingdom, but without additional descriptive detail.
    ${ }^{54}$ Eggebrecht, op. cit. 32-3. ${ }^{55}$ Gilbert, op. cit. 236-9.

[^54]:    ${ }^{56}$ Gilbert, op. cit. 239.
    ${ }^{57}$ Ibid. 236.

[^55]:    ${ }^{58}$ Montet describes a number of tomb scenes in which 'filets' are being removed from slaughtered cattle: $\mathbf{P}$. Montet, Les Scènes de la vie privée dans les tombeaux égyptiens de l'Ancien Empire (New York, 1925), 170-1; see also Vandier, op. cit. 168-9.

    The significance of the number seventeen remains unclear: it might represent an accurate inventory of specific muscle groups separated during routine butchering operations, or it might be a purely arbitrary amount suggesting 'many'. Similar numbers of sides, quarters, and muscle bundles hanging on the string-and boiling in a nearby cauldron-in the butchering scene from Antefoker's tomb (fig. 3) suggest that some meaning may attach to the quantity of triangles.
    ${ }_{59}$ Gilbert, op. cit. 24I-3.

[^56]:    ${ }^{60}$ Ibid. 247-5 I. Hecker has produced preliminary information on fauna from Amarna: H. M. Hecker, 'Preliminary Report on the Faunal Remains from the Workmen's Village', in B. J. Kemp (ed.), Amarna Reports, I (1984), I 54 ff. The collection represents locally herded and hunted species as well as butchered pieces brought in from outside. Cattle seem to fall into this last category, and based upon the brief data provided, the bovine bones appear to have been predominantly cleaver-chopped into pieces rather than knife-cut to separate meat from bone. It is suggested that the chunks of beef may have been preserved in jars for distribution to the state-employed workers (ibid. i60, especially note 9). Since the context of a poor labourers' village does not compare with that of a landed noble's estate, the butchering mark evidence from the former does not necessarily illuminate the manner of carcass reduction in the latter. More of Hecker's work presented in detail would be of great value in comparative studies of faunal exploitation as well as descriptive/explanatory exercises such as the present one.

[^57]:    * For assistance received in the course of preparing this paper for publication I am grateful to Cyril Aldred, Christine Barratt, Dr M. L. Bierbrier, Professor J. R. Harris, Peter Hayman, T. G. H. James, Dr Rolf Krauss, Professor G. T. Martin, Robert Morkot, Dr A. J. Spencer, and Angela Thomas.
    ${ }^{1}$ W. C. Hayes, The Scepter of Egypt, iI (New York, 1959), 294.
    ${ }^{2}$ The main works relating to Kiya and her monuments are: Yu. Ya. Perepelkin, Perevorot Amen-khotpa IV, i (Moscow, 1967), parts 3-4, 114 ff. and passim; idem, The Secret of the Gold Coffin (Moscow, 1978) (a translation of Taǐna Zolotogo Groba (Moscow, 1968)), passim; idem, Kéěe i Semnekhkeré (Moscow, 1978), passim; J. R. Harris, CdE 49 (1974), 25 ff.; R. Hanke, $S A K 2$ (1975), 79 ff.; idem, Amarna-Reliefs aus Hermopolis (Hildesheim, 1978), esp. 188 ff . Cf. further J. R. Harris and L. Manniche, Louisiana Revy, i7/i (Oct. 1976), 10 f.; L. Manniche, $G M_{1} 8$ (i975), 33 ff.; W. Helck, $S A K_{4}$ (1976), i 17 ff.; idem, $L \ddot{A}$ ini, 422 ff. (deleting his n. i6); idem, MDAIK 40 (1984), 159 ff . Perepelkin's views are in the main accessible to me only through Gold Coffin and through summaries by R. Holthoer (kindly made available to me by J. R. Harris) and E. S. Bogoslovskij, GM 6I (1983), 53 ff. Cf. idem, $G M 93$ (i986), 85 f.
    ${ }^{3}$ (i) MMA 20.2.I i: Hayes, op. cit. II, 294; H. W. Fairman, $\mathcal{F} E A 47$ (i96ı), 29, fig. i, pl. vi, i. (ii) British Museum EA 6590 I : Fairman, $\mathcal{f} E A 47$, 29 f., fig. 2; for purposes of comparison, a photograph of this fragment is published here as pl. XVII, 2. A probable fragment from a third jar is considered below, no. V.
    ${ }^{4}$ T. E. Peet and C. L. Woolley, The City of Akhenaten, I (London, 1923), pl. 32, 3; cf. A. Thomas, CdE 57 (i982), i in. 4 (Bolton i9.23.3c, unpublished). Kiya's titulary is found in both 'full' and 'shortened' forms (cf.
    
     $r$ are sometimes omitted; $d y$ occurs only upon the KV 55 coffin ( n .8 below). The shortened version of the lady's
     is omitted on the Berlin kohl-tube (n. 9 below), whilst a further variation on Kiya's 'shortened' titulary is to be found upon the British Museum kohl-tube fragment (described below, no. VI).
    ${ }^{5}$ Cf. Harris, $C d E 49,27$ ff. with accompanying notes.
    ${ }^{6}$ Petrie Museum, University College London, UC 24382: cf. Harris, CdE 49, 26 and n. 5, 28, fig. a; J. Samson, Amarna, City of Akhenaten and Nefertiti (2nd edn., Warminster, i978), i19, fig. 60.

[^58]:    ${ }^{20}$ The precise archaeological context of the North Palace pieces will presumably be considered in the forthcoming City of Akhenaten, iv.

[^59]:    ${ }^{21}$ The plaster fill has doubtless been cleared fully from the $p ;$ at the foot of the middle column in more recent times.
    ${ }^{22}$ Cf. British Museum Research Laboratory report 5017, dated 21 November 1983, in the Department of Egyptian Antiquities, where it is suggested that 'the plaster was accidentally applied to the surfaces of the monument, perhaps due to careless workmanship during an attempt at repair in modern times'. It is more likely, however, that the fill is ancient, the intention having been to leave visible only the left-hand column of text-i.e. the palimpsest name and titulary of Meritaten.

    Two samples of the plaster employed to fill portions of the text on EA 581 79 have now been analysed by X-ray diffraction. Detlef G. Ullrich, for whose generous co-operation the writer is grateful, reports that the layer in both samples is composed of gypsum $\left(\mathrm{CaSO}_{4} 2 \mathrm{H}_{2} \mathrm{O}\right)$ and calcite $\left(\mathrm{CaCO}_{3}\right)$, at a ratio of roughly 2 : 1 . According to Herr Ullrich, this mixture is certainly ancient, though by the absence of anhydrite ( $\mathrm{CaSO}_{4}$ ) it differs from plaster collected at Amarna by the Deutsche Orient-Gesellschaft between I9 I and i914. More similar in composition to the plaster fill of EA 58179 are two plaster lion heads in West Berlin (Ägyptisches Museum, Berlin, 12622 and 13253), though the precise date of these pieces remains uncertain.
    ${ }^{23}$ For the palimpsest $\left[h q^{3} n f r\right] m r(y)[i t n]$, cf. Hanke, Amarna-Reliefs, 257, pl. $45(\mathrm{~V}=5)$.

[^60]:    ${ }^{27}$ Not in Dawson and Uphill, op. cit. The Revd George Denis Nash (1866-1943) formed a large collection of antiquities under the guidance of A. W. Shorter and V. S. Golenischeff among others. This collection was sold through Spink, following the death of Nash's widow, in 1959 and 1960, a proportion (including the Nash ostraca, published by J. Černý and A. H. Gardiner, Hieratic Ostraca, I (Oxford, 1957)) being acquired by the British Museum. My thanks are due to M. L. Bierbrier for access to his notes on Nash, from which the above details have been abstracted.
    ${ }^{28}$ Fairman, $\mathcal{F} E A$ 47, 29 f., fig. 2. Cf. pl. XVII, 2 below. ${ }^{29}$ Cf. n. 4 above.
    ${ }^{30}$ Note, however, that the left-hand edge shows evidence of having been broken comparatively recently (though before it reached the British Museum). It is conceivable, therefore, that the relevant portion of the text may one day turn up.

[^61]:    ${ }^{33}$ Cf. N. de G. Davies, The Rock Tombs of El Amarna, in (London, 1905), pls. $8=11$, 30. For figures in the round, cf. the references cited by J. R. Harris, $\operatorname{AcOr} 38$ (1977), 9 n. 26. In addition, Cyril Aldred draws my attention to the figure of an Amarna 'princess' published by H. Schäfer, Amarna in Religion und Kunst (Leipzig, 1931), pl. 37 (Berlin 2 1.690).
    ${ }^{34}$ For the Kiya structures within the Great Temple, cf. Hanke, Amarna-Reliefs, 196.
    ${ }_{35}$ The possibilities are outlined in C. Aldred, Akhenaten, Pharaoh of Egypt-a New Study (London, 1968), 242 f.; cf. most recently D. B. Redford, Akhenaten, the Heretic King (Princeton, 1984), 188 and 191. The traditional view has been questioned already by Helck, $C d E 44$ (i969), 200 f.; cf. P. Munro, $Z \ddot{A} S$ ı05 (1969), i 12 n. 8, and Harris, $C d E 49,29$ and n. i.
    ${ }^{36}$ Cf. Harris and Manniche, Louisiana Revy $17 / \mathrm{I}$, ı 0 f. Contrast Helck's analysis, MDAIK 40 (1984), 59 ff.
    ${ }^{37}$ Cf. Manniche, $G M$ I8, 34, 37 n. 20, who suggests the possibility of Kiya's equation with Tadukhepa. Redford's candidate, Gilukhepa (Akhenaten, i50), was considered and rightly discounted by Manniche, loc. cit.
    ${ }^{38}$ On the two cosmetic jars published by Fairman, n. 3. above.
    ${ }^{39}$ Cf. the Petrie docket, n. io above. It has been suggested (by Perepelkin among others, presumably on the basis of the vintner's title [hry]brh-for which cf. Helck, Materialien zur Wirtschaftsgeschichte des Neuen Reiches, iv (Wiesbaden, 1963), 728; J. Cerný, $\mathcal{F} E A 50(1964), 38$ ) that the docket published in Frankfort and Pendlebury, op. cit. II, pl. 58, i6 (cf. n. Io above), is to be dated rather later, to Year [1]6. Kiya's prominence as late as this is perhaps unexpected-but, as Manniche points out ( $G M$ I $8,37 \mathrm{n}$. 18), 'the estate may still have been known as that of $t ;$ špst (without the name) even after her death'.
    ${ }^{40}$ For which cf. n. 4 above. I am not convinced by Hanke's arguments (Amarna-Reliefs, 188 ff .) that any version of Kiya's titulary either incorporated or was in any sense equivalent to the title hmt nsw-nor by the corollary that 'Kiya' was merely a Kosename of Nefertiti.

[^62]:    ${ }^{41}$ Cf. Roeder, Amarna-Reliefs, pl. i i, no. 442-VIIIA (= Hanke, Amarna-Reliefs, 190 ff., pl. i57); and, further, Harris, $C d E 49,30$ n. 6.
    ${ }^{42}$ Cf. Harris, loc. cit. The origin and context of Hermopolis block no. 83 I-VIIIC (Roeder, Amarna-Reliefs, pl. 106), which mentions 'the king's bodily son, his beloved, Tutankhaten', are unfortunately obscure.
    ${ }^{43}$ Perepelkin, Gold Coffin, 85 ff . and passim, argues to the contrary that Kiya went on to rule as a hitherto unrecognized coregent of Akhenaten before 'Smenkhkare' acceded to that position. This thesis is presumably expanded in the same author's Kéié i Semnekhkeré.
    ${ }^{44}$ Cf. Harris, $C d E 49,30$ n. 8.
    ${ }^{45}$ For the appropriation of Kiya's funerary equipment, cf. n. 8 above.
    ${ }^{46}$ C. N. Reeves, $G M 30$ (1978), 6ı ff.; a further instance (Cairo JE 37505) noted idem, BiOr 38 (198ı), $297=$ idem, $O L Z 78$ (1983), 548, now reproduced in R. Hari, Iconography of Religions xvi, 6. New Kingdom. Amarna Period (Leiden, i985), pl. 32a. Cf. GM 94 (i986), 85.
    ${ }^{47}$ Harris, $G M_{4}$ (i973), 15 ff.; idem, AcOr 35 (1973), 5 ff.; idem, AcOr 36 (1975), i iff.

[^63]:    ${ }^{1}$ For information and practical assistance I am grateful to Mrs B. Adams, Mrs H. C. Adamson, Dr M. L. Bierbrier, Mrs M. Hill, Dr D. Jones, Dr G. Kelling, Professor K. A. Kitchen, Dr M. F. Laming Macadam, Mrs D. N. E. Magee, Dr J. Malek, Mlle G. Pierrat, and the late Professor T. W. Thacker. My principal debt is to Dr K. Bosse Griffiths for her encouragement to study the Wellcome material since its arrival in Swansea, and to her, Professor J. Gwyn Griffiths, and Dr A. B. Lloyd for the provision of every facility, including the excellent photographs taken by Mr R. P. Davies.
    ${ }^{2}$ An accompanying label reads: ' 13703 QQ TP EGY Small glazed tile with inscription on all sides, $3 \times 2$ " thick. Soth. 26/6 to 6/7/22. Lot 1550 . McGregor. Case No. 7407.' See [A. E. Knight,] Catalogue of the MacGregor Collection of Egyptian Antiquities (London, 1922), 200, where the plaque is one of three objects forming lot ${ }_{1} 550$, and is described as 'a small glazed Tile, 3 in. by 2 in. by in. deep, with inscriptions on all sides'. For the Revd. William MacGregor, see W. R. Dawson and E. P. Uphill, Who was Who in Egyptology (2nd edn., London, 1972), r89-90. Something of the manner in which Wellcome assembled his collections is described in H. Turner, Henry Wellcome (London, 1980), 41-52, and J. Symons, Museum Ethnographers Group Newsletter, 20 (1987), 1-20; for their recent distribution: G. Russell, The Wellcome Historical Medical Museum's Dispersal of Non-Medical Material, 1936-1983. (Supplement to Museums fournal, 86, London, 1986.)

[^64]:    ${ }^{3}$ A. Lucas (ed. J. R. Harris), Ancient Egyptian Materials and Industries (4th edn., London, 1962), I58-6i. Dr Kelling's observations are consistent with the preferred use of natural sand rather than artificially powdered quartz: see also A. Kaczmarczyck and R. E. M. Hedges, Ancient Egyptian Faience (Warminster, 1983), 188-9. Although well attested as a cement for inlays formed of other materials (ex. U. Hölscher, The Mortuary Temple of Ramses III, II (Chicago, 1951), 39-40, and in general Lucas op. cit. 76-9) gypsum paste seems rarely to have itself been employed as an inlay: see, however, F. C. J. Spurrell in W. M. F. Petrie, Medum (London, i892), 29.
    ${ }^{4}$ Cf. The Earl of Carnarvon and H. Carter, Five Years' Explorations at Thebes (London, 1912), frontispiece (electrum with wooden base); and for an exceptional example of a wooden statuette set in other than a wooden base, B. Hornemann, Types of Egyptian Statuary, I (Copenhagen, 1951), pl. i91. For composite statues: J. D. Cooney, fournal of Glass Studies, 2 (1960), $21-9$, where the head correctly identified as of glass ( $22=\mathrm{S}$. Birch, Catalogue of the Collection of Egyptian Antiquities at Alnwick Castle (London, 1880), 71-2, no. 510) is now illustrated: V. A. Donohue in University of Durham; Gulbenkian Museum of Oriental Art and Archaeology (Durham, 1971), pl. 8; J. Ruffle, The Ancient Egyptians (Durham, 1980), 13. Cf. J. Samson, feA 59 (1973), 47-59.
    ${ }^{5}$ For the type, J. Vandier, Manuel d'archéologie égyptienne, iI (Paris, 1958), 434-6.
    ${ }^{6}$ Cf. E. Iversen, Canon and Proportions in Egyptian Art (2nd edn., Warminster, 1975), 29.

[^65]:    7 That Nebnetjeru held office under Sethos I is indicated by his portrayal as High Priest in Paser's tomb, with the cartouches of Sethos I upon his robe, and is reflected also in texts and scenes dated to this reign by Paser's characterization, when already vizier, as 'son of the High Priest of Amun, Nebnetjeru': see K. A. Kitchen, Acts of the First International Congress of Egyptology (Berlin, 1979), 386; cf. G. Lefebvre, Histoire des grands prêtres d'Amon de Karnak (Paris, 1929), i15-17. A fragmentary graffito (v. 3 in the list below) dated to year 17 of Ramesses II and mentioning Nebnetjeru, which had led H. Kees (Das Priestertum im ägyptischen Staat (Leiden and Cologne, 1953), ir8) to posit a second Nebnetjeru as High Priest at this time, and W. Helck (Zur Verwaltung des Mittleren und Neuen Reiches (Leiden and Cologne, 1958), 313-14) to argue that the father of Paser only succeeded to the High Priesthood under Ramesses II, has been convincingly shown by Kitchen to be a posthumous reference within an inscription relating to Paser himself (loc. cit.; $\mathcal{F E A}$ 61 (1975), 267). For the erroneous suggestion that Nebnetjeru was High Priest not in Thebes but in Hermonthis, first raised and rejected by Lefebvre (loc. cit.; see also n. 14 below), and later urged by R. Anthes, $Z \ddot{A} S 67$ (1931), 2-9, see Kees, op. cit. 98-9. The date of Nebnetjeru's appointment is uncertain (Lefebvre, op. cit. 115 ; Kitchen, Acts, 389 n .29 ); a terminus ad quem for his demise is the Festival of Opet in Ramesses II's first regnal year, at which Nebwenenef was elected to the High Priesthood (K RI III, 282-5).
    ${ }^{8}$ K RI 1, 299, io ff.
    ${ }^{9}$ A. H. Gardiner, $A E O$ I, 23*. See also R. el-Sayed, Documents relatifs à saïs et ses divinités (Paris, 1975), 32.
    ${ }^{10}$ J. Yoyotte, Annuaire EPHE 74 (1966), 87-8; Kitchen, Pharaoh Triumphant (Warminster, 1985), 28

[^66]:    ${ }_{22}$ The attribution to the vizier Paser of a shawabty from Abydos, Glasgow Art Gallery and Museum 00-126bk (D. Randall-Maciver and A. C. Mace, El Amrah and Abydos (London, 1902), 77, 86, pl. 39; Cerný, loc. cit.) is mistaken.

[^67]:    ${ }^{23}$ A gold clasp from the Serapeum has been attributed to Paser, apparently without inscriptional support: G. Maspero, Essais sur l'art égyptien (Paris, 1912), 181.

[^68]:    ${ }^{24}$ Vandier, Manuel, III, 466, 485-6, 496. For the wig, see also H. D. Schneider, Shabtis, I (Leiden, 1977), 166; and for the knot: M. A. Murray, Ancient Egypt, 7 (1922), 14-16; Gardiner, $E G^{3} 506$ (22).
    ${ }^{25}$ For the type and its function cf. H. Kayser, Die Tempelstatuen ägyptischer Privatleute im mittleren und im neuen Reich (Heidelberg, 1936); H. Ranke, MDAIK 12 (1948), 448-66; E. Otto, Orientalia, ns 17 (1948), 448-66; J. van Dijk, OMRO 64 (1983), 49-58.
    ${ }^{26}$ The full annotation reads: 'One of the Votive Statues recently found by Hekekyan Bey. Memphis. Temple of Vulcan. An inscription on the apron of a kneeling figure of gray granite, which bears upon the right shoulder the Cartouch of Rameses the Great of Sesostris. It measures from the knees to the Crown of the head 2 feet 3 inches; + with the base 2 (f)-6 ins. The figure holds in his hands a small statuette of Pthath or Vulcan, which is minus a head-a deep hole in the neck shows the head to have been removed, possibly because made of a more precious material. This statuette was 8 inches high.' Griffith Institute, Lieder squeezes, i6ıA. For details of the work of Hekekyan and its record see J. Malek, $\mathcal{f E A} 72$ (1986), ioi-12. The site was visited by H. Brugsch in July 1853, two months after Mrs Lieder. That the statue was not amongst those noticed by him and described in Reiseberichte aus Aegypten (Leipzig, 1855) suggests that it may by then already have been removed: Malek, op. cit. 107.

[^69]:    ${ }^{27}$ Dawson and Uphill, op. cit. 160.

[^70]:    ${ }^{28}$ The first numbers refer to the list above pp. 107-11. The glimpse to be had in the foreground of $L$. Borchardt, Statuen und Statuetten von Königen und Privatleuten, Iv-v (Berlin, 1934-6), pl. 163 ( 1 134), where the right shoulder of a statue bearing the appropriate inscription is to be seen, is probably of Cairo CG 42 r64.
    ${ }^{29}$ Now in the Albright-Knox Art Gallery in Buffalo: see W. K. Simpson, MDAIK 37 (1981), 436.
    ${ }^{30}$ 'Prophet of Anupu or Anubis, who dwells in the divine abode'; 'the divine . . . all': S. Birch, Catalogue of the Egyptian Antiquities at Alnwick Castle (London, 1880), 72.
    ${ }^{31}$ G. Roeder, $A$ IPHOS 3 (1936), 398-402. ${ }^{32}$ MDAIK 30 (1974), 16-17. ${ }^{33}$ Loc. cit.
    ${ }^{34}$ For information on a number of points I am indebted to Professor O. R. Gurney, Dr D. Jones, and Dr J. Malek.

[^71]:    ${ }^{35}$ Cf. W. Helck, Untersuchungen zu den Beamtentiteln des ägyptischen alten Reiches (Glückstadt, 1954), 112 n . 5; H. G. Fischer, Egyptian Titles of the Middle Kingdom (New York, 1985), 21. For ḥm in place of an expected ḥm-ntr see H. Junker, $A S A E 49$ (1949), 21 i; P. Vernus, Athribis (Cairo, 1978), 178-9.
    ${ }^{36}$ J. E. Quibell, $A S A E 3$ (1902), 258, corrected by A. Kamal, $A S A E 12$ (1913), 137; and A. M. Blackman, FEA 3 (1916), 243-4.
    ${ }^{37}$ W. V. Davies et al., Saqqara Tombs I, The Mastabas of Mereri and Wernu (London, 1984), pls. 27-9; Junker, $A S A E 49$ (1949), 207-15, who argues that these titles reflect their holder's participation in a specific religious drama, a view at variance with, but not necessarily excluding, the present interpretation.
    ${ }^{38}$ Fischer, $Z \ddot{A} S 86$ (1961), 2 I--8.
    ${ }^{39}$ Kees, $R T 36$ (1914), ı-ı6; Blackman, $\mathscr{f} E A 5$ (1918), 148-65; Gardiner, $\mathscr{f} E A 24$ (1938), 84.
    ${ }^{40}$ For these associations see the references to Blackman, Fischer, Gardiner, and Junker in the preceding nn. 37-9 above.
    ${ }^{41}$ Cf. Blackman, $\mathcal{H} E A 3$ (i916), 243-4; Kees, $Z \ddot{A} S 64$ (1929), ıо0-2.
    ${ }^{42}$ Compare BD Spells in 2 and II3. On the concept of the four children of Horus see P. Munro, in U. Luft et al. (eds.), Festschrift zum 150 jahrigen Bestehen des Berliner ägyptischen Museums (Berlin, 1974), 195-204.
    ${ }^{43}$ F. von Bissing and H. Kees, Das Re-Heiligtum des Königs Ne-woser-re (Rathures), II (Leipzig, 1923), no. 44 d .
    ${ }^{44}$ In Spell 1947 their dancing for the resurrection of the king may be paralleled by the mww-dancers, themselves apparently to be equated with the souls of Pe : Junker, MDAIK 9 (1940), 1-39.

[^72]:    ${ }^{45}$ See L. V. Z̆abkar, A Study of the Ba Concept in Ancient Egyptian Texts (Chicago, 1968), 30-2, and the references there quoted.
    ${ }^{46}$ An analysis of the full range of situations in which the souls function is consistent with an essential participation at royal epiphanies: see Z̆abkar, ibid. 15-36. In this connection cf. the title hrp šmsw $\mathrm{H} \boldsymbol{r} r$ amongst those of Wernu: Davies et al., op. cit., pls. 27-9.
    ${ }^{47}$ See Kees, Der Götterglaube im alten Ägypten (3rd imp., Berlin, 1977), 284.
    ${ }^{48}$ From the combined data, selected for other purposes and therefore not exhaustive, in K. Baer, Rank and Title in the Old Kingdom (Chicago, 1960), 169-95, 205-21; and N. Kanawati, The Egyptian Administration in the Old Kingdom (Warminster, 1977), 104-30, it emerges that of forty-two holders of the title hry-š̌ts n pr-dwst fourteen are viziers of whom two are also $s ; n s w$, and four others, without the vizieral title, are $s ; n s w$; whilst of the forty-eight remaining viziers listed fourteen are also s; nsw. Cf. B. Schmitz, Untersuchungen zum Titel $S_{3}$-Njśwt 'Königssohn' (Bonn, 1976), 84, 166; and N. Strudwick, The Administration of Egypt in the Old Kingdom (London, 1985), 287, 312-13. Strudwick points out that throughout the Fourth Dynasty and in the early part of the Fifth every vizier was termed a $s 3$ nsw: ibid. 308-9, table 29.
    ${ }^{49}$ CCG 20539 (H. O. Lange and H. Schäfer, Grab-und Denksteine des mittleren Reiches, II (Berlin, 1908), 153.
     $h r y$ sšts $n$ pr-rnh, no. 4 in Gardiner's list ( $\mathcal{F} E A 24$ (1938), i60), an association apparently at variance with his distinction for the earlier periods between the hwt-rnh and the $p r-r n h$ : ibid. 83, 90, 166. For the relationship between the hwt-rnh and the pr-dwst see Blackman, $\mathcal{f} E A 5$ (1918), 149-50; Gardiner, op. cit. 84-5.
    ${ }^{50}$ H. R. Hall, HTBM v, pl. 25 (888); L. Habachi, Kush 7 (1959), 46-7.
    ${ }^{51}$ See V. Loret, $R T_{14}$ (ı893), 117-18; G. Legrain, BIFAO 54 (1954), ı96; H. Wild, BIFAO 54 (1954), ı96;

[^73]:    ${ }^{52}$ O. Berlev, $\mathcal{f} E A 60$ (1974), 109 n. 16; Simpson, loc. cit. who corrects the former's misattribution of the statue at Buffalo to the Twelfth-Dynasty vizier.
    ${ }^{53}$ Compare also, on Paser, Cairo CG. 42 164, the title hrp hawwt nt dšrt (Helck, Beamtentiteln, 35-6, in reference to the apparently equally ancient royal traditions of Sais. Cf. Zabkar, op. cit. 19-20 and the references there quoted; and el-Sayed, Documents relatifs à Saïs, 1 I n.f. For the association of the ḥwwt nt dšrt and the king's appearance in his carrying-chair, see Pyramid Texts, Spell 56.
    ${ }_{54}$ Pace H. G. Evers, Staat aus dem Stein, II (Munich, 1929), 33 (222). Cf. Legrain, Statues et statuettes de rois et de particuliers, I (Cairo, 1906), 27, pl. 26 (42044): temp. Ammenemes II.
    ${ }^{55}$ I hope to publish a review of this vexed question in the near future.
    ${ }^{56}$ A. Wilkinson, Ancient Egyptian fewellery (London, 1971), 83-90.
    ${ }^{57}$ Cf. Borchardt, Statuen und Statuetten, II (Berlin, 1925), 2-4, pl. 60 (381, 382): Sesostris II.
    ${ }^{58}$ H. Bonnet, Reallexikon der ägyptischen Religionsgeschichte (Berlin, 1952), 262-3. The frequency with which the cartouches receive additional iconographic elaboration in these inscriptions suggests that they here represent specific personifications: see A. Radwan, $S A K 2$ (1975), 21 3-34.
    ${ }^{59}$ In general, the prenomen appears on the right arm/shoulder and the nomen either adjoining it on the chest, or on the left arm/shoulder. Ex. Tuthmosis III: Borchardt, op. cit. iv-v, 42 (i057); Legrain, op. cit. 72, pls. 73 (42123), 74 (42124); Amenophis II: Borchardt, op. cit. II, $115-16$, pl. 96 (566); Legrain, op. cit. 75-6, pl. 74 (42125); 76-7, pl. 75 (42126); Tuthmosis IV: Borchardt, op. cit. III (Berlin, 1930), 152 (916); Amenophis III: Borchardt, op. cit. if: 97-8, pl. 92 (55 ) ; 145-6, pl. 106 (590).
    ${ }^{60}$ Apparently exceptional before the reign of Akhenaten, see next note. For an ambiguous example cf. Legrain, op. cit. 7 I , pl. 72 (42122), where on the right shoulder the prenomen of Amenophis I is associated with the name of Amun-Min and on the left the prenomen of Tuthmosis III with that of Khons. That the divine names are here to be understood as royal epithets is perhaps suggested by Legrain, op. cit. 34-5 (42057), where the prenomen of Tuthmosis III is qualified as mry 'Imn; E. Naville and H. R. Hall, The XIth Dynasty Temple at Deir el-Bahari, III (London, 1913 ), pl. 5 (3), where the prenomen of Amenophis II is shown on the right shoulder of a scribal statue, whilst on the palette that rests on the left shoulder appears ri-hprw-r¢ mry 'Imn. Compare, however, C. Leemans, Aegyptische Monumenten van het Nederlandsche Museum van Oudheden te Leyden II (Leiden, 1844), pl. 4 (Di9). For an early occurrence of the figure of a god (Amun) alone see the statue in the Metropolitan Museum of Horemheb as a scribe: H. E. Winlock, $\mathscr{F} E A$ io (1924), i; W. C. Hayes, The Scepter of Egypt, il (New York, 1959), 304.

[^74]:    ${ }^{61}$ Examples conveniently reproduced in C. Aldred, Akhenaten and Nefertiti (New York, 1973), 29-31, 92-3. Cf. the parallel statue of Nefertiti, ibid. ıo6. For the Aten's 'regality' see, for example, B. Gunn, $\mathscr{F} E A 9$ (ı923), ${ }_{168-70} \quad{ }^{62}$ Royal sphinxes present a separate problem: see Donohue, loc. cit.
    ${ }^{63}$ Ex. Borchardt, op. cit. III, i 19 (841); ibid. Iv-v, 19-20 (i228). ${ }^{64}$ Evers, op. cit. 36-7.
    ${ }^{65}$ Borchardt, op. cit. II, 133-4, pl. IOO (582); ibid. III, I20-1 (847): Dyn. 19.
    ${ }^{66}$ Cf. the texts quoted in nn. $82-3$ below, in reference to members of naval and military units designated by a royal name and epithet, and where the latter, or more usually the epithet alone, may be followed by the associated title and name of the officer e.g. Wsr-m>ct-R $f-s t p-n-R\ulcorner w s r p d w t$. . . .tsw hw Mn-ms: Borchardt, op. cit. II, 258; J. Yoyotte and J. Lopez, BiOr 26 (1969), 19.
    ${ }^{67}$ See A. Scharff, $Z \ddot{A} S 70$ (1937), 47-51; Yoyotte, Akten des vierunzwanzigsten internationalem orientalistenKongresses (Wiesbaden, 1959), 54-6. Helck, 7 NES 25 (1966), 32-41; Habachi, Features of the Deification of Ramesses II (Glückstadt, 1969); Lopez, RdE 26 (1974), ir 15-17; L. Bell, $\mathcal{F} N E S 44$ (1985), 251-94; idem in P. Posener-Krieger (ed.), Melanges Gamal eddin Mokhtar, I (Cairo, 1985), 3 1-59. Cf. also E. Hornung (trans. J. Baines), Conceptions of God in Ancient Egypt (London, 1983), 140, where, however, the significance of 'Tutankhamun's prenomen seems to have been overlooked; compare D. P. Silverman, SAK 8 (i980), 235-6.
    ${ }^{68}$ For endowments: Gardiner in Petrie et al., Tarkhan I and Memphis, v (London, 1913), 33-6, pls. 79-80; Gardiner, Ramesside Administrative Documents (London, 1948), 59; idem, $\mathfrak{f E A} 27$ (1941), 58-60. The hm-k; of a statue named 'Ramesses meryamun, beloved of Horus' appears on a stela from Tonkala: A. Weigall, A Report on the Antiquities of Lower Nubia (Oxford, 1917), i13, pl. 64; D. Wildung, OLZ 68 (1973), 558; and the šm‘yt of a statue 'Ramesses Montu in the Two Lands' upon a stela from Qantir: Roeder, $Z \ddot{A} S_{1} 6$ ( 1926 ), 62; J. J. Clère, Kêmi 11 (1950), 33-4; Habachi, $A S A E 52$ (1954), 529.
    ${ }^{69}$ Cf. B. Ockinga, Die Gottebenbildlichkeit im alten Ägypten und im alten Testament (Wiesbaden, 1984), 3-30.
    ${ }^{70}$ Yoyotte, op. cit. 54; R. Khawam, BIFAO 70 (1971), 144-5. Cf. E. P. Uphill, The Temples of Per Ramesses (Warminster, 1984), 129-31.

[^75]:    ${ }^{71}$ Habachi, Features, 17-20. $\quad{ }^{72}$ Ibid. 8.
    ${ }^{73}$ An instructive instance is the scarab bearing the inscription hr $m n \underline{t r} w$ in which M. el-Alfi ( $\mathscr{f} E A 58$ (1972), 179-8I) has thought to see an abbreviated reference to a statue of this name (itself attested, also in abbreviated form upon a statue at Gerf-Hussein) but which R. Hari ( $\mathcal{F} E A 60$ (1974), 134) questions: 'désigne-t-elle vraiment une statue, ou n'est-elle, parmi tant d'autres, qu'un qualificatif du roi qu'on retrouverait aussi bien sur un scarabée que sur une statue, voire sur d'autres monuments?' That in this case the allusion is in fact to a statue is indicated by a mould from Qantir that records the full designation $p$ s twt cs $n$ Rc-ms-sw mry-'Imn hr m ntrw: Khawam, op. cit. 138-9, pl. 32 (12).
     Khawam, op. cit. 139; pl. 32 (13).
    ${ }^{75}$ Habachi, op. cit. $26 . \quad{ }^{76}$ See n. 7 I above.
    ${ }^{77}$ Roeder, op. cit. 53; Clère, op. cit. 27-8; Habachi, ASAE 52 (1954), 550; idem, Features, 29-31; idem, in S. Lauffer (ed.), Festgabe für Dr. Walter Will (Cologne, 1966), 67-77.
    ${ }^{78}$ Uphill, op. cit. 13, 129-37, and the references there quoted.
    ${ }^{79}$ Habachi, Features, 24-5, pl. 122 (left shoulder).
    ${ }^{80}$ C. D. Noblecourt and C. Kuentz, Le Petit temple d'Abou Simbel (Cairo, 1968), 149-51); Habachi, op. cit. 10 .

[^76]:    ${ }^{81}$ Pap. Anastasi VIII, recto I, 7: K RI III, 500 11. 7-8.
    ${ }^{82}$ A. R. Schulman, Military Rank, Title, and Organization in the Egyptian New Kingdom (Berlin, 1964), 36 (328a); 147 (387) (cf. Yoyotte and Lopez, BiOr 26 (1969), i6); 159 (454a); 162 (492f); 166 (497f); 167 (499e); ibid. i8 (492n); i9 (50Ic). See also n. 66 above.
    ${ }^{83}$ Schulman, op. cit. 136-68; Yoyotte and Lopez, op. cit. 12-19.
    ${ }^{84}$ Cf. N. de G. Davies, The Tombs of Two Officials of Tuthmosis the Fourth (London, 1923), 33 n. 4.
     92 ll. ı 0 ff., 93 ll. 7 ff., 100 ll. 6 ff. (Ramesses II); H. H. Nelson et al., Medinet Habu, I (Chicago, 1930), pl. 27 ll. 12-17 (Ramesses III).
    ${ }^{86}$ Wildung, $Z \ddot{A} S 99$ (1972), 33-41.
    ${ }^{87}$ H. Grapow, Die bildlichen Ausdrücke des Aegyptischen (Leipzig, 1924), 3 1.
    ${ }^{88}$ Legrain, op. cit. II, 8-9 (42144). ${ }^{89}$ A. Rowe, LAAA 25 (1938), pl. 34 1. i.
    ${ }^{90}$ Hall, Catalogue of Egyptian Scarabs, $\mathscr{E}^{2} c$., in the British Museum, I (London, 1913), 213 (2120, 212 1). Cf. B. Jaeger, Essai de classification et datation des scarabées Menkhéperrê (Fribourg and Göttingen, 1982), i91 (6).
    ${ }_{91}$ Petrie, Historical Scarabs (London, 1889), 49-50; idem, Scarabs and Cylinders with Names (London, 1917), pl. 40 (19.3.3-5); Hall, op. cit. 212 (2115); Newberry, Scarab-shaped Seals, pl. 5 (36258; 36282); Rowe, $A$ Catalogue of Egyptian Scarabs . . . in the Palestine Archaeological Museum (Cairo, 1936), 160-1; pl. 17 (672); F. Matouk, Corpus du scarabée égyptien, I (Beirut, 1977), 217 (658).
     Tuthmosis IV; ibid. 1652 1. 8: Amenophis III; ibid. 207 I 1. 4: Tutankhamun; R. Hari, Horemheb et la reine Moutnedjemet (Geneva, 1964), pl. liii: Horemheb); šwnts nb (N. de G. Davies, The Rock Tombs of El Amarna, II (London, 1905), pl. 7 l. 14: Akhenaten); itn nhnmmt (Gardiner, Late Egyptian Miscellanies (Brussels, 1937), 15 11. 10-1ı: ?Sethos II).

[^77]:    ${ }_{93}$ Cf．J．Vercoutter，BIFAO 46 （1947）， 125 ff．；ibid． 48 （1949）， $107 \mathrm{ff} . \quad{ }^{94} \mathrm{Cf} . W b .111,308$.

[^78]:    * I am grateful to Mademoiselle Cilette Keller, Conservateur-Adjoint of the Musée d’Ethnographie, Neuchâtel, for the photograph of stela Eg.428, and to the Musée for permission to reproduce it. I have had the benefit of J. van Dijk's views on the problems contained in this communication, and although we may see some of them differently, his criticism is always constructive and I am very grateful to him for it. Also M. L. Bierbrier and G. T. Martin helped me with information and comments on various points. In my search for Royal Butlers of the reign of Ramesses IV, I was able to consult the transcriptions of various papyri and ostraca by J. Cerný, now at the Griffith Institute, Oxford. The line-drawings are by Mrs M. E. Cox.
    ${ }^{1}$ K. A. Kitchen in Festschrift Elmar Edel, eds. M. Görg and E. Pusch (Bamberg, 1979), 272-84 figs.; additional observations, Malek, SAK 12 (1985), 45-7.

[^79]:    ${ }^{7}$ Unpublished, listed in J. Gabus, 175 ans d'ethnographie à Neuchâtel. Musée d'ethnographie de Neuchâtel du 18 juin au 3 I décembre 1967, part i, p. 55 (top). The stela is shown on the photographs in Gunn MSS xix. 3 ( 2,4 ), not reproduced here.
    ${ }^{8}$ The present dimensions, supplied by the Musée, are $6_{3} \times 130 \mathrm{~cm}$.

[^80]:    ${ }^{11}$ AIPHOS 20 （1968－72）， 193.

[^81]:    ${ }^{12}$ G. A. Gaballa, The Memphite Tomb-Chapel of Mose (Warminster, 1977), 17, pls. xxxiv, xxxv; E. Lüddeckens, $M D A I K$ ı (1943), ı37-8.
    ${ }^{13} L \ddot{A}$ v, 4ir (D).
    ${ }_{14}$ A connection with $\xlongequal[\sim]{\sim}$, $s d m w$, of the stela found in the temple of Ramesses II at 'Amâra West, now Khartoum Mus. 3069, is very unlikely. The title $s d m w-r \check{s}$ of A. Radwan, Die Kupfer-und Bronzegefässe Ägyptens (Munich, i983), i 5 [334], pl. 60, may be shortened from 'servant in the Place of Truth'. In any case, it seems that one should distinguish between 'Imn-nht $\langle\boldsymbol{w}\rangle$ and Nht-'Imn, L. Christophe, BIFAO 48 (1949), 21 (c).
    ${ }^{15}$ 'Slugi' faraonov, bogov $i$ chastnykh lits ( $k$ sotsial'noı̆ istorii Egipta XVI-XIV vv. do n.e.) (Moscow, 1979), with a list of the holders of the title hary sdmww-rš on pp. 138-9; Ägypten und Kusch (Fs. Hintze), 81-94.
    ${ }^{16} \mathcal{F} E A 60$ (1974), r62-5 pl. xxxiv; PM i11 ${ }^{2}$, 740 (Amenemhab Pakharu).
    ${ }^{17}$ The beginning of the name is damaged, but the instances of the name in the tomb-chapel of Tia leave no doubt that this is how the name should be read, even on the stela, Martin, $\mathcal{F E A} 69$ (1983), 28.

[^82]:    ${ }^{18}$ Ibid. 28, fig. I ; ibid. 70 (1984), 10-1 1 , fig. I ; G. T. Martin, M. J. Raven, and D. A. Aston, $\mathcal{F} E A 72$ (1986), 15-21 pls.
    19 The problem is not new, but has not yet been studied in detail.
    ${ }^{20}$ 1. Stela in Cairo Museum, of Year 24 of Ramesses III, from Memphis, A. R. Schulman, $\mathfrak{F N E S} 22$ (1963), 177-84, pl. vii; W. Helck, fNES 25 (1966), 32-41; K RI v, 249-50.
    2. P. Turin, Cat. i891 recto, of Year 2 of Ramesses IV, with Sth-hr-wnm•f and 'Itm-nht, W. Pleyte and F. Rossi, Papyrus de Turin, pl. 49 line 4; K RI vi, 77.i.
    3. Stela BM 588, where he is shown before Ramesses IV and Maet, probably from the Deir el-Medina tomb of the Chief Workman Anherkhau, J. J. Janssen, $\mathscr{f} E A 49$ (i963), 64-70 illus.; M. L. Bierbrier, HTBM io, 24-5, pl. 57; KRI VI, 83-4; PM I ${ }^{2}$, 72 I (Inḥerkhá, a).
    4. Stela, before Ramesses IV, found at Deir el-Medîna, B. Bruyère, Rapport . . . Deir el Médineh (1935-1940), fasc. ii, 86 (151), pl. xvii; K RI vi, 85 (2).
    5. Ostracon with a sketch of a king, from Deir el-Medîna, ibid. (1934-1935), fasc. iii, 362, fig. 212; Vandier d'Abbadie, Cat. des ostraca figurés, i, no. 255 I, pls. lxix, lxxvi; K RI vi, 85(3).
    6. O. DM 45 recto, 15 , of Year 2 of Ramesses IV, with 'Imn-hrw, J. Cerný, Cat. des ostraca hiératiques non littéraires, i, pl. 34; cf. also idem in $C A H_{11_{1}^{2}}$, part 2, 607 ; K RI VI, 120.1 i.
    7. Probably to be restored on O. Sydney, Nicholson Mus. R. 97 recto, 2, with 'Imn-hrw, C. J. Eyre, in J. Ruffle et al., Glimpses of Ancient Egypt. Studies . . . H. W. Fairman (Warminster, i979), 80-9ı illus.; K RI vi, i 5 i.i 6.
    ${ }^{21}$ Op. cit. 66-7.

[^83]:    ${ }^{22}$ Stela Stockholm, Medelhavsmuseet, NME 57, B. J. Peterson, Opuscula Atheniensia 9 (1969), i I (XVII), Abb. 20; M. Morgensen, Stèles égyptiennes . . . Stockholm, 67; K RI v, 392.
    ${ }^{23}$ S. Curto, L'Egitto antico nelle collezioni dell'Italia settentrionale (Bologna, 1961), 84-5 (55), nl. 33; PM $\mathrm{III}^{2}$, 75 I.
    ${ }^{24}$ P. Vernus, Athribis (Cairo, 1978), 32-4 (33), pl. iv; PM $111^{2}, 755$.
    ${ }^{25} \mathrm{~K} R I$ vi, 83-5.
    ${ }^{26}$ The possibility that Hori of the end of the reign of Ramesses III was distinct from the holder of the same title under Ramesses IV cannot be ruled out, but it seems unlikely.
    ${ }^{27}$ Such a connection may exist in the case of the famous Scribe in the Place of Truth, Ramose, $\mathcal{F E A} 60$ (1974), 165. Part of the professional career of Tia, temp. Ramesses II (PM ini ${ }^{2}, 654-5$, and reports by Martin, $\mathcal{F E A}$ 69-72) took place at Thebes, but his tomb is also at Saqqâra.
    ${ }^{28} \mathcal{F} E A 72$ (1986), 105-6.
    ${ }^{29}$ Helck, $Z \ddot{A} S 82$ (1957), 107 and $\mathrm{PM}_{\mathrm{II}^{2}}{ }^{2}$ I 31 (485). Material remains from Memphis, mainly usurpations, were surveyed by L.-A. Christophe, $B I E 37$ (1) (1954-5), 20-4. The upper part of the red granite seated statue ( $=$ Christophe no. 3) now stands at the entrance to the 'Ramsîs Museum' at Mît Rahîna, A. M. Moussa, $A S A E$ 68 (1982), $119-20$, pl. i; S. G. Gohary, OrAnt 17 (1978), 194-6, pl. xvii; M. Basṭâ, Aham al-marâlim al-atharîya . Mît Rahîna (1978), fig. i 1 .
    ${ }^{30}$ On stela BM 588 (see n. 20 above), sš nsw wdpw/wb; nsw Heri mir-hrw s; Pth-m-wi; mir-hrw ms•n Ḥther $m><\langle t\rangle-h r w$ is followed by $n t($ ? $)$ Wist. I assume that it was Hori's mother Hathor who came from Thebes.
    ${ }^{31}$ Malek, $S A K 12$ (1985), 43-60 illus.

[^84]:    ${ }^{32}$ The tomb-chapel of Tjay is of a similar plan, but without the columns, V. Loret, BIE iii Sér. 10 (1899), 95 and plan facing 100.
    ${ }^{33} w d p w / w b ; n s w$. The former reading is currently preferred, but convincing demonstration of its merits is still lacking.
    ${ }^{34}$ Zur Verwaltung des Mittleren und Neuen Reichs, 269-76.
    ${ }^{35}$ A. H. Gardiner, $A E O$ 1, 43*-44* (122); J. Vergote, foseph en Égypte, 31-7; Schulman, fARCE 13 (1976), 117-30 pls. xxxvii, xxxviii; idem, $C d E$ (1986), 187-202; B. Schmitz, $L \ddot{A}$ vi, 77ı-2.
    ${ }^{36}$ G. Lefebvre, Inscriptions concernant les grands prêtres d'Amon Romê-Rö̈ et Amenhotep, 42.17; Schulman, JARCE 13 (1976), 123 -4.
    ${ }^{37} C d E 61$ (1986), 199-202.
    ${ }^{38}$ I do not believe in the existence of Schulman's no. $28=$ Aha, $C d E 6$ (1986), 200 (from O.DM 46 verso, r, Cerný, op. cit. i, pl. 38). Furthermore, a stela of Year 4 or 5, perhaps of Ramesses IV (K RI vi, 29), which mentions a Royal Butler whose name is lost, was found at Serâbît el-Khâdim (A. H. Gardiner, T. E. Peet, and J. Cerný, The Inscriptions of Sinai, no. 304, pl. lxxviii). Another, whose name is lost, was mentioned in Year i (?), perhaps of Ramesses IV, on O. Strasbourg H. 42 (Černý MSS. 17.35.74). Several other Royal Butlers can at present be only broadly dated to the Ramesside period.

[^85]:    ${ }^{48}$ In addition to the studies quoted above see S. Sauneron and J. Yoyotte, $R d E 7$ (r950), 68 n. 6; J. M. A. Janssen, CdE 26 (195 1), 56-9; J. Yoyotte, Vetus Testamentum, 12 (1962), 467 n. 4; Helck, Die Beziehungen [etc.] (2nd edn. 1971), 353 .
    ${ }^{49}$ This feature is studied by He Deulenaere, Le Surnom égyptien à la Basse Epoque, 3 I .
    ${ }^{50}$ The only indicator of Hori's possible Semitic origin, the name of his presumed wife (J. J. Janssen, $\mathscr{F E A} 49$ (1963), 66 n .9 ), has been removed, see above.
    ${ }^{51}$ H. Gauthier, $A S A E 35$ (1935), 87-90, pl. ii; PM ${ }_{11}{ }^{2}$, 75 I.
    ${ }^{52}$ Column-fragment, J. E. Quibell, Excavations at Saqqara (1906-1907), 81, pl. xxxvii (4, 5).
    ${ }^{53}$ Berlandini-Grenier, BIFAO 74 (1974), r-19 illus.; PM ${ }_{111}{ }^{2}$, 715.
    ${ }^{54}$ Relief Boston MFA 24.98I, D. Dunham, $\mathfrak{F} E A 21$ (1935), $149-50$ pl. xviii.
    ${ }^{55}$ T. Handoussa, in Hommages à Francois Daumas, in (Montpellier, 1986), 409-19 illus.
    ${ }^{56}$ Gunn MSS xix. II [1]; Notebook, 6, no. 3.
    ${ }^{57}$ Unpublished. Information G. T. Martin.
    ${ }^{58}$ Not all of the owners of funerary cones in N. de Garis Davies and M. F. Laming Macadam, A Corpus of Inscribed Egyptian Funerary Cones, are well dated.
    ${ }^{59}$ Y. J.-L. Gourlay, BIFAO 79 (1979), 92-4; cf. also Malek, SAK 12 (1985), 50.

[^86]:    ${ }^{1}$ J. Černý, The Valley of the Kings (Cairo, 1973), v-vi, hereafter Černý, VK.
    ${ }^{2}$ C. A. Keller, NARCE 99-ı00 (1977), i6; E. Hornung, $Z \ddot{A} S$ 105 (1978), 59-66 with references; E. Thomas, $\mathscr{F} E A 64$ (1978), 80-3; E. Bogoslovsky, ZÄ $S$ 107 (1980), 89-ıı6; A. Amer, GM 49 (198ı), 9-12; Keller, $\mathcal{7}$ ARCE 21 (1984), i19-38; C. N. Reeves, CdE 6ı (1986), 43-9.
    ${ }_{3}$ The Turin plan of KV2 (Ramesses IV) refers to the finished tomb (Černý, op. cit. 24) but the one of KV6 (Ramesses IX) may have been a working plan (ibid. 23).

[^87]:    ${ }^{4}$ Roughly eight working hours with a noon break. Černý, $V K, 48,53$.
    ${ }^{5}$ W. Helck, $\mathfrak{f E S H O} 7$ (1964), 136-66. Cf. J. J. Janssen, SAK 8 (1980), i 34.
    ${ }^{6}$ Cerný, op. cit. 26.
    ${ }^{7}$ Ibid. 2 I n. 1, 25 with n. 2, 27 n. 11, 28 nn. 5 and 8,29 nn. 1, 3, and 7, 31 n. 9, 32 nn. 3 and 4; idem, $A$ Community of Workmen at Thebes in the Ramesside Period (Cairo, 1973), 89 n. 5, 92 n. 2, 95 n. 9; Thomas, $\mathcal{F E A}$ 64, 81 and n. I (in which the word 'Cairo' should be emended to 'Cat.'); D. Valbelle, 'Les Ouvriers de la tombe' Deir el-Médineh a l'époque ramesside (Cairo, 1985), 202 with n. 6; Amer, $\mathcal{F} E A 7 \mathrm{I}$ (1985), 67 n .9 ; R. Ventura, Living in a City of the Dead (Fribourg, 1986) 149, 163-5, i82; idem, $\mathscr{J} E A 73$ (1987), i5 1 n. 8.
    ${ }^{8} \mathrm{~K} R I$ vi, $367-8 . \quad{ }^{9}$ It is so labelled in $\mathrm{K} R I$ vi, 367.1 and Amer, $\mathscr{f} E A 7 \mathrm{I}, 67 \mathrm{n} .9$.
    ${ }^{10}$ Verso, II. The date is commented upon in Parts B, C, and the General Discussion. For the identification of the tomb see $n .34$ below.

[^88]:    ${ }^{11}$ I have substituted 1,125 for 1,175 which is what Černy and Kitchen read. The difference between the two can be very slight when the hieratic is carelessly written. The reason for my reading will be presented in note d to the translation.
    ${ }^{12}$ The hieratic does not make much sense here, and therefore was not transliterated by Černý. I prefer to include what was understood by Černý as the numeral for ' 60 ' among the unintelligible signs, for reasons which will be presented in the notes to the translation.
    ${ }^{13}$ For the reading $d n y(t)$ and the determination of its meaning see Cerný, $V K, 20-\mathrm{r}$.
    ${ }^{14}$ The sign for $d n y$ was inadvertently omitted from K RI vi, 367.5. It figures, however, in Černý's manuscript MSS ${ }_{17.16}$, p. 46, and is mentioned by him in $V K$, 21 . I wish to thank Dr Jaromir Malek who kindly provided me with photocopies of the pertinent pages from Černý's notebooks in the Griffith Institute.

[^89]:    ${ }^{15}$ Published in K $R I$ vi, 223-4. For its identification with $\mathrm{KV}_{9}$ see also Helck, $L \ddot{A}_{\text {III }}$ 516. Cf. K. Weeks, The Berkeley Map of the Theban Necropolis, Report of the Second Season, I979 (Berkeley, 1979), pp. 14-1 5; Cerný, VK, 25; Valbelle, op. cit. 201 n. 3.
    ${ }^{16} \mathrm{~K} R I$ vi, 223.12.
    ${ }^{17}$ Certainly 30 . According to ibid., 223.12a, the length can be 10,20 , or 30 c . On the evidence of the tomb itself (see Piankoff's plan in A. Piankoff with N. Rambova (ed.), The Tomb of Ramesses VI, I (New York, 1954), fig. 2 (opposite p. 9)), the damaged numeral should be read ' 30 '. This is the 'open air' passage, to the left of the one marked ' A ' in the plan.

[^90]:    18 The width of the passage being 6 c ., and its height 7 c ., the scribe's actual value must have been a multiple of 42. The only pertinent multiple that fits the traces (it should end with ' 60 ') is 1,260 c.c. ( $6 \times 7 \times 30$ ). This result implies that the minimal values should be considered for the niches, which strengthens our proposition that the number 886 in 'verso' 3 , is the correct reading (see note g). If we had taken 1,175 c.c. as the volume of Passage 3 , instead of 1,125 (see note d), the margin of values for the volume of Passage 2 would have been different ( $1,212 / \mathrm{I}, 200 \mathrm{c} . \mathrm{c}$.) and therefore incompatible with the traces of the text.

[^91]:    1930 c.--Passage no. i. See n. 17 above.
    30 c.-Passage no. 2. See n. 18 above.
    25 c.-Passage no. 3. Derived from Piankoff's plan. Lost in a lacuna in P. Turin 1885 verso I, 4 (K RI vi, 223.15). The volume of this passage (without the niches) was probably calculated in P. Turin 1923 'verso' as follows: $25 \times 6 \times 7.5=1,125$ (see n . i i above).

    21 c.-Passage no. 4. Derived from the following operation: $21 \times 6 \times 7=882$, the result being the exact volume supplied by our papyrus for this passage (without the niches).

    Io c. -W sht isq. Supplied by P. Turin 1885 verso I, 6 (combining the lengths of the hall and its gate). The result is consistent with the measurements in Piankoff's plan.

    16 c. - Mrkbt. Supplied by P. Turin 1885 verso I, 7 (hall + gate). Cf. $16 \times 16 \times 7=1,792$ c.c. as given in P. Turin 1923 'verso', 5.
    ${ }_{15} \mathrm{c} .-$ Tpy $n$ wpt. Derived from the following operation: $15 \times 6 \times 7=630 \mathrm{c} . \mathrm{c}$., the result being the volume mentioned for this passage in P. Turin 1923 'verso', 6.

    15 c . -nty $\mathrm{hr} s 3 \cdot f$. The length of this passage is actually mentioned in P . Turin 1923 'verso', 8 . This passage
    was later lengthened under the new building project (see note $m$ ).
    ${ }^{20}$ Černý, VK, 27-34.

[^92]:    ${ }^{21}$ The cubic contents of the royal tombs have not been measured. The following estimate is based on the assumption that the ratio length to volume was roughly constant. At a length of 162 c ., the unfinished tomb of P. Turin 1923 'verso' contained io,062 c.c. Accordingly, the longest tomb in the Valley, KVir of Ramesses III (cf. Cerný, $V K, 8$; actually that of Seti I is much longer if one considers the long passage past the hall, but given the dimensions and the uncertainties regarding that passage, KVI7 cannot be considered in this comparison), the given length of which is 124 m (about 238 c .), should contain approximately 14,782 c.c. This is less than one-eighth of 122,916 c.c., the total projected volume of the tomb in our text.

[^93]:    ${ }^{26}$ Under Ramesses V. The data in Part A indicate the tomb's state of excavation when the new project was initiated.

[^94]:    ${ }^{27}$ 'The total output of four years' work under Ramesses $V$ was but one-quarter of what was demanded for a single year, according to the new project.
    ${ }^{28}$ Cf. O. Cairo CG 25536 recto 5; 25537, 10 (J. C̆erný, Ostraca hiératiques, I (Cairo, 1935), 33*; 34*).

[^95]:    ${ }^{30}$ For other instances of denying access to the Valley of the Kings see Ventura, $L C D, 182-3$ n. 37, C. J. Eyre, $G M 98$ (1987), 19h. For instances of work on several tombs in the Valley of the Queens, see Ventura, $L C D$, i 3 I n . 73. Occurrences of inactivity while the workmen remained in their village for several days in a row are too common to require special mention. Since the families of the workmen resided in the village, most periods of prolonged inactivity were spent in the village whether this detail is actually mentioned or not. Interestingly, O. Gardiner II (K $R I$ VI, 248-9), containing part of the necropolis journal and dated to a Year 2 (of Ramesses V according to Kitchen, but possibly of Ramesses VI), mentions two periods of inactivity, of in and 26 days respectively, the numbers being close to those of the present document ( 12 and 25). Between III šmw 3 and III šmw 13 (I I days), the workmen were idle looking for provisions (at the hhtm?) (verso 2-3). Between III šmw 25 and IV šmw 2 I ( $26 / 27$ days) they were idle again without any specified reason (verso 8-9). For instances of work being done by the workmen at the htm, see Ventura, $L C D$, 105-6 n. 100.

[^96]:    ${ }^{33}$ One would expect, for instance, 56,427 c.c., obtained by halving $122,916(61,458)$ and subtracting from the quotient half the volume that had been excavated already ( $10,062: 2=5,031$ ).
    ${ }^{34}$ Černý, $V K, 25$; Valbelle, op. cit. 202; Helck, $L \ddot{A}$ iII, 516 ; K RI vi, 367 , etc.
    ${ }^{35}$ Cerný, $V K, 23^{-6}$ (cf. Reeves, $C d E ́$ 61, 43-9).
    ${ }^{36}$ Unpublished, see Cerný, $V K, 25$; Thomas, $\boldsymbol{\text { FEA }} 64,8$ 1-2.
    ${ }^{37}$ Does not contain plans or measurements, but mentions dated activity in the tomb. W. Spiegelberg, OLZ 5 (1902), 326; H. Carter and A. Gardiner, $\mathfrak{f} E A$ 4, 134-5; Cerný, $V K, 3$ 1; Valbelle, op. cit. 53, 202.

[^97]:    ${ }^{38} \mathrm{~K} R I$ vi, 224.5 (verso $\mathrm{I}, 7$ ).
    ${ }^{39}$ Carter and Gardiner, $\mathscr{F E} A_{4}$, I 35.
    ${ }^{40}$ Valbelle, op. cit., dates it to the reign of Ramesses VI.
    41 'Verso', 8, see Part A above.
    42 Cerný, VK, 25.
    ${ }^{43}$ Piankoff, op. cit. I, 9. Thomas mentions this detail in her Necropoleis, 129 where 'beyond E' should be read 'beyond F ' in view of her lettering of the rooms in $\mathrm{KV}_{9}$ (plan: fig. i 3 (p. i i9)) which differs from that of Piankoff.
    ${ }^{44}$ Since the decoration of the rooms followed closely their excavation (Cerný, $V K, 34$ ), the existence of usurped cartouches of Ramesses V as far as the $m r k b t$ confirms our suggestion that work had stopped in KV 9 under Ramesses V when the nty $h r$ s $3 \cdot f$ was barely started.
    ${ }^{45}$ The date of accession of Ramesses V and his exact length of reign have been frequently debated. See lately, R. Krauss, Sothis- und Monddaten (Hildesheim, 1985), 131-3 with references.
    ${ }^{46}$ See p. ${ }^{1} 50$ above and below.
    ${ }^{47}$ In II prt. See Krauss, op. cit. 133.

[^98]:    ${ }^{48}$ O. Cairo CG 25254. K RI vi, 343. Translated in Cerný, $V K$, 34.
    ${ }^{49}$ Cerný, $V K$, io-ı i. For various views on this problem see K. A. Kitchen, $\mathscr{f} E A 58$ (1972), 193; Thomas, Necropoleis, 129; Valbelle, op. cit. 201-2; Amer, $\mathscr{f} E A 71,67$.
    ${ }^{50}$ Cerný, $V K$, 2 i n. i. See also $K R I$ vi, 367 passim, where quotation marks are used.
    ${ }^{51}$ See K RI vi, 368. The text is discussed in Ventura, $\mathcal{f} E A$ 73, 149-59.
    ${ }_{52} \mathrm{~K} R I$ vi, 368 n .7 b ; Ventura, op. cit. 15 I n . a.
    ${ }^{53}$ G. Elliot Smith, The Royal Mummies (Cairo, 1912), 91; J. E. Harris and K. R. Weeks, X-Raying the Pharaohs (New York, 1973), 166; P. Ghalioungui, in J. E. Harris and E. F. Wente (eds.), An X-Ray Atlas of the Royal Mummies (Chicago, London, 1980), 66.

[^99]:    ${ }^{54}$ While Kitchen $(\mathscr{f} E A 58$, 193) may be right in claiming that enmity and persecution were not the motives for this usurpation, the act itself is none the less extraordinary. See also Valbelle, op. cit. 202.
    ${ }^{55}$ If, for instance, the sealing off of the Valley of the Kings had been foreseen, the new project for KV9 would have taken this delay into account, and the preparation of tombs in the Valley of the Queens would have taken place while the workmen were idle for six months.
    ${ }_{56}$ The urgency is evident by the number of burials involved, and by the fact that the workmen were diverted from their main occupation to prepare them. Normally the workmen of $p ; h r$ were put to work in the Valley of the Queens only after the royal tomb was complete.
    ${ }^{57}$ P. Bibl. Nat. 237 Carton I, 15-19 (K RI vi, 340.2-5).
    ${ }^{58}$ Cf. Amer, $\mathcal{F E A} 7 \mathrm{I}, 67$.
    ${ }^{59}$ See n. 48 above.

[^100]:    ${ }^{1}$ G. Daressy, $A S A E$ I (1900), 141-7, E. Feucht, $L \not A_{\mathrm{I}}$, 893. PM I², 630.

[^101]:    ${ }^{2}$ G. Maspero, Guide au Visiteur du Caire (1895), (1915).
    ${ }^{3}$ For the complete list of the finds, Daressy, op. cit. 144-5.
    ${ }^{4}$ E. Chassinat, La Seconde Trouvaille de Deir El-Bahari (Sarcophages) (Cairo, 1909), nos. 6001-29.
    ${ }^{5} \mathrm{PM} \mathrm{r}^{2}, 630-42$. The material has been exhaustively studied by Dr D. Aston in his unpublished thesis 'Tomb Groups from the End of the New Kingdom to the Beginning of the Saite Period', Ph.D. thesis, University of Birmingham (1987). I am grateful to him for kindly allowing me to consult the thesis.
    ${ }^{6}$ Located at present on $\mathrm{D}_{57}$ stairs (not exhibited). The remaining twelve cloths will be the subject of a future study.
    ${ }^{7}$ H. E. Winlock, $B M M A$ I9 (1924), II, 7, 20, fig. 2. For a complete account of his work at Deir el-Bahari area, see idem, Excavations at Deir El-Bahari 191I-193I (New York, 1942). For a different argument about the exact site of the second cache of Deir el-Bahari, see E. Thomas, The Royal Necropoleis of Thebes (Princeton, 1966), 174-5.
    ${ }^{8}$ For the position of the cloth and further details of objects found beneath the cloth, see Daressy, $A S A E_{3}$ (1902), 152-4; ibid. 4 (1903), 150-5; Winlock, $B M M A 21$ (1926), II, 25 ff., figs. 31, 32, 33. For the conditions of some mummies found in the second cache, see G. E. Smith, $A S A E 4$ (1903), 156-60; ibid. 7 (1906), 155-82, pl. 6, figs. i, 2.
    ${ }^{9}$ Daressy, $A S A E 8$ (1907), 22-38, see also Winlock, BMMA 21 (1926), II 25, fig. 33.

[^102]:    ${ }^{10}$ Unless otherwise stated, the date is based on leather straps and tabs associated with the mummy.
    ${ }^{11}$ Name and titles suggest no. 114-but the description of Daressy implies a figure of Osiris adored by the deceased. The text given by him does not correspond exactly with that on this cloth.
    ${ }^{12}$ Aston, op. cit. 337, dating based on Sensen's coffin.

[^103]:    ${ }^{13}$ Ibid. 363 , dating based on the coffins and shabtis of the deceased.
    ${ }_{14}$ No other objects were found in association with the cloth to allow closer dating.
    ${ }^{15}$ For a complete form of her name, Daressy, $A S A E 8,7$, i 8.
    ${ }^{16}$ Aston, op. cit. 343, dating based on his Book of the Dead papyrus.

[^104]:    ${ }^{17}$ Daressy mentioned that there is no name on the cloth. For a similar abbreviated form of the name, Daressy, ASAE 8, 17 .

[^105]:    ${ }^{18}$ R. A. Caminos, $\mathcal{F} E A 56$ (1970), 1 18; A. Lucas and J. R. Harris, Ancient Egyptian Material and Industries (4th edn., London, 1962), 356.
    ${ }^{19}$ Caminos, op. cit., 121 .
    ${ }^{20}$ G. Nagal, $A S A E 49$ (1949), 317-29, pls. 1, 2, 3; PM i², 660-1 (ı6). Caminos, op. cit. i21.
    ${ }^{21}$ Caminos, in Homenaje al Prof. Martin Almagro Basch, Separata IV (Madrid, 1983), 223-31, pls. 1, 2.
    ${ }^{22} \mathrm{PM} \mathrm{I}^{2}$, 687 (II59.A). B. Bruyère, Rapport sur les fouilles des Deir el Médineh (1928) (Cairo, 1929), 42, 47, pls. 2, 3, fig. 28. For other examples see idem, Rapport sur les fouilles de Deir el Médineh (1926) (Cairo, 1927), 12, fig. 3. See also K. Parlasca, Mumienporträts und verwandte Denkmaler (Wiesbaden, 1966), 154-5, pls. 54 (1, 2), 55 $(1,2)$. In a study of votive offerings to Hathor to be published by the Griffith Institute, Dr Geraldine Pinch cogently argues that the painted cloths from Deir el-Bahari (Hathortücher) are votive and not funerary.
    ${ }^{23}$ Parlasca, op. cit. 155-6, pl. $56(\mathrm{I}, 3,5)$.
    ${ }^{24}$ One example has been recorded for the Deir el-Bahari cache of the mummies of priests of Montu, PM I ${ }^{2}$, 649. Also J. Baillet, RT 22 (1900), i, no. 7.
    ${ }^{25} \mathrm{~K}$. Bosse-Griffiths, $\mathcal{F E A}$ 61 (1975), i14-24; ibid. 64 (1978), 99-106. For good coloured photographs of beadwork and bead shroud in situ, see idem, Pictures from the Wellcome Collection, No. I, Bead work (Swansea, 1978).

[^106]:    * Communication presentée à la Third International Conference of Demotic Studies (Cambridge, 8-12 September 1987).

[^107]:    ${ }^{1}$ Voir mon article des Mélanges offerts à fean Vercoutter (Paris, 1985), 249-62.

[^108]:    ${ }^{2}$ P. Turin $247=2120$, M. Malinine, Choix de textes juridiques, I, 72 et s.; II, 33 et s .
    ${ }^{3}$ Malinine, $R d E 27$ (1975), i 64 et $s$. + stèle de Florence 1659 (2507), de l'an 4 de Psammétique ier ou d'Apriès (S. Pernigotti, EVO 2 (1979), 2 1-37).

[^109]:    ${ }_{1}$ The stela is published by kind permission of the Trustees of the British Museum. I am grateful to Dr M. L. Bierbrier and Mr T. G. H. James for access to the stela, and to P. BM 10113 (discussed below). For its brief bibliography, see D. Meeks in E. Lipiński (ed.), State and Temple Economy in the Ancient Near East, in (Louvain, 1979), 679. Study of the Elephantine stela of Amasis in Cairo (n. 27 below), in the context of preparation of a corpus of Saite inscriptions, was made possible by a grant from the British Academy which is gratefully acknowledged here.
    ${ }^{2}$ For the site, see F. Gomaa, Die Besiedlung Ägyptens während des Mittleren Reiches (Wiesbaden, 1986), 343-4, and P. Vernus, $R d E 37$ (1986), 146 n. 40 . For preliminary reports on the work of the Tübingen expedition, see L. Gestermann et al., GM IO4 (1988), 53-70.

[^110]:    ${ }^{3}$ The indispensable reference work is that by Meeks cited in n. I. A few bibliographic additions can be made to his list of donation stelae: 22.2.0: photograph in Naissance de l'ecriture, Galeries nationales du Grand Palais, 7 mai-9 aout 1982 (Paris, 1982), 282, no. 234. 22.8.1 5: imperfect copy in H. M. Stewart, Egyptian Stelae, Reliefs and Paintings from the Petrie Collection, ini, 4, no. 5, pl. 4 (see my review in $\mathcal{F} E A 72$ (1986), 226). 22.8.31: published by Hodjash and Berlev, The Egyptian Reliefs and Stelae in the Pushkin Museum, 157-8, 160, 164, no. 106. 22.10.19: published by Y. Koenig, $A S A E 68$ (1982), in i-13.23.2.2 : published by J.-L. Chappaz, Genava 30 (1982), 7 I-8I (probably Iuput II, not I as suggested by Meeks and still by M.-A. Bonhême, Les Noms royaux dans l'Egypte de la Troisième Période Intermèdiaire (Cairo, 1987), 212-16; cf. K. Kitchen, The Third Intermediate Period (2nd edn., Warminster, 1986), 542. 26.2.4 and 26.2.11: published by Leahy, RdE 34 (1982-3), 77-91. 26.3.1b: copy in Stewart, op. cit. 7, no. 14, pl. 3 (cf. $7 E A$ 72, 226). 26.4.ob: now in New York, MMA 02.4.105 B. 26.4.4a: new translation by T. Christensen, GM 65 (1983), 7-24. p. 681, B4: published in Hodjash and Berlev, op. cit. 162, $164-5$. Stelae not in Meeks' list are: Moscow, Pushkin Museum i.i.a.5645, year 18 Apries, published by Hodjash and Berlev, op. cit. I70, I73, no. I 14; Cairo T. 23.10.24.2, unpublished, cf. Leahy, GM 49 (1981), 44 n. 28. Cf. also the stelae of Osorkon III discovered at Hermopolis (A. J. Spencer et al., Ashumein (r982) (London, 1983), 12-13, no. 1982/77) and Akoris (Preliminary Report, Second Season of the Excavations at the Site of Akoris, Egypt, 1982, by the Archaeological Mission of the Heian Museum of Ancient History, The Palaeological Association of Japan, Kyoto, 1983), and the stela of Taharqa published by Meeks, Hommages à la mémoire de Serge Sauneron, 1, 22 1-59.
    ${ }^{4}$ Meeks, State and Temple Economy, 6ir n. 19.

[^111]:    ${ }^{5}$ Ibid. $679-80$, lists ten, to which should be added the undated stela from Memphis (Cairo T. 23.10.24.2) mentioned in n. 3 above. $\quad{ }^{6}$ Ibid. 679, 26.5.1c. $\quad{ }^{7}$ First noted by G. Posener, RdPh 21 (i947), i29.
    ${ }^{8}$ A. Spalinger, Acts of the First International Congress of Egyptology $(=$ Schriften zur Geschichte und Kultur des alten Orients 14), 593-604. ${ }^{9}$ A. H. Gardiner, $\mathscr{F} E A 31$ (1945), 17-20.
    ${ }^{10}$ R. A. Parker, $M D A I K_{15}$ (1957), 208-12; E. Hornung, $Z \ddot{A} S_{92}$ (1965), 38-9; E. Edel, GM 29 (1978), 15; cf. A. B. Lloyd, Herodotus Book II: A Commentary, I (Leiden, 1975), 189-93. ${ }^{11}$ Op. cit. 212.
    ${ }^{12}$ H. Wild, Les Antiquités égyptiennes de la collection du Dr Widmer (Musee cantonal des Beaux Arts, Lausanne, 1956), 25-6, pl. iv. See also Vom Euphrat zum Nil, Eine Ausstellung der Gesellschaft der Freunde eines Schweizerischen Orient-Museums im Kunstmuseum des Kantons Thurgau, Kartause Ittingen, 28 April-15 September 1985, 38-9. The stela is dedicated to Thoth nb hmnw. Meeks, State and Temple Economy, 679 , takes this to be the Upper Egyptian Hermopolis, but the geographical distribution of donation stelae (n. 4 above) makes it more likely that one of the Delta sites of the same name is alluded to, as Wild suggests.
    ${ }^{13}$ N. Reich, Papyri juristischen Inhalts (Vienna, 1914), 5-8, pls. i-ii; Malinine, Choix de textes juridiques, I, 15-19; 11, 5-6. The photographs in Reich's publication are clear enough but one is included here for convenience. In view of the implications of the date, I have collated the text myself and consulted Dr S. P. Vleeming. I am grateful to him for reconsidering the reading, and for his opinion that it is correct. A project to catalogue this and other abnormal hieratic/early demotic papyri in the British Museum was announced by Dr E. Cruz-Uribe at the Third International Conference of Demotic Studies at Cambridge in September, 1987.

[^112]:    14 The attribution to Apries has been unanimously accepted by demotic specialists: S. Pernigotti, EVO 2 (1979), $21-4$; H.-J. Thissen, Enchoria 10 (1980), ro9; Vleeming, OMRO 61 (1980), 6 and CdE 56 (1981), 36.
    ${ }^{15}$ It was apparently not known to Posener, $R d P h 21$, 129, hence his conclusion that Amasis 'a été reconnu par l'ensemble du pays dès sa prise du pouvoir'. Its significance is lost on Spalinger, Acts, 594, because he believes it to be an 'inscription' and 'probably from Lower Egypt'.
    ${ }^{16}$ This is on the assumption that the stela records a private endowment, not a royal one. On the problem of identifying the actual donor in these texts, see my comments in GM 49, 42.
    ${ }^{17}$ For the adoption of the royal titulary, see Bonhême, Les noms royaux, in-if.

[^113]:    18 J. Vercoutter, Textes biographiques du Sérapéum (Paris, 1962), $21-6$. Vercoutter's chronology is now obsolete: the bull would have been born in 578 and died in 566 at approximately eleven and a half.
    ${ }^{19}$ See, in general, H. De Meulenaere, Herodotos over de 26ste dynastie (Louvain, 1951), 77-82; F. Kienitz, Die politische Geschichte Ägyptens vom 7, bis zum 4, Fahrhundert vor der Zeitwende (Berlin, 1953), 161-4, and the works by Spalinger and Lloyd cited here in nn. 8 and 20.
    ${ }^{20}$ The passage is discussed in detail in Lloyd, Herodotus, in (Leiden, 1988), i78-80.
    ${ }^{21}$ No ancient source specifies Amasis' position before he became king. The widespread modern assumption that he was an army officer is likely to be correct, especially if Herodotus is right that he was of humble origin (for a note of caution on this, see Lloyd, Herodotus, III, 212), since the rest of Herodotus' description does not suggest a scribal career. The mutineers' acclamation of Amasis tends in the same direction.
    ${ }_{22}$ For the possible sources of this section of Diodorus' Book i, see A. Burton, Diodorus Siculus Book I, A Commentary (Leiden, 1972), 25-8; cf. O. Murray, $\mathcal{F} E A 56$ (1970), 144-50, for the role of Hecataeus of Abdera; for the independence of Diodorus on Apries, see Lloyd, Herodotus, iir, i71.
    ${ }^{23}$ W. Helck, Geschichte des alten Ägypten (Leiden-Cologne, 1968), 255.

[^114]:    ${ }^{24}$ A good analogy is provided by the numerous records of Psammetichus II's Nubian campaign. It may be noted in passing that the dedication of the Shellal stela version to the local triad of Elephantine does not imply the presence of Psammetichus II at the first cataract, contra M. Lichtheim, Ancient Egyptian Literature, III (Berkeley, i980), 86 n. i.
    ${ }^{25}$ On the constraints imposed by the genre, see N. Grimal, La Stèle triomphale du roi Pi( ${ }^{\text {a ank }) y \text { (Cairo, 1981), }}$ 295-8.
    ${ }^{26}$ Contra Kienitz, op. cit. 164.
    ${ }_{27}$ G. Daressy, RT 22 (1900), 1-9. A partial translation was given by J. Breasted, Ancient Records, iv (New York, 1906), §§ 996-1007. Improved readings of some sections have been made by Posener, $A S A E 34$ (1934), 148 and n. 4, and H. De Meulenaere, in C. Vandersleyen, Les Guerres d'Amosis (Brussels, 1971), 144. A few passages are studied from the formulaic point of view by Spalinger, Aspects of the Military Documents of the Ancient Egyptians (New Haven and London, 1982), 255 (index). I have collated the text and am confident of the reading of the passages discussed in this article.
    ${ }^{28}$ Edel, GM 29, 13-19.
    ${ }^{29}$ The $h 3 w-n b w$ of the stela have generally been equated with the Greeks of Herodotus, Lloyd, $\mathscr{f H S} 95$ (i975), 59. The attempt by Vandersleyen, Les Guerres d'Amosis, i 44 (cf. L $\ddot{A}_{\text {II, 1053-4), to identify them as Phoenicians }}$ is irretrievably undermined by an uncritical acceptance of Helck's description of the role of Cyprus (n. 40 below), and by misrepresentation of what Helck actually says. The latter does not, contrary to Vandersleyen, translate $h i w-n b w$ as 'Asiatic'. The stela distinguishes clearly between the opponents of Amasis. In year 1 , they were $h ; w-n b w$ in $k b n t$ boats, in year 4 they were sttiw in 'h'w boats. It is the latter whom Helck quite properly calls Asiatics, and Edel's demonstration that the events described for year 4 relate to the Babylonian invasion confirms the equation. This leaves the $h ; w-n b w$ as at least partly coterminous with the Greek mercenaries whom Herodotus describes as providing Apries' support. For a similar sense in the fourth century, see L. Limme in K. R. Veenhof (ed.), Schrijvend Verleden (Leiden, 1983), 328 n. 19; O. Perdu, RdE 36 (1985), 107 (o). On the wider use of the term, see now E. Iversen, $Z \ddot{A} S_{114}$ (1987), 54-9.

[^115]:    ${ }^{30}$ D. J. Wiseman, Chronicles of Chaldaean Kings (London, 1956), 94-5, pls. xx-xxi); translation by A. Oppenheim in J. B. Pritchard, Ancient Near Eastern Texts (Princeton, 1955), 308; partial translation by P. Berger, Die neubabylonischen Königsinschriften (Neukirchen-Vluyn, 1973), 6, 68-9, 32 1, and by Edel, GM 29, 14-15. I am most grateful to Professor W. G. Lambert for collating the text. Oppenheim's translation reflects very accurately (except for the omission of 'King' in line i) what is present, with a minimum of restoration, and may usefully be compared with Edel's version. Although there are a number of minor inaccuracies in the last published version of the text (Wiseman, loc. cit.), the corrections do not significantly improve understanding of the text. At the beginning of line 1 of the reverse $\ldots{ }^{r} a^{1}-s u$ is probably correct, the second sign certain. The following phrase 'King of Egypt' suggests that this is the end of the name of an Egyptian king, as widely recognized. Amasis is the only king of the Twenty-sixth Dynasty whose name could end so, which confirms that the next few lines refer to his reign, and to Nebuchadnezzar's year 37 itself, and are not a retrospective account of earlier events. Professor Lambert regards the reading [ $N i$ ]-ku-u (Wiseman, Nebuchadrezzar and Babylon (Oxford, 1985), 40) at the beginning of line 2, as impossible. [Ni-ik]-ku-u could be read but [sa]-ku-u, 'chiefs', is epigraphically more likely. Since it is difficult to imagine why Necho should be mentioned at all, let alone just before the toponym 'Putuiaman', Wiseman's suggestion may safely be rejected.
    ${ }^{31}$ First recognized by Berger, op. cit. 6; also by Edel, GM 29, 14-15. Berger's unambiguous elucidation has been misunderstood by A. Malamat, $\mathcal{F} A N E S C U_{5}$ (1973), 278, who credits him with identifying the contingents as part of the Babylonian army, and by Spalinger, $S A K 5$ (1977), 237 n. 63 , who attributes to him the view that the tablet has to do solely with troop levies.
    ${ }^{32}$ This is due to Edel, GM 29, 15-16; Spalinger, Acts, 597.
    ${ }^{33}$ For Herodotus' notoriously defective knowledge of Egypt's relations with the Near East, see Lloyd, Herodotus, iII, 117 and 241.

[^116]:    ${ }^{34}$ See the discussions cited in n. 19 above.
    ${ }^{35}$ See the summaries of Helck, Die altägyptischen Gaue (Wiesbaden, 1974), 55 and $L \ddot{A}$ iv, 191; Spalinger, Acts, 602 n. 15; Lloyd, Herodotus, III, 18ı-2. The evidence allows the equation of Momemphis with Kom el-Hisn, without proving it. The toponym on the stela is certainly $\ \Omega \Omega=$ 'Im;w (Helck, loc. cit.; Edel, GM 29, 19) but Helck's view that this is decisive assumes that Herodotus and the stela are referring to the same battle.
    ${ }^{36}$ P. Rylands III-VI (the earliest dating to 2, il šmw); see Thissen, Enchoria 10 , 110 ; Vleeming, OMRO 61, 6; most recent translations in B. Menu, RdE 36 (1985), 83-5. P. Louvre E. 786 (3, in šmw 19): Malinine, MDAIK 16 (1958), 221-5. Cairo T. 14.2.25.2: Meeks, State and Temple Economy, 680, no. 26.5.3.
    ${ }^{37}$ It is likely, as Lloyd, Herodotus, III, I70, and Historia 37 (1988), 37-8, has suggested, that the classical tradition of a reign of 22 or 25 years reflects continuing loyalty to Apries in some quarters.
    ${ }^{38}$ Edel, GM 29, 15 -16,

[^117]:    39 Herodotus' idea that they were moved to protect Amasis from his own people is patently unsatisfactory, and has been rejected in favour of a variety of explanations. For Helck, Geschichte des alten Agypten, 256-7, the intention was to keep the mercenaries out of sight; for Lloyd, Herodotus, 1, 23 to soothe the wounded pride of the 'machimoi'; for Spalinger, $S A K$ 5, 242, to allow more effective control.
    ${ }^{40}$ Helck, Geschichte des alten Ägypten, 255 n. 8 . Edel's views in $G M 29$ seem to be the same as those expressed in the 1952 paper. Exactly how much of Helck's narrative is based on Edel, and how much independent, is unclear.
    ${ }^{41}$ Vandersleyen, Les Guerres d'Amosis, 145.
    ${ }^{42}$ Daressy, $R T$ 22, 2; De Meulenaere, in Vandersleyen, Les Guerres d'Amosis, 144.
    ${ }^{43}$ For $s n$, 'open up', see $W b$. III, 454 and for its use to describe the submission/capture of cities, Grimal, La Stèle triomphale, 329 (index); for $s n$, 'cut off', see $W b$. iII, 457.

[^118]:    ${ }^{44}$ Helck, $L \ddot{A}$ vi, $1452-5$; but cf. J. Osing, $G M 40$ (1980), 45-51, who argues that isy was the main name of Cyprus, and that irs was, perhaps, the name of a town on the island. Helck has subsequently argued for the location of isy in south-western Anatolia ( $Z \ddot{A} S_{110}(1983), 29-36$ ). J. Leclant, in Salamine de Chypre, histoire et archeologie, Colloques internationaux CNRS, no. 578 (Paris, 1978), 131-5, seems to regard irs and isy as variants of the same toponym. J. Strange's view that Cyprus was synonymous with Kftiw does not convince, cf. S. Wachsmann, Aegeans in the Theban tombs (Louvain, 1987), 99-102.
    ${ }^{45}$ For a general survey of Egypt's foreign relations at the time, see Spalinger, $S A K 5$ (1966), 221-44.
    ${ }^{46}$ For earlier conquests of Cyprus, see Lloyd, Herodotus, III, 241.
    ${ }^{47}$ Spalinger, $S A K_{5}, 234$.
    ${ }^{48}$ Lloyd, Herodotus, III, 171-2. ${ }^{49}$ Spalinger, SAK 5, 236-41.

[^119]:    ${ }^{50}$ E. Gjerstad, The Swedish Cyprus Excavations, IV.2, The Cypro-geometric, Cypro-archaic and Cyproclassical Periods (Stockholm, 1948), 466 ff .
    ${ }^{51}$ See Lloyd, Herodotus, III, 240, for discussion of Amasis and Cyprus.
    ${ }^{52}$ If there is any truth in Herodotus' story of Apries' captivity, it could refer to a brief period after this or the second battle.
    ${ }^{53} \mathrm{~W}$. Guglielmi, L $\ddot{A}_{\text {III, 164-5. A. Gardiner, The Wilbour Papyrus, II (Oxford, 1948), 27, 33; Wb. 1, } 26 \text { and 47; }}$ P. Munro, Form und Mass-Festschrift für Gerhard Fecht (Wiesbaden, 1987), 312 n. f); cf. P. Vernus, Athribis (Cairo, 1978), 336 on possible nuance. It is noteworthy that in the Libyan period $i w$ is used to refer to a temple of Isis of ist wrt, K. Jansen-Winkeln, Die ägyptische Biographien der 22, und 23, Dynastie (Wiesbaden, 1985), 165 n. 26.
    ${ }_{54} \mathrm{~J}$. Malek, $R d E_{3} 6$ (1985), 181-5. iw was an archaism by the sixth century, when $m ; w t$ had inherited its broad range of meaning: J. Yoyotte, Comptes-rendus GLECS 8 (1957-60), roo-1; 9 (1962), 5-9; W. Schenkel, Die Bewasserungsrevolution im alten Ägypten (Mainz, 1978), 62-5.

[^120]:    ${ }^{55}$ See Grimal, La stèle triomphale, 222, for a useful map of the region in relation to Tefnakht's campaign there.
    ${ }^{56}$ W. M. F. Petrie, The Palace of Apries (Memphis II) (London, 1909), esp. 1-4; Petrie, E. Mackay, and G. Wainwright, Meydum and Memphis (III) (London, 1910), 40-4, ch. xiii.
    ${ }_{57}$ B. J. Kemp, MDAIK 33 (1977), roi-2 and GM 29 (1978), 6ı. ${ }^{58}$ PM 1112, 830.
    ${ }^{59}$ D. Wildung, Die Rolle ägyptischer Könige im Bewusstsein ihrer Nachwelt, I (Berlin, 1969), 78.
    ${ }^{60}$ W. Kaiser, MDAIK 43 (1987), 123-4.
    ${ }^{61}$ My thanks are due to Mr David Jeffreys, Director of the EES Memphis Survey, for his comments on this matter.
    ${ }^{62}$ Yoyotte, RdE 15 (1963), 112-13; Grimal, La Stèle triomphale, 16 n. 26.
    ${ }^{63}$ On the siege techniques required, see Grimal, La Stèle triomphale, 233-6. In resisting Piye (line 88), Memphis was helped by the protection afforded by the river on its immediate east. It also held out against a prolonged Athenian siege, P. Salmon, La Politique égyptienne d'Athènes (Brussels, 1965), 105-1.
    ${ }^{64}$ e.g. sbty, htm or nhtw, for which see Grimal, La Stèle triomphale, i6 n. 26, 84 n. 237, 115 n. 336 respectively.

[^121]:    ${ }^{65}$ H. S. Smith, D. G. Jeffreys, and J. Malek, $\mathcal{F E A} 69$ (i983), 40; D. G. Jeffreys, Survey of Memphis, i (London, 1985), 51-5.
    ${ }^{66}$ The Boundary stelae of Akhenaten refer to the central part of the city as P3-iw-n-'Itn, N. de G. Davies, Rock Tombs of El Amarna, v (London, 1908), pl. 30, 11. 15-16. This may be intended to convey the spiritual/physical separateness of the part of the city particularly dedicated to the Aten. Cf. also J. Vandier, Mo'alla (Cairo, 1950), VIa7, 242, 246.

    67 It may at least be wondered whether the canopic jar of a king 'Wahibre' (i.e. Apries?, Leahy, GM 80 (1984), $69-70$ ) found reused at Saqqâra is relevant here. According to J. F. and L. Aubert, Statuettes égyptiennes (Paris, 1974), 214, a ushabti of a king Wahibre (Cairo CG485I6) is an 'offrande votive découverte à Saqqarah'. The first part of the description is an assumption, and the basis for the second unclear. P. E. Newberry, Funerary Statuettes (Cairo, 1937) gives no provenance.
    68 The idea that Apries might have had supporters at Memphis, and even been resident there, was mooted by Vercoutter, Textes biographiques, 26, mainly on the basis of his tentative recognition (idem. 20 n . o) of a reference to a Memphite coronation of Amasis on a Serapeum stela which he dates to year 5. Amasis could have held a second ceremony then to symbolize the final triumph of year 4-for a probable instance of recoronation after a civil war in the reign of Achoris, see J. D. Ray, $\mathscr{f} E A 72$ (1986), 149-58-but the context suggests that the allusion is to the induction of an Apis bull.
    ${ }^{69}$ Posener, RdPh 21, 128-31; De Meulenaere, Herodotos over de 26ste Dynastie, 92-3.
    ${ }^{70}$ Leahy, GM 70 (1984), 50-2; Lloyd, Herodotus, III, 180.

[^122]:    ${ }^{71}$ H. Schäfer, Klio 4 (1904), 152-63. Cf. Lloyd, Herodotus, III, 170.
    ${ }^{72}$ For the titles and family relationships of these men, see E. Graefe, Untersuchungen zur Verwaltung und Geschichte der Institution der Gottesgemahlin des Amun (Wiesbaden, 198r). Sheshonq A was probably still Chief Steward in 570.
    ${ }^{73}$ Although he does not make this specific connection, Graefe, op cit. II, II I, notes the possibility that the reduced titles of the last three Chief Stewards were the result of measures taken by Amasis, with the quite proper reservation that these officials are less well documented than their predecessors.
    ${ }^{74}$ My argument, $G M 80$ (1984), 72-3, that there are no certain examples of the erasure of Apries' names needs to be modified in the light of Munro, Form und Mass, 328-33, but the two statues of Hor discussed there still represent no more than an isolated act of personal vengeance against a supporter of Apries.
    ${ }^{75}$ Helck, Geschichte des alten Ägypten, 256 n. 2, notes that such an attitude towards a defeated opponent is 'unägyptisch', and explains it as the result of Amasis' Libyan background.
    ${ }^{76}$ For an acute and realistic assessment of the limitations of Herodotus on Egyptian history, see now Lloyd, Historia 37, 22-53.

[^123]:    ${ }^{1}$ I cannot find a clear expression of the rule in the standard discussions of Egyptian dress. The major treatments of the subject are: Hans Bonnet, Die ägyptische Tracht bis zum Ende des Neuen Reiches (Leipzig, 1917; reprinted Hildesheim, 1964); Elisabeth Staehelin, Untersuchungen zur ägyptischen Tracht im Alten Reich (Berlin, 1966); J. Vandier, Manuel d'archéologie, ini (Paris, 1958), 106-10 (on Old Kingdom); Michel Malaise, in Mélanges offerts à fean Vercoutter (Paris, 1985), 217-27; H. O. Lange and H. Schäfer, Grab-und Denksteine des mittleren Reichs im Museum von Kairo (CCG), Teil 4, Tafeln (Berlin, 1902) pls. 70-85.
    ${ }^{2}$ H. G. Fischer, $R d E 30$ (1978), 78-95.
    ${ }^{3}$ George A. Reisner, Mycerinus (Cambridge, Massachusetts, 1931), pl. 41. In the fragmentary triad, No. 13, the nome personification similarly has the fold in the direction opposite to that of the king, ibid. pl. 46 f. ${ }^{4}$ William C. Hayes, The Scepter of Egypt, i (New York, 1953), 70, fig. 46.
    ${ }^{5}$ Cyril Aldred, Middle Kingdom Art in Ancient Egypt (London, 1950), no. 4, p. 34.
    ${ }^{6}$ See the numerous examples in Labib Habachi, Elephantine IV: The Sanctuary of Heqaib (Mainz am Rhein, 1985). The long wrap-around garment, however, retains the usual right-over-left fold: cf. op. cit. pl. ro3.
    ${ }^{7}$ The seated statue of Prince Ahmose in the Louvre: Aldred, New Kingdom Art in Ancient Egypt (London, 1951), no. 2; statue of Nebyot from Edfu in the Louvre; and the seated statue of Si-Amun in New York (MMA 65.115).

[^124]:    ${ }^{8}$ Op. cit. 87 und 88 n. 2.

[^125]:    ${ }^{1}$ S. Gilula, loc. cit.
    ${ }^{2}$ D.h. exakt so, wie Lichtheim die hier in Frage stehende Stelle versteht, s.o.
    ${ }^{3}$ Für einen noch deutlicheren Fall im späten Mittelägyptisch s. meine Ägyptischen Biographien der 22. und 23. Dynastie (Wiesbaden, 1985), 464, Z.7-8 und 66: Hier besteht ein klarer Gegensatz '. . . ich meinerseits (jnnk) . schon mein Vater . . .'!
    ${ }^{4}$ Zum Verb vgl. J. Osing, Die Nominalbildung des Ägyptischen (Mainz, 1976), II, 765 (929). Ein weiterer Beleg in CT VI, i (Sp. 472).
    ${ }^{5}$ S. dazu die Belegsammlung bei B. Gunn, Studies in Egyptian Syntax (Paris, 1924), 88.
    ${ }^{6}$ Als Zeichen der Ehrfurcht, s. Wb. iII, 231, 3.
    ${ }^{7}$ Op. cit. 6 (d).
    ${ }^{8}$ Schenkel, Memphis, Herakleopolis, Theben, 63 (d) möchte $I$ allerdings eher als aus hieratischem verderbt erklären.
    ${ }^{9}$ Vgl. auch Wb. iv, 99, 12 (dort von Göttern).
    ${ }^{10}$ Belege bei J. Polotsky, Zu den Inschriften der II. Dynastie (Leipzig, 1929) § 33 und Schenkel, Frühmittelägyptische Studien (Bonn, 1962), §3.

[^126]:    ${ }^{1}$ Kush 10 (1962), $334 . \quad{ }^{2}$ Loc. cit. ${ }^{3}$ Memphis, Herakleopolis, Theben, 63.
    ${ }^{4}$ In seiner Anmerkung e: 'Wörtl.: Ich habe die Vorderseite meiner Feder geneigt; d.h. ich war friedlich?'
    ${ }^{5}$ Op. cit. 87.
    ${ }^{6}$ MDAIK 16 (1958), 41-2.
    ${ }^{7}$ Ganz entsprechend der 'weißen Fahne' als Zeichen der Kapitulation oder des Parlamentärsstatus.
    ${ }^{8}$ Die Feder als Zeichen der Friedfertigkeit muß ja gerade in der Hand getragen werden; an der Stirn ist sie das Abzeichen des Kriegers.
    ${ }^{9}$ Immerhin könnte man auf die allgemein knappere Determinierung der Inschriften der ersten Zwischenzeit verweisen, vgl. Schenkel, Frühmittelägyptische Studien, § го.
    ${ }^{10}$ Zum Verb hnn im Sinne von 'die Waagschale neigen, sinken lassen' vgl. Wb. II, 494, $13=\mathrm{pHarris} \mathrm{I}, 26$, 12 (dort allerdings ohne Objekt gebraucht).
    ${ }^{11}$ Aus den (späteren) Darstellungen (mit Herz und Feder bzw. Maat im Gleichgewicht) geht ja nicht hervor, ob Sünden oder gute Taten (oder beides) gewogen werden.
    ${ }^{12}$ BIFAO 30 (1931), 430 ff .
    ${ }^{13}$ Die Idee vom Totengericht in der ägyptischen Religion (Glückstadt, 1935), 68 ff .
    ${ }^{14}$ Wobei dann-bei gutem Ausgang-eine Umkehrung der Gewichtsverhältnisse erforderlich ist.
    15 Untersuchungen zur Darstellung des Totengerichts im Alten Ägypten (München, 1976), 80 ff.

[^127]:    ${ }^{1}$ Der bisher früheste auf der von Clère，loc．cit．，besprochenen Stele aus der in．Dynastie sowie CT V 32 I，s． dazu R．Grieshammer，Das fenseitsgericht in den Sargtexten（Wiesbaden，1970）， 46 f．
    ${ }^{2}$ So jetzt auch E．Doret，The Narrative Verbal System of Old and Middle Egyptian（Genf，i986）， 147 Ex． 258.
    ${ }^{3}$ Iv，334， 6.
    ${ }^{4} \mathrm{~Wb} . \mathrm{Iv}, 77,9$.
    ${ }^{5}$ Vgl．die Schreibung von hpr•n in Z．i2．${ }^{6}$ J．Vandier，Mocalla（Cairo，1950），Iv， 30.
    ${ }^{7}$ I would like to thank Janine Bourriau and the Fitzwilliam Museum for permission to publish this coffin．

[^128]:    ${ }^{1}$ Neg. B88 held in the School of Archaeology and Oriental Studies, University of Liverpool, reproduced here by kind permission of Professor A. F. Shore.
    ${ }^{2}$ J. Garstang, Burial Customs of Ancient Egypt (London, 1907), 212.
    ${ }^{3}$ Ibid., pl. iv.
    ${ }^{4}$ C. P. Smither, $\mathcal{F} E A 25$ (1939), 34; C. J. C. Bennett, $\mathcal{F} E A 44$ (1958), 120-1; D. B. Spanel, Beni Hasan in the Herakleopolitan Period (Ph.D. Toronto, 1984), 98; W. Barta, Aufbau und Bedeutung der altägyptischen Opferformel (Glückstadt, 1968), 289.
    ${ }_{7}^{5}$ D. Magee, $\mathcal{F S S E A} 13$ (1983), 241, 248 . ${ }^{6}$ Bennett, $\mathcal{F E A} 27$ (1941), 78.
    ${ }^{7}$ H. Gauthier, Dictionnaire des noms géographiques, vi (Cairo, 1929), i02; J. J. Clère and J. Vandier, Textes de la Première Période Intermédiare et de la XI ${ }^{\text {eme }}$ dynastie (Brussels, 1948), I5, 19, 33.
    ${ }^{8}$ W. Schenkel, Frühmittelaegyptische Studien (Bonn, 1962), 38.

[^129]:    ${ }^{1}$ H. G. Fischer, Dendera in the Third Millennium BC (New York, 968 ), 83.
    ${ }^{2}$ Fischer, in R. A. Caminos and H. G. Fischer, Ancient Egyptian Epigraphy and Palaeography, (New York, 1976), 47; Spanel, op. cit. 62; Schenkel, op. cit. 51, 59.
    ${ }^{3}$ Fischer, Dendera . . 40, 43. ${ }^{4}$ Ibid. fig. 4.
    ${ }^{5}$ G. Steindorff, Grabfunde des Mittleren Reichs in den Königlichen Museen zu Berlin. I. Grab des Mentuhotep (Berlin, i896), 4, 8, ıо, Thebes; H. Schäfer, Priestergräber vom Totentempel des Ni-user-Rê, II (Leipzig, 1890 ), 23 MR i, $3_{2-3}$ MR i, $_{35}$ MR $_{\text {I }}, 83$ MR 8 . Abusir; H. O. Lange and H. Schäfer, Grab-und Denksteine des Mittleren Reiches, I (Cairo, I902), 280, CG 20262; І (Cairo, 1908), 279, CG 20462.
    ${ }^{6}$ G. Steindorff, Grabfunde. II. Der sarg des Sebk-o. Ein Grabfunde aus Gebelên (Berlin, 1901 ), 17, pls. 7.10, 20; A. de Buck, The Egyptian Coffin Texts, vil (Chicago, i96i), vir: if 2 GiBe.
    ${ }^{7}$ K. Sethe, Die altaegyptischen Pyramidentexte, I (Leipzig, 1901), spell 468/896c; il (Keipzig, i910), spell 535/1287c, spell 536/1295a, spell $553 / 1363$, spell 676/2012b.
    ${ }^{8}$ Ibid. i, spell 468/896c. ${ }^{9}$ de Buck, op. cit. i, spell 6o/Biod and B4c; vi, spell 723/B3Bo.
    ${ }^{10}$ Beni Hasan tomb i16, Nfry. ${ }^{11}$ Idem, tomb 585, Hnmw-nhti. ${ }^{12}$ Idem, tomb 366, Hety.
    ${ }^{13}$ Idem, tomb ${ }_{130}$. ${ }^{14}$ Idem, tomb $500, M 3.15$ Idem, tomb 723.
    ${ }_{16}$ Garstang, Burial Customs . . . 64 BH ェ; 189 BH 39, fig. ı69; 191 BH 132.
    ${ }_{17}$ Ibid. 212, pl. xiv; 45. ${ }^{18}$ J. Bourriau, Umm el-Ga'ab (Cambridge, 1981), 70, no. 131.
    ${ }^{19}$ Do. Arnold, MDAIK 28 (1972), 43-4, 45, Abb. 4 group 9.
    ${ }^{20}$ Fischer, $K U S H 9$ (196ı), $56-8$, pl. xi, fig. 3; 59, pl. xiiib, fig. 4; 6ı, pls. xiia, xiiia.
    ${ }^{21}$ Fischer, L $\ddot{A}$ iII, 82; B. Jaroš-Deckert, Grabung im Asasif 1963-197o. V. Das Grab des fnj-jtjff (Mainz am Rhein, 1984), 110-11, Abb. 32 MMA 13.182 .3.

[^130]:    ${ }^{1}$ Fischer, $L \ddot{A}$ inf, 77-8.
    ${ }^{2}$ K. Michalowski et al., Fouilles Franco-Polonaise. Tell Edfu III. 1939 (Cairo, 1950), 88, pl. vi. 5, xxiii.
    ${ }^{3}$ A. B. Kamal, $A S A E 2$ (1901), 35. JE. 34325.
    ${ }^{4}$ Garstang, Burial Customs . . . 226, fig. 144. JE 43308.
    ${ }^{5}$ W. M. F. Petrie and G. Brunton, Sedment, i (London, 1924), pl. 36.
    ${ }^{6}$ A. Lansing, $B M M A$ 19, part ii (1924), 38; W. C. Hayes, Scepter of Egypt, i (New York, 1953), 222-4, fig. 140; B. J. Kemp and R. S. Merrillees, Minoan Pottery in Second Millennium Egypt (Mainz am Rhein, i980), i6, pl. 22. 7 Ibid. 14I, pls. 13, 14.98, fig. 45.100. Ashmolean E.3302c and E. 3286.
    ${ }^{8}$ Ibid. 147, pls. ıо, ir, i7.ı10. ${ }^{9}$ Garstang, El-Arábah (London, 1901), 44.
    ${ }^{10}$ Kamal, $A S A E$ II (191ı), $8 . \quad{ }^{11}$ Hayes, op. cit. 250, fig. 160; Fischer, $L \ddot{A}$ iII, 79.
    ${ }^{12}$ H. Carter, Five Years Exploring at Thebes (London, 1912 ), 54, pl. 1. 1-2.
    ${ }^{13}$ B. Altenmuller, L $\ddot{A}$ i, 327 f.; T. Hopfner, Der Tierkult der alten Ägypter nach den Griechisch-Romischen berichten und den wichtigeren denkmälern (Wein, 1913); C. Gaillard and G. Daressy, La Faune momifiée (Cairo, 1905), 126-32, pls. liii-liv.
    ${ }_{14}$ Janssen, $M D A I K$ 16 (1958), i76-82 and bibliography; Fischer, $\mathcal{F} E A_{41}$ (1961), 152-3; MMF 12 (1977), ${ }^{1773-8 .} \quad{ }^{15} \mathrm{~W}$. B. Emery, Great tombs of the First Dynasty, iif (London, i958), 78.
    ${ }^{16}$ G. A. Reisner, $B M F A 34$ (1936), 96-9 tsm wnn stp s3 $r$ hem•f.
    ${ }_{17}$ J. Capart. $Z \ddot{A} S_{44}$ (1908), ı3I; L. Limme, $C d E 60$ (1985), 147-5ı.
    ${ }^{18}$ Michalowski et al., op. cit. 69.

[^131]:    ${ }^{1}$ Ibid. 74. ${ }^{2}$ Ibid. $98 . \quad{ }^{3}$ Ibid. ioo. ${ }^{4}$ Fischer, $L \ddot{A}$ iII, 77.
    ${ }^{5}$ D. Arnold, MDAIK 30 (1974), 159; idem, Gräber des Alten und Mittleren Reichs in El-Tarif (Mainz am Rhein, 1976), 40, pl. 27b. ${ }^{6}$ R. Engelbach, Harageh (London, 1923), 16, pl. lix.
    ${ }^{7}$ W. M. F. Petrie, Diospolis Parva. r898-1899 (London, i90I), 48; Fischer, L $\ddot{A}$ iif, 80 n. 34.
    ${ }^{8}$ E. Chassinat and C. Palanque, Fouilles dans la nécropole d'Assiut (Cairo, 1911), 155-7, pl. xxix. i-2. JE 36445 .
    
    10 Unlike Brussels E.26i7a-c, Limme, op. cit. $147 . \quad 11$ Ranke, $P N$ i, 236, 12-ı6.
    ${ }^{12}$ D. Franke, Personendaten aus dem Mittleren Reich. Dossiers $I-786$ (Wiesbaden, i984), does not list any names like these.

[^132]:    ${ }^{1}$ Of Thorpe, probably that near Norwich. An Edmond Wodehouse, MP, lived in Thorpe at that time, and may thus have been P. E. Wodehouse's father or grandfather. The Norfolk Wodehouse family lived at Kimberley Hall and were extensive landowners. I should like to express my thanks to Barbara Green and Bill Milligan of Norwich Castle Museum for all their help and permission to publish. I am also indebted to Piotr Bienkowski for permission to publish the Liverpool piece, and to both museums for excellent photographs.
    ${ }^{2}$ Along with two other sculptured fragments and two pieces of silicified wood from the Petrified Forest, Cairo. I owe this and the previous note to the kindness of Barbara Green.
    ${ }^{3}$ The present Egyptian collection is housed at the top of the castle keep, and includes a good range of categories of antiquity. One may note two interesting pieces, published while still in private hands: 93.925, a statue of one Roy, published by A. H. Gardiner, $\mathcal{F E A} 6$ (1920), 212-13, and 37.21 (1), a painted clay granary, published by A. M. Blackman, also in $\mathcal{F} E A 6,206-8$. For the latter, see now also J. D. Bourriau, Pharaohs and Mortals (Cambridge, 1988), ro4-5 [91]. For the museum's mummies, see W. R. Dawson, $\mathcal{f} E A$ i5 (i929), 186-90.
    ${ }^{4}$ My thanks go to Gay Robins for delivering the slide.
    ${ }^{5} \mathrm{PM}_{\text {II }^{2}}$, 365-6. ${ }^{6}$ Later altered to Tuthmosis III.

[^133]:    ${ }^{1} \mathrm{PM} \mathrm{HI}^{2}, 354-5$.
    ${ }^{2}$ G. Jéquier, L'Architecture et la décoration dans l'ancienne Égypte, I (Paris, 1920), pl. 35, 2; J. Capart and M. Werbrouck, Thebes, the Glory of a Great Past (London, 1926), fig. $142 . \quad{ }^{3} N A W G 1955$ Nr. 6, 200 n. 17.
    ${ }^{4}$ H. Kayser, Die ägyptische altertümer im Roemer-Pelizaeus-Museum in Hildesheim (Hildesheim, 1966), 69, Abb. 43. ${ }^{5}$ Die Blütezeit des Pharaonenreiches (Bielefeld and Leipzig, 1900), 19, Abb. 17.
    ${ }^{6}$ Schott cites A. M. Calverley, The Temple of King Sethos I at Abydos, III (London and Chicago, 1938), pl. I3, as providing a parallel, which it most certainly does not!
    ${ }^{7} \mathrm{PM}_{\mathrm{HI}}{ }^{2}$, $362 . \quad{ }^{8}$ Naville, op. cit. I (London, i895), passim.
    ${ }^{9}$ Jéquier, op. cit. pl. 35, i; Capart and Werbrouck, op. cit. fig. 143; Naville, op. cit. pl. ix; ibid., Introductory Memoir (London, 1894), pl. xii.
    ${ }^{10}$ For the recent identification of other fragments from Deir el-Bahari in museum collections see R. Tefnin, in Artibus Aegypti, eds. H. De Meulenaere and L. Limme (Brussels, 1983), 153-77, and C. Van Siclen, GM 97 (1987), 21-4.

[^134]:    ${ }^{1}$ For information and references, the author is indebted to Ms Laura Ponsonby, Royal Botanical Gardens, Kew, and to Dr A. Leahy. Plate references are to N. de G. Davies, The Tomb of Rekhmire at Thebes (New York, 1943). ${ }^{2}$ Ancient Records of Egypt, 11 (Chicago, 1906), 746-51. ${ }_{3}$ The Life of Rekhmara (London, 1900), pls. xiii and xiv. ${ }^{4}$ op. cit. I, 43.
    ${ }^{5} E G^{3}, 486$, and $A$ Concise Dictionary of Middle Egyptian (Oxford, 1981), 58, respectively.
    ${ }^{6}$ E. Edel, Die Felsgräbernekropole der Qubbet el Hawa bei Assuan, il Abt., I. 2, 22 (Wiesbaden, 1970); R. Germer, Untersuchungen über Arzneimittelpflanzen im alten Agypten (Hamburg, 1979), 134-8, and Flora des pharaonischen Agypten (Mainz, 1985), 245-6; G. Charpentier, Recueil de matériaux épigraphiques relatifs à la botanique de l'Egypte antique (Paris, 1981), 319.

    7 W. J. Darby, P. Ghaliounghi and L. Grivetti, Food: the Gift of Osiris, II (London, New York, San Francisco, 1977), 649-50.
    ${ }^{8}$ This is a direct translation of the German Erdmandel as used in V. L. Täckholm and M. Drar, The Flora of Egypt, iI (Cairo, 1950), 60 ff .
    ${ }^{9}$ H. M. Burkitt, The Useful Plants of West Tropical Africa (Kew, 1985), 614-16.
    10 Täckholm and Drar, op. cit. 68.
    ${ }^{11}$ J. Murray, Bulletin of the Imperial Institution XXII (1924), no. 1, 74. ${ }^{12}$ Burkitt, op. cit. 615.

[^135]:    ${ }^{1}$ Margaret Murray, The Splendour That was Egypt (London, 1964), 86.
    ${ }^{2}$ Faulkner, op. cit. 245.
    ${ }^{3}$ Breasted, op. cit. Iv. 350. ${ }^{4}$ Davies, op. cit. 44.
    ${ }^{5}$ Ibid., pl. xxxviii.

[^136]:    ${ }^{1}$ A. R. David, The Pyramid Builders of Ancient Egypt (London, 1986), 155-7.
    ${ }_{4}^{2}$ Darby et al., op. cit. I. 436, fig. 9.4.
    ${ }^{5}$ Claudia Roden, A New Book of Middle Eastern Food (London, 1985), 504.
    ${ }^{3}$ Op. cit. pl. xviii.
    ${ }^{6}$ Ibid. 49 I.

[^137]:    ${ }^{1}$ Permission has been granted by the Oriental Institute for the publication of this relief. I am indebted to Dr Janet Johnson for assisting in this matter. I must gratefully acknowledge the information given to me about this piece by Mr John Larson, the archivist. BM I5 $_{16} 6$ is reproduced by courtesy of the Trustees of the British Museum.
    ${ }^{2}$ When Professor K. A. Kitchen visited Wheaton in November of 1984 , he examined this inscription and thought that Neferhotep was the name.
    ${ }^{3}$ J. Černý, Community of Workmen at Thebes in the Ramesside Period (Cairo, 1973), 121.
    ${ }^{4}$ Ibid. 34. ${ }^{5}$ R. A. Caminos, Late Egyptian Miscellanies (London, 1957), 175, 450.
    ${ }^{6}$ R. Ventura, Living in the City of the Dead (Freiburg, 1986). ${ }^{7}$ Ibid. $1-63 . \quad{ }^{8}$ Ibid. 43-6.

[^138]:    ${ }^{1}$ M. Bierbrier, The Tomb Builders of the Pharaohs (London, 1982), 27.
    ${ }^{3} \mathrm{~K} R I$ iII, 596, 4; Černý, op. cit. $288 . \quad{ }^{4}$ Bierbrier, op. cit. 29.
    ${ }^{6}$ Černý, op. cit. 285-6. ${ }^{7}$ Ibid. 287; Bierbrier, op. cit. 29.
    ${ }^{9}$ Loc. cit. ${ }^{10}$ Ostraca, Cairo Cat. 542, 13.
    ${ }^{2}$ Černý, op. cit. $122-3$.
    ${ }_{5} \mathrm{PM} \mathrm{I}^{2}$, I 4.
    Loc. cit. 10 Ostraca, Cairo Cat. 542, 13.
    ${ }^{8}$ Černý, op. cit. ${ }^{288-9}$.
    Ibid. 29. ${ }^{13}$ Loc. cit.; Černý, op. cit. $289 . \quad{ }^{14}$ Bierbrier, op. cit. 31 r.
    ${ }^{15}$ B. Bruyeré, Rapport sur les Fouilles de Deir el Medineh (1923-1924) (Cairo, 1925), pl. xiii, fig. i.
    ${ }^{16}$ Černý, op. cit. 289.

[^139]:    ${ }^{1}$ Loc. cit. ${ }^{2}$ Bierbrier, op. cit. 31-2. ${ }^{3}$ fEA 26 (1940), 23-9, pls. 5-8.
    ${ }^{4}$ To the references collected by S. Allam, Hieratische Ostraka und Papyri, I (Tübingen, 1973), 258-67, in his discussion and translation of this text, add A. Theodorides, RIDA 24 (1977), 24, no. 15; E. Cruz-Uribe, RID $A$ 29 (1982), 47-52, 62-3; B. Menu, Recherches sur l'histoire juridique, economique et sociale de l'ancienne Egypte (Versailles, I982), i97, no. 4, 330, no. 5; I. Harari, RID $A_{30}$ (1983), 45; S. Groll, Studien zu Sprache und Religion Agyptens. Zu Ehren von Wolfhart Westendorf, i (Göttingen, 1984), 41-6ı.
    ${ }^{5}$ See my comments in RIDA 29 (1982), 47-52.
    ${ }^{6}$ I wish to thank Madeleine Cody and Stephen Thompson, two Brown graduate students, with whom I discussed this text at great length in a graduate seminar on Egyptian legal texts held at Brown University during the spring of 1987 .
    ${ }^{7}$ Gardiner, $\mathfrak{F E A} 26$ (1940), 24.

[^140]:    ${ }^{1}$ This interpretation follows the suggestion of J. Janssen and P. Pestman, $\mathscr{F E S H O} \mathrm{II}_{\text {I }}$ (1968), i66, that a woman does not inherit property from her deceased husband. Although not stated, perhaps the children of the marriage or other relatives would be required to care for the widow. In our text Rennefer expresses the wish that Padiu, as executor of the estate, should care for her when she is a widow. By doing so, she declares the transfer of the property rights, which she received from her husband in the first section of the document, back to her husband's family in the guise of Padiu, her husband's younger brother, now their adopted son.
    ${ }^{2}$ Literally, 'made to him as a child'.
    ${ }^{3}$ For $m 〔 d \downarrow$, see Gardiner, $\mathcal{f} E A 26$ (1940), i $57-8$. Similar meaning can be found in demotic, E. Lüddeckens, Ägyptische Eheverträge (Wiesbaden, 1960), 187, no. 39, and possibly also P. Rylands IX, $17 / 15$ : ' 20 measures of
     no. ı6. For the $m$ here and beginning the next phrase, see Cerny and Groll, op. cit. 256, ex. 694.
    ${ }^{4}$ See F. Gomaa, $L \ddot{A} \mathrm{v}, 863$.
    ${ }^{5}$ See J. Cerný, $\mathfrak{f E A} 27$ (1941), 106-12, where he cites this passage on p. ı08.
    ${ }^{6}$ M. Green, OrAnt, 18 (1979), 298, would understand this passage to mean: 'I am the one who is legally responsible for him.' One must question whether this responsibility is due to his being the older brother or whether it was a matter of Padiu marrying the daughter of his slave. In neither case is there evidence to support that understanding.

[^141]:    ${ }^{1}$ See Pestman, op. cit. 8.
    ${ }^{2}$ For the use of $\operatorname{irm}$ in this phrase, see my discussion in $\operatorname{RIDA} 29$ (1982), 56 , where I note its use to specify binding relationships.
    ${ }^{3}$ Here iir is to be understood as an infinitive, so Groll, op. cit. I, 42. In verso 2 the infinitive is given as $i r$.
    ${ }^{4}$ Gardiner, $\mathscr{f} E A 26$ (1940), pl. 7a, note to line 2, suggests $m r m t$ was meant to be omitted. My translation takes iir as the beginning of a second tense making $m r m t$ a vital part of the narrative of the preceding sentence.
    ${ }^{5}$ Here to be understood 'contest their legal status'.
    ${ }^{6}$ Šwtyw perhaps derives from šwty, 'merchant', though the seated man determinative does not support such an interpretation here. The example in Gardiner, $A E O$ I, $94^{*}$, suggests translating 'merchants', but that would not make clear sense in our text. See also A. Erman and H. Lange, P. Carlsberg zo: Eine ägyptische Schulhandschrift der 20. Dynastie (1925), 67; Theodorides, RIDA 5 (1958), 104-5, no. 165 and RIDA 12 (1965), 89, no. 48.
    ${ }^{7}$ In the sense that Padiu will be executor of estate and thus in charge of all of the affairs detailed in the document.
    ${ }^{8}$ There has been some doubt as to whether to read the ideogram as cnty or nmty. See E . Otto, $L \ddot{A}$ 1, 3 19, no. 2, versus W. Barta, $L \ddot{A}$ iv, 453 .
    ${ }^{9}$ The writers would like to thank the Curator of the Museum of Archaeology and Anthropology for photographs and for permission to publish this panel, which was noted by Dodson in September 1986, during the course of recataloguing and computerizing the Museum's Egyptian collection. The object has since been transferred on long-term loan to the Fitzwilliam Museum, Cambridge (loan no. 88). Thanks are due to Professor J. R. Harris for his comments on an earlier draft of this note.

[^142]:    ${ }^{1}$ Paula Rudall and T. Lawrence of the Jodrell Laboratory, Royal Botanic Gardens, Kew, to whom the writers' thanks are due, identify the wood as box (Buxus sp.). ${ }^{2}$ The type of ivory has yet to be established.
    ${ }^{3}$ Cf. W. R. Dawson and E. P. Uphill, Who Was Who in Egyptology (2nd edn., London, 1972), 2.
    ${ }^{4}$ The Acworth material came to the British Museum in 1939, the pieces retained being registered in 1946. These objects are now numbered EA 64477-5400 and EA 66882. Additional items were presented to the British Museum by Acworth's widow in 1952 (EA 65518-51) and 1965 (EA 66674-705).
    ${ }^{5}$ According to the priced extracts from Acworth's copy of the Meux sale catalogue ( n .8 below), preserved in the British Museum's Department of Egyptian Antiquities.
    ${ }^{6}$ As Neferkare was designated at that time, cf. H. Gauthier, Livre des rois d'Egypte, III (Cairo, 1914), 206 n. I.
    7 Waring and Gillow Ltd., 'Theobald's Park', Waltham Cross, Herts. Catalogue of the Furniture $\mathcal{E}$ Contents of the Mansion together with certain items removed from 41, Park Lane . . (2nd edn., London, 15-16, 18-19, 22-3 and 25-6 May i9if), i20, lot 1642.
    ${ }^{8}$ E. A. W. Budge, Some Account of the Collection of Egyptian Antiquities in the Possession of Lady Meux, of Theobald's Park, Waltham Cross (ist edn., London, i893), 94 f., no. ı84; ibid. (2nd edn., London, 1896), 349 f., no. 1299. Cf. Gauthier, Livre des rois, iII, 212, XxiII; J. von Beckerath, Handbuch der ägyptischen Königsnamen (Munich, 1984), 96, 250, xx. 8, G. 2; KRI vi, 462, 15 , B.
    ${ }^{9}$ Cf. Budge, Collection . . Meux (ist edn., i893), v.
    ${ }^{10}$ Ibid. 95; (2nd edn., 1896), 350, erroneously restores $m i[r<d t]$, and is so followed by Gauthier and von Beckerath (n. 8 above); cf. further KRI vi, 462, I 5, B. For the correct restoration, $m i[t z-\underline{t} n n$ ], cf. fig. i.
    ${ }^{11}$ For the post-interment history of the king's mummy cf. C. N. Reeves, Studies in the Archaeology of the Valley of the Kings, with particular reference to tomb robbery and the caching of the royal mummies (Ph.D. dissertation, University of Durham, 1984), I, 275 (a revised version of this study is in press). The association of the panel and box was first posited ibid. I, izo.
    ${ }^{12} \mathrm{PM} \mathrm{I}^{2}, 662$; $\mathrm{K} R I$ vi, 460 (D).

[^143]:    ${ }^{1}$ The missing section was replaced with a suitable piece of wood at the time the casket was restored. The lid has, in addition, lost its securing knob. Despite a rather uncomfortable discrepancy in size between it and the surviving knob on the box proper (which may itself be a replacement), the lid fitting is perhaps to be recognized as Petrie Museum, University College London, UC 12954 , published by W. M. F. Petrie, Scarabs and Cylinders with Names (London, 1917), pl. 46, 20.8.1 (formerly Hilton Price collection: A Catalogue of the Egyptian Antiquities in the Possession of F. G. Hilton Price, Dir. S. A., II (London, 1908), 59, no. 4526; Sotheby, Wilkinson and Hodge, Hilton-Price Collection (London, 12-14, 17-21 July 1911 ), $112, \operatorname{lot} 878$ ). The Petrie knob is of ivory, 5.4 cm in diameter and 1.45 cm deep, and is inscribed with the prenomen of Ramesses IX. The mortice at the back measures $\mathrm{I} .0 \mathrm{~cm} \times 0.6 \mathrm{~cm}$, which, as estimated from a photograph (cf. n. 3 below), would offer a suitable fit for the broken tenon on the lid. Full details of UC 12954 were kindly supplied by Barbara Adams.
    ${ }^{2}$ Cf. Munich-Hildesheim-Berlin, Nofret, 122; Brussels, Femme, 122.
    ${ }^{3}$ The writers are indebted to Dr Sylvia Schoske and the Staatliche Sammlung Ägyptischer Kunst, Munich, for their kindness in making a full photographic coverage of the Cairo box available.
    ${ }^{4}$ The figure was drawn by Christine Barratt of the British Museum's Department of Egyptian Antiquities, to whom the writers are most grateful.
    ${ }^{5}$ KV 6 was not systematically cleared until 1888 (cf. G. Daressy, $A S A E$ I 8 (1919), 270 ff .), though the tomb had been accessible for many years before that date. Henry Salt's interest in KV 6 is briefly considered by Reeves, $G M 88$ (1985), 44 n . I I and 45 n . 16.
    ${ }^{6}$ Cf. Reeves, op. cit. I, 275. ${ }^{7}$ G. Maspero, Momies royales de Deir el-Bahari (Cairo, 1889), 594-614.

[^144]:    ${ }^{1}$ Ibid. 603-4. $\quad{ }^{2}$ Ibid. 604-5. $\quad{ }^{3}$ B. Gunn and I. E. S. Edwards, $7 E A 41$ (1955), 83-105.
    ${ }^{4}$ W. Spiegelberg, $Z \ddot{A} S 57$ (1922), 149-51.
    ${ }^{5}$ H. Kees, Die Hohenpriester des Amun von Karnak von Herihor bis zum Ende der Äthiopenzeit (Leiden, 1964), 65. ${ }^{6}$ Coffin in New York, MMA 30.3.23-25; cf. Niwiński, BES 5 (1986), 82-3.
    ${ }^{7}$ Coffin in Cairo, JE 29730/29741 (unpublished). Cf. J. Lieblein, Dictionnaire de noms hiéroglyphiques . . . Supplément (Leipzig, 1892), 1003 (no. 140); G. Daressy, $A S A E 8$ (1907), 13.
    ${ }^{8}$ Coffin in Cairo, JE 29612 (unpublished). Cf. Lieblein, op. cit. 1002 (no. 132); Daressy, $A S A E$ 8, 12.
    ${ }^{9}$ Niwiński, $\mathcal{H} A R C E$ 16 (1979), 55.

[^145]:    ${ }^{1}$ The fragment is reported to have been found lying near the surface in 'Cemetery D'; see D. Randall-Maciver and A. C. Mace, El Amrah and Abydos (London, 1902), 87, 96, pl. xli (4). It is now in Philadelphia, Pennsylvania University Museum E.i6i86.
    ${ }^{2}$ See, for example, H. Gauthier, $L R$ III, 349 (IX), 350 (XI.2); K. A. Kitchen, The Third Intermediate Period in Egypt (Warminster 1972/1986), 3 16 n. 402.
    ${ }^{3}$ Ranke, $P N_{\text {I, }} 373,17$ and 374, $15 . \quad{ }^{4}$ Cf. ibid.
    ${ }^{5} \mathrm{~Wb} . \mathrm{II}, 49 \mathrm{I} . \quad{ }^{6} \mathrm{~Wb} . \mathrm{II}, 492 . \quad{ }^{7} \mathrm{~Wb} . \mathrm{II}, 49 \mathrm{I}$.

[^146]:    ${ }^{1}$ Cf. Stewart, op. cit. in-i3, pls. in, i7, i8 (nos. 8-ir).
    ${ }^{2}$ The coffin lid was formerly in the Dewsbury Museum. I am grateful to Mr Brian Haigh of Kirklees Museums for making the piece available for inspection.
    ${ }^{3}$ Malinine et al., op. cit. 33.
    ${ }^{4}$ J. H. Taylor, The Development of Theban Coffins during the Third Intermediate Period: A Typological Study (Ph.D. thesis, University of Birmingham, 1985), II, 268-71.
    ${ }_{5}$ The stela is of the same type as that of the fourth Prophet of Amun Nht $\cdot f-M w t$ A: D. A. Aston, Tomb Groups from the end of the New Kingdom to the beginning of the Saite Period (Ph.D. thesis, University of Birmingham, 1987), 568. This suggests a date in the ninth century. Kitchen's suggestion, op. cit. 223, n. 128, that the $T 3-n$-hsrt named on the Manchester stela might be identical with the man of that name mentioned on statue Cairo CG 42212 , is pure conjecture. The surviving decoration on the cartonnage fragment London UC 38040 shows that it was of the 'Two Falcons' type, which was very popular during the Twenty-second Dynasty at Thebes: Taylor, op. cit. 1, 166-71, fig. i6. Such cases ceased to be made at the beginning of the seventh century BC .
    ${ }^{6}$ Kitchen dates his 'reign' $c .870-860 \mathrm{BC}$; op. cit., table 3. It is clear that he was a contemporary of Osorkon II: Kitchen, op. cit. 108.

[^147]:    ${ }^{1}$ See R. D. Anderson, Catalogue of Egyptian Antiquities in the British Museum, iII, Musical Instruments (London, 1976), 58, no. 83, where no attempt was made to read the cartouche.
    ${ }^{2}$ I am grateful to E. R. Russmann, B. V. Bothmer, R. S. Bianchi, and R. Fazzini for their assistance and encouragement in preparing this article. Any errors, omissions or opinions are my own. I would also like to thank Irene Diehl for her patience and skill in typing the manuscript.

[^148]:    ${ }^{1}$ Leningrad, Hermitage 735 . Schist, ht. 15.7 cm . M. Mathieu and B. Pavlov, Pamyatniki, Iskusstva Drevnego Egipta v Muzeyach Sovetskoga Soyuga (Moscow, 1958), fig. 102.
    ${ }^{2}$ Louvre E. 25480 . Schist, ht. 17.5 cm . J. Vandier, $Z \ddot{A} S 90$ (1963), in5-18, pls. XI-XIII.
    ${ }^{3}$ (East) Berlin ir 864. Schist, ht. 25 cm . See p. 233 n. 3 above.
    ${ }^{4}$ Bologna ı 80 ı. Schist, ht. 40 cm . H. W. Müller, $Z A ̈ S$ (1955), 46-68. Cf. C. Aldred, Egyptian Art (New York and Toronto, i980), 226.
    ${ }^{5}$ Musee Jacquemart-André 438. Aldred, in L'Egypte du Crépuscule, 143, fig. 125
    ${ }^{6}$ A. Leahy, $G M 80$ (1984), 59-75, questions Müller's attribution of Bologna 180 ı to Apries rather than Psamtik II (I am indebted to R. Fazzini for calling this reference to my attention). I have chosen to accept for now an identification of this head as Apries. A comparison of Jacquemart-André 438 and Bologna i80i shows important differences in style and physical appearance. The Paris face has a receding chin, is quite round, and is altogether softer than Bologna. Furthermore, the Blue Crown of Psamtik II is proportionally much higher and almost parallel to the plane of the face, while the uraeus has its loop well above the body of the cobra. This crown and uraeus vary not only from Bologna, but from every other late Saite royal head in a Blue Crown. In my mind, this places the Paris head uniquely apart from later portraits.
    ${ }^{7}$ Capitoline no. 26. Most recently cited by Leahy, op. cit. 66, no. V.3. Also see A. Roullet, The Egyptian and Egyptianizing Monuments of Imperial Rome (Leiden, 1972), 33-4, no. 279, pl. cxcix, fig. 291. Dr Leahy has called to my attention a colossal head of a sphinx now in Paris-Louvre E.26097, Vandier, Revue du Louvre 20 (1970) 175-6. It closely resembles the Capitoline sphinx, and shows a similar round face, pronounced cheekbones, and rather large eyes neither slanted nor almond shaped. They possibly represent a parallel idealizing style or show a different type of representation associated with sphinxes. The latter idea is one that I do not believe has been explored.
    ${ }^{8}$ Cairo T.30/5/26/1. Leahy, op. cit. 67. Illustrated in A. Mariette, Album du Musée de Boulaq (Cairo, 1871), pl. 37 (lower right).

[^149]:    ${ }^{1}$ Philadelphia E. 14303 has often been attributed to Amasis following Bothmer, op. cit. 61-2, no. 53, pl. 50, figs. 120-2. Professor Bothmer expressed to me, in private conversation in 1986, that he now feels a later date is indicated, with which I concur.
    ${ }^{2}$ F. R. Grace, Fournal of the Archaeological Institute of America, 46 (1942), 350; Bothmer, op. cit. xxxviii, 71-2; Aldred, Egyptian Art, 225, 227-8; C. Vandersleyen, $L \ddot{A}$ iv, 1077.

[^150]:    ${ }^{1}$ I am grateful to Mr A. Higgott, Keeper of the Newbury Museum, for permission to publish the stela, and for the photograph reproduced on pl. XXXIII, 2, and to Dr Helen Whitehouse for knowledge of the stela's existence. The Newbury Museum contains a few other Egyptian objects acquired in similar circumstances.
    ${ }^{2}$ P. Munro, Die spätägyptischen Totenstelen (Glückstadt, 1973), 30-5, 194-208.
    ${ }^{3}$ For 'Irtiertjai', see M. Thirion, RdE 36 (1985), I33; E. Lüddeckens et al., Demotisches Namenbuch, I, 7 I (ir $\cdot t=w-r \underline{d}$ ).

[^151]:    ${ }^{1}$ For 'Ahamaatirtbint', known only at Thebes and in the Saite and early Persian period, see Thirion, op. cit. 134; Lüddeckens et al., op. cit. I, 10.
    ${ }^{2}$ E. Graefe, Untersuchungen zur Verwaltung und Geschichte der Institution der Gottesgemahlin des Amun (Wiesbaden, i981), i, 82, p212; cf. M. Bietak and E. Reiser-Haslauer, Das Grab des 'Anchhor, il (Vienna 1982), 276, G.82.
    ${ }^{3}$ J. Bourriau, fEA 62 (1976), pl. xxvi, i; Graefe, Untersuchungen . . . 45, j241.
    ${ }^{4}$ For 'Wedjarenes', see G. Vittmann, WZKM 70 (1978), io- 13.
    ${ }^{5}$ Untersuchungen . . 46, n. 1, with reference to J. Yoyotte, CRAIBL 1961 (1962), 48.
    ${ }^{6}$ Cairo JE 36980: ${ }^{\text {PM }}{ }_{\text {II }}{ }^{2}$, 156; K. Kitchen, The Third Intermediate Period in Egypt (Warminster, 1972, repr. 1986), § 194; Vittmann, Orientalia 44 (1975), 383. The only other example of this pattern known to me is Diamunhebsed (BM 1 333: Munro, op. cit. 283). Cf. however, Mwt-di s-ḥbw (Avignon 304: Egypte Eo Provence (Muséum Calvet, Avignon, 1985), § i89).
    ${ }^{7}$ Some already noted by Vittmann, Orientalia 47 (1978), 3. I. P. Louvre E.3228d: M. Malinine, Choix de textes juridiques, I (Paris, 1953), 46, 6; II (Cairo, 1983), 17-20, pl. vi. Daughter of an Irtiertjai (without title) in year three of Taharqa, which is too high for her to be the lady of the Oxford stela. II. Cairo CG 38238: G. Daressy, Statues de divinités (Cairo, 1906), 71; Yoyotte, Mélanges Maspero, I ${ }^{4}$ (Cairo, 1961), §60. Daughter of a

[^152]:    ${ }^{1}$ G. Roeder, in Mitwirkung von A. Ippel, Die Denkmäler des Pelizaeus Museum zu Hildesheim (Berlin, 192 I ), 178.
    ${ }^{2}$ B. F. Cook, 'Some Groups of Hadra Vases', in Alessandria e il mondo ellenistico-romano. Studi in onore di Achille Adriani (Rome, 1984), $795-803$. PM 188 is p. 800 , no. 50 ; PM 1189 is p. 798 , no. 36.
    ${ }^{3}$ I thank the Director, Dr A. Eggebrecht and also Dr Bettina Schmitz for their kind invitation to pursue this study. My research was supported by grants from the Australian Research Grants Scheme.
    ${ }^{4} \mathrm{Ht} .40 .4 \mathrm{~cm}$, d. lip 14.6 cm , d. foot 1 I cm . A portion of the foot is reatached, some chips missing; the fabric is cracked on the belly below and to the right of the right handle; otherwise intact. Provenience unknown (Alexandria?).
    ${ }^{5}$ A. Enklaar, $B A$ Besch, 60 (1985), 106-46; at 108 f. and 137 f.
    ${ }^{6}$ For Callaghan's arguments about Cretan manufacture, see his articles in $B S A 73$ (1978), 1-30; $B S A 75$ (1980), 33-47; BSA 76 (1981), 35-85; and especially now $B S A 80$ (1985), 1-17 (with R. E. Jones).
    ${ }^{7}$ See now Enklaar, Vereniging van Vrienden Allard Pierson Museum Amsterdam, Mededelingenblad, Nr. 33 (juni 1985), ioff.
    ${ }^{8}$ See Enklaar, Vereniging. . . in f, fig. 3. The general similarities with Amsterdam 8723 are important because normally the proportions of hydriae from this workshop are quite heavy: see Enklaar, BA Besch, 60, 137.
    ${ }^{9}$ For the two usual schemes for defining the principal decorative zone, top and bottom, see Enklaar, $B A$ Besch, 60, ir 6, fig. 4. For the double band in the Workshop of the Branchless Laurel, see, for example, Enklaar, op. cit. 107, fig. ıb (Alexandria 8817) and Amsterdam 8723, Enklaar, Vereniging . . .

[^153]:    ${ }^{1}$ Enklaar, BA Besch, 60, 139.
    ${ }^{2}$ Ibid. 113.
    ${ }^{3}$ Ibid. 139.
    For help in various ways I should like to thank P. Callaghan, B. F. Cook, A. Enklaar, P. M. Fraser (who also read a draft of this note and offered constructive criticism), M. J. Osborne, R. Coles, J. Rea, and J. Whitehorne. S. Byrne and S. Hannan assisted me with prosopographical details.
    ${ }^{4}$ P. Thead. inv. 3 I, Egyptian Museum, Cairo, Special Register 3049. We thank Dr Mohammed Saleh, Director of the Museum, for the permission to publish the papyrus, and Mrs Janet Cooke for her help. The photograph was taken by Mr Roland Zachmann, Institut für Papyrologie der Universität Heidelberg.
    ${ }^{5}$ See the list of letters drawn by A. K. Bowman and J. D. Thomas, Vindolanda: The Latin Writing-Tablets (London, 1983), 54.
    ${ }^{6}$ R. Seider, $Z P E 29$ (1978), 241-5 I, esp. 247.
    ${ }^{7}$ R. Cavenaile, Aegyptus, 50 (1970), 213-320; N. Criniti, ibid. 53 (1973), 93-158; ibid. 59 (1979), 190-26ı.

[^154]:    ${ }^{1}$ J. F. Gilliam, Eos, 48 (1957), 207-16 = Roman Army Papers (Amsterdam, 1986) ( $=$ MAVORS it), 163-72; R. W. Davies, Bonner fahrbucher, 169 (1969), 208-32; idem, BASP 10 (1973), $21-5$.
    ${ }_{2}$ Thus inferred by Gilliam, Eos, 48, 208. The approval for service and the assignment to a specific unit are therefore somewhat incorrectly conflated in inscriptions such as CIL VI, 37207 (Rome): $D(i s)$ M(anibus). Val(erius) Ursinianus cives Aquileiesis, probitus an(nnorum) XVIII in legione X Gemina ubi mil(itavit) an(nnos) $V$, in pretoria an(nnos) IIII, etc., or $A E$ 1969/70, 71 I. The fragmentary P. Mich VIII, $467=\mathrm{S}$. Daris, Documenti per la storia dell'esercito romano in Egitto (Milan, 1964), 6, seems to read $p[r o] b[a v e] r[e]$ se in cl[as(se)] $A[u] g(u s t a)$ Alex (andrina) and later me probavi in classe but since there was only one fleet in Egypt, little can be inferred from this. Unfortunately, the wording in P. Oxy. VII, 1022 ( = R. O. Fink, Roman Military Records on Papyrus (Cleveland, 1971), 87) is such that it does not clearly show that the two acts are separate.
    ${ }^{3}$ Vegetius I, 5: Proceritatem tironum ad incommam scio semper exactam, ita ut VI pedum vel certe $V$ et $X$ unciarum inter alares equites vel in primis legionum cohortibus probarentur. See P. Fouad I, $21=$ Daris, Documenti, IOI (cf. 102 and iO3).

[^155]:    ${ }^{1}$ Acknowledgements. I would like to thank the directors of the Qașr Ibrîm excavations, W. Y. Adams and J. A. Alexander, for their assistance and for discussions about the remains; Pamela Rose for assisting in the excavation of the camel dung; Ilse Köhler-Rollefson for a copy of her doctoral thesis; J. A. J. Gowlett of the Oxford Radiocarbon Accelerator for the rapid processing of the dates and help regarding recalibration; and Bill Adams, Ilse Köhler-Rollefson, and Pamela Rose for reading an earlier version of this paper and offering me the benefit of their comments. None of the above should be held responsible for any statements made.
    ${ }^{2}$ For the most recent interim report, see J. A. Alexander and B. Driskell, $\mathcal{F E A} 7$ I (1985), 12-26; earlier interim reports are in earlier volumes.
    ${ }^{3}$ See B. Compagnoni and M. Tosi, 'The Camel: its Distribution and State of Domestication in the Middle East during the Third Millennium bc in Light of Finds from Shahr-i Sokhta', in Approaches to Faunal Analysis in the Middle East, eds. R. H. Meadow and M. A. Zeder (Peabody Museum Bulletin 2), 91-103.
    ${ }^{4}$ Alexander and Driskell, op. cit., fig. 6.
    ${ }^{5}$ Ibid. 26.
    ${ }_{6}$ These dates and those given below are due to Dr J. A. J. Gowlett of the Radiocarbon Accelerator Unit, Oxford.

[^156]:    ${ }^{1}$ Alexander and Driskell, op. cit., fig. $2 . \quad{ }_{2}$ Ibid. 23.
    ${ }^{3}$ R. W. Bulliet, The Camel and the Wheel (Cambridge, Mass., 1975); I. Köhler, Zur Domestikation des Kamels (Hannover, 1981); I. L. Mason, 'Camels', in Evolution of Domesticated Animals, ed. I. L. Mason (London, 1984), 106-15.
    ${ }^{4}$ W. J. Darby, P. Ghalioungui, and L. Grivetti, Food: The Gift of Osiris, 2 vols. (New York, 1977); A. Gautier, 'Quaternary Mammals and Archaeozoology of Egypt and the Sudan: a Survey', in Origin and Early Development of Food-Producing Cultures in North-Eastern Africa, eds. L. Krzyzaniak and M. Kobusiewicz (Poznan, 1984); Köhler, loc. cit. ${ }^{5} \mathrm{M}$. Ripinski, $\mathcal{F} E A$ 71 (1985), i34-4i. ${ }^{6}$ Köhler, loc. cit.
    ${ }^{7}$ G. Caton-Thompson, Man, 34 (1934), 21. ${ }^{8}$ Ripinski, op. cit. 138.
    ${ }^{9}$ B. Midant-Reynes and F. Braunstein-Silvestre, Orientalia, 46 (1977), 337-62. See particularly 347.

[^157]:    ${ }^{1}$ Ripinski, loc. cit. ${ }^{2}$ Midant-Reynes and Braunstein-Silvestre, loc. cit.; also Köhler, loc. cit.
    ${ }^{3}$ For a good illustration of this piece, see Darby et al., op. cit., fig. 5.20.
    ${ }^{4}$ For example, Ripinski, op. cit. 136.
    ${ }^{5}$ H. S. Smith, in The Domestication and Exploitation of Plants and Animals, eds. P. J. Ucko and G. W. Dimbleby (London, 1969), 307-14. See 3 10.
    ${ }^{6}$ Various suggested origins are discussed by Midant-Reynes and Braunstein-Silvestre, op. cit. 342.
    ${ }^{7}$ See the discussion in Midant-Reynes and Braunstein-Silvestre, op. cit. 342-3.
    ${ }^{8}$ P. Cervicek, in Nubian Studies, ed. J. M. Plumley (Warminster, 1982), 57-63.
    ${ }^{9}$ For example, by Midant-Reynes and Braunstein-Silvestre, op. cit. 355, who point to the difficulty of dating such engravings.
    ${ }^{10}$ W. Y. Adams, Nubia. Corridor to Africa (Princeton, 1977). ${ }^{11}$ Ibid. 342-3, 422, 440.
    ${ }^{12}$ It is hoped that the dating project currently being carried out by Dr Caroline Grigson of the Odontological Museum at the Royal College of Surgeons will provide more information of this kind.
    ${ }_{13}$ Adams, op. cit. 383-5; B. G. Trigger, History and Settlement in Lower Nubia (Yale University Publications in Anthropology, 69, 1965). See 131.
    ${ }^{14}$ Ibid. 131.

[^158]:    ${ }^{1}$ For a list of examples, see L. Keimer, Revue de l'Egypte ancienne, 1 (1927), 182-97; 2 (1929), 210-53; 3 (1931), 36-4I.
    ${ }^{2}$ P. Newberry, El Bersheh, II (London, 1985), pl. xvi; H. Wild, Le Tombeau de Ti, II (Cairo, 1953), pls. xciib, cxx. ${ }^{3}$ Von Bissing, Die Mastaba des Gemnikai, il (Leipzig, 191 I), 42.
    ${ }^{4}$ See n. I above. ${ }^{5}$ Keimer, $R E A$ I (1927), 187, 193.
    ${ }^{6}$ V. Täckholm, Students' Flora of Egypt (2nd edn., Beirut, 1974), 618.
    ${ }^{7}$ Keimer, $R E A$ I (1927), i85-6 n. 3, 189 n. ı.
    ${ }^{8}$ Von Thomas, 'Terrestrial Marsh and Solar Mat', $\mathcal{F} E A 45$ (1959), 38-51.
    ${ }^{9}$ R. Germer, Flora des pharaonischen Ägypten (Mainz am Rhein, 1985), 188.
    10 'Täckholm, Students' Flora . . ., 697. ${ }^{11}$ Idem, Flora of Egypt, I (Cairo, 1941), 103.

[^159]:    ${ }^{1}$ Zohary, Flora Palaestina, I Text (Jerusalem, i966), 58. $\quad{ }^{2}$ Täckholm, Students' Flora . . ., 64.
    ${ }^{3}$ Germer, Flora . ., $28 . \quad{ }^{4}$ Ibid. ${ }^{5}$ Täckholm, Students' Flora . . ., 64.
    ${ }^{6}$ Boulos, El Hadidi, The Weed Flora of Egypt, 144.
    ${ }^{7}$ Täckholm, Students' Flora . . ., 64; Zohary, op. cit. $58 . \quad{ }^{8}$ Ibid.
    ${ }^{9}$ Ibid. $\quad{ }^{10}$ Boulos, El Hadidi, op. cit. 144; Zohary, op. cit. I, Plates (Jerusalem; 1966), pl. 64.

[^160]:    ${ }^{1}$ J. E. Quibell, Hierakonpolis I (London, 1900); J. E. Quibell, and F. W. Green, Hierakonpolis II (London, 1902); B. Adams, Ancient Hierakonpolis (and Supplement) (Warminster, 1974).
    ${ }^{2}$ J. Garstang, $A S A E$ 7, 132-48; A. Lansing, BMMA Supplement (Nov. 1935), 37-45.
    ${ }^{3}$ W. A. Fairservis, $\mathcal{F}$ ARCE 9 (1972), 7-27, 67-99; M. A. Hoffman, American Antiquity 39 (1974), 35-50, and Expedition 18 (1976), pp. 32-41.
    ${ }^{4}$ G. Brunton, in Studies presented to F. Ll. Griffith (London, 1932), 272-6.
    $5^{5}$ W. Kaiser, MDAIK 17 (1961), 1-53. ${ }^{6}$ Quibell and Green, Hierakonpolis II, pp. 20-3.
    ${ }^{7}$ H. J. Kantor, $\mathcal{F N E S} 3$ (1944), i io-36. ${ }^{8}$ M. A. Hoffman, $\mathcal{F} N E S 39$ (i980), in9-37.
    ${ }_{9}$ P. Lacovara, ARCE Newsletter 128 (Winter 1985), 20-7. ${ }^{10}$ Ibid.

[^161]:    ${ }^{1}$ Cf. C. Fuchs, D. Kaufman, and A. Ronen, Fournal of Field Archaeology 4 (1977), 171-9.
    ${ }^{2}$ Lansing, op. cit.; B. J. Kemp, $\mathcal{F} E A 52$ (1966), 13-22. ${ }^{3}$ Ibid. ${ }^{4}$ Lansing, op. cit.
    ${ }^{5}$ W. Needler, Predynastic and Archaic Egypt in the Brooklyn Museum (Brooklyn, 1984), 110-21, esp. 114.
    ${ }^{6}$ G. A. Reisner, The Development of the Egyptian Tomb from the Earliest times down to the accession of Cheops (London, 1936), 5 .
    ${ }^{7}$ Ibid. 3-5.
    ${ }^{8}$ Cf. B. Landström, Ships of the Pharaohs (New York, 1970), 16.
    ${ }^{9}$ Cf. W. M. Davis, $\mathcal{F} S S E A$ 8.I (Dec. 1977), 25-35.

[^162]:    ${ }^{1}$ W. M. F. Petrie, Corpus of Prehistoric Pottery and Palettes (London, 1921 ).
    ${ }^{2}$ G. Brunton and G. Caton-Thompson, The Badarian Civilisation (London, 1928).
    ${ }^{3}$ Kaiser, Archaeologica Geographica 6 (1957), 69-77.
    ${ }^{4}$ Petrie, Corpus, pl. $38 . \quad{ }^{5}$ Ibid., pls. 3-4.
    ${ }^{6}$ J. D. Bourriau, Umm el-Ga'ab: Pottery from the Nile Valley before the Arab Conquest (Cambridge, 1981),
    ${ }^{7}$ Ibid. 14, I 8.
    ${ }^{8}$ Fairservis, op. cit. 21-5.

[^163]:    ${ }^{1}$ Cf. P. Lacovara in W. D. Kingery, ed., Ceramics and Civilization: Studies of Ceramics and Man Through Time I (forthcoming).
    ${ }^{2}$ K. W. Butzer, Early Hydraulic Civilization in Egypt (Chicago, 1976), 12-14. 19-20.

[^164]:    ${ }^{1}$ D. Arnold, $7 n j-j t j \cdot f$. Here and below the abbreviations used are those employed in the book under review, pp. 7 ff .

[^165]:    ${ }^{1}$ No reference to Jaroš-Deckert's study is made. See Informationsblatt der deutschsprachigen Ägyptologie 27: 1 (1984), p. 28, where the dissertation title 'Thebanische Wandmalereien der in. Dynastie' is listed under the University of Vienna.
    ${ }^{2}$ Cf. p. 15 n. 16. According to p. 59 n. 375 , W. Schenkel is to publish the fragments.
    ${ }^{3}$ Most recently illustrated and discussed by Mohammed Saleh and Hourig Sourouzian, Offizieller Katalog. Die Hauptwerke im Ägyptischen Museum Kairo (Mainz, 1986), cat. no. 70. The Middle Kingdom finds from TT 386 are to be published by Dorothea and Dieter Arnold, W. Schenkel, and J. Settgast, according to Arnold, op. cit., p. 7 .
    ${ }^{4}$ Note, however, unusual aspects of the fishing scene, IIa2, demonstrating that the painters in the local style could show considerable originality (pp. 34 ff .).

[^166]:    ${ }^{1}$ So, too, the battle scene on land preserved only in the fragments discussed on pp. 77 f . The style of this painting cannot be determined.
    ${ }^{2}$ See now L. Gestermann, Kontinuität und Wandel in Politik und Verwaltung des frühen Mittleren Reiches in Ägypten (Wiesbaden, 1987), 35 ff.

[^167]:    ${ }^{1}$ C. Vandersleyen, Das alte Ägypten, pl. xxvic.

[^168]:    ${ }_{1}$ The text at the top right of p. 13 is more clearly understood when it is realized that it serves as a caption to an almost destroyed figure, traces of whose kilt are visible on pl. 8 b .

[^169]:    ${ }^{1}$ I am indebted to Drs A. Leahy and S. G. J. Quirke for the transcription of and comments on this text.
    ${ }^{2}$ It is a very minor point, but there is the occasional inconsistency in the writing of the personal names: Senetjer (p. 13) and Seneter (p. 23); Dḥutmose (most places) and Dḥuti-mes (pp. 19-20).

[^170]:    ${ }^{1}$ Contrast the varying treatments of the erased cartouches of Taharqa in pl .2 I, lines 19-20, 22 and pl .22 , lines 6,33 , and 35 .
    ${ }^{2}$ Prisse's drawing is reproduced in Leclant, Recherches sur les monuments thébains, pl. 48 (upper).

[^171]:    ${ }^{1}$ The earliest known drawing of this scene, made by J. W. Wild in 1843 , suggests that Soped wears the type of wig depicted in Borchardt, Das Grabdenkmal des Königs Saḥure ir, B1. 5, and elsewhere.
    ${ }^{2}$ As he has about other details of the same scene shown by Prisse but omitted in the new version, e.g. the eye of Horus, the right hand border of Sobek's head-dress, and the lower part of the skull-cap worn by the priest supporting that god. Wild's copy includes all of these except the last. The only published photograph of the scene (von Bissing, Denkmäler ägyptischer Sculptur, figure accompanying text to plate 100 ) is indistinct at a number of crucial points.
    ${ }^{3}$ Page 41, line II: read 'for him' instead of 'for he' (sim. n. 13 on the same page); p. 45, line 30 : read 'rest in' instead of 'stoppest toward'; p. 49, n. I2: 'ancient times' in this context is ambiguous; p. 53, line 2 I : read 'every nine days' instead of 'each ninth day'; p. 64, n. 40: 'Late Egyptian' instead of 'neo-Egyptian' (sim. p. 67, nn. 19 and 21, p. 86); p. 70, line 7: 'Ipet-Sut' instead of 'Ipet-Sout'; ibid., line 8: 'what the gods have made for him' instead of 'what make for him the gods'; p. 7 I , line 9: 'they are the ones who' instead of 'these are who'; p. 76, lines 29-33: 'causing that' instead of 'making so that'; ibid.: $\underline{t m} ;-$ - should be 'with strong (not brave) arm'.
    ${ }^{4}$ See p. 44, n. 33 . ${ }^{5}$ See p. 33, n. 30.
    ${ }^{6}$ The $s d m=f$ is rendered throughout by the present indicative, with little attempt being made to distinguish main clause from subordinate clause forms. Typical is the translation of her ntr pnes in pl. 21, line 16 as 'when this great god appears' (p. 47). A few further examples involving other constructions: $n \boldsymbol{h} m$ 'Imn in pl. 39, lines 7 and 9 is translated 'Amun does not reconsider' (p. 57); $\underset{i}{ } . h r=f p . t$ in pl. 28A, line 18 is translated 'he who will come across the sky' (p. 74); $k$ s.tw in plate 43, line 17 is translated 'about whom it is said' (p. 75).
    ${ }^{7}$ Examples: $h t p=f d w$ '.t hns $=f$ 'Imnt nfr.t, cited from Piankoff, The Litany of Re, pl. 9, col. 13 , is translated 'Let his place of rest be the Duat, let the place he is coming through be the beautiful West' (p. 32); $\underline{d} d . h r . t w$ in pl. 43, line II is translated '(thou art) he about whom it is said' (p. 75); iw=f $\subset q=f m h t . w n b$ in pl. 43, line 19-44, line I is translated 'He is the one who comes into all trees' (ibid.).
    ${ }^{8}$ Examples: $d g g$ in pl. 24, lines 26 and 47 is translated 'he who does not stop seeing' (pp. 59, 60); wnn=f hr wbn $h t p$ in pl. 28A, line 12 is translated 'he does not stop rising and setting' ( p .74 ). The converse is also found; thus, $n n$ ky $h r h w=f(\mathrm{sic})$ in pl .43 , lines $7-8$ is translated '(Thou art) the one who has no equal' (p. 75).
    ${ }^{9}$ Alterations: $b:=f$, cited from Piankoff, The Litany of Re, pl. 7, column 18, is translated 'thy ba-soul' (p. 3 1); $s ;=f$ in pl. 42, line 17 is translated 'her son' (p. 74); rn=s in pl. 22, line 32 is translated 'his name' (p. 54); $s s=s$ in pl. 44, line 9 is translated 'his son' (p. 76). Additions: 'thee' before 'ba-soul' (p. 31, line 2); 'thou' before 'makest'

[^172]:    ${ }^{1}$ See above，remarks on p．67，n． 19.
    ${ }_{2}$ The following list of corrections is not exhaustive：p．15，fig．4（c）：the hieroglyphs have been printed upside down；p．i7，fig． 5 （f）：the $f$ after mw．t is reversed（cf．pl．in A）；p．30，n．i：the reference after Leclant，Recherches should read pp． 62 ff．，par．17；p．31，n．9：the reference after Piankoff，Litany should read p．28，par．67；p．39， n．36：for A and E，read A and B；p．42，n．5：read［ss］p．n＝sn，not［ss］p．sn（cf．pl．20A）；p．48：something has been omitted between the first and second lines of the first full paragraph（＇bear－potamus＇）；p．70，n．17：the reference after $W b$ ．v should read p． 76 （4）；p．71，n．19：after Lefebvre，Gr．，omit par．356；p．74，n．30：read Wb．i1，not $W b$ ．I；ibid．，n．33：the second sentence of this note belongs with $n .34$ on the following page，where it should be inserted after the words＇conscientious in hearing＇；p．82，third paragraph：for pr－hnw，read pr－hnw．
    ${ }^{3}$ A few examples have been cited above．The following supplementary list is not exhaustive：pl．34， 5 th line： $\rightarrow$ is written for $\Longrightarrow$ after the preposition $m$ ；pl．37，18th line：the $d$ of $h f[d]$ has been added gratuitously；pl．38， 4th line：$h r=s n$ is written for $h r e=s n$ ；ibid．：the determinative fof $h p r w$ has been omitted；pl．38，13th line：the plural strokes of $h n m m . t$ have been omitted；pl．39， 5 th line：${ }_{111}^{m}$ has been omitted after $h t p ;$ pl．40，6th line：$-\infty$ has been omitted after H；pl．40，roth line：the determinative ，ㄱ of＇Imn has been omitted；pl．40，i6th line：a sign has been omitted before the determinative of $m n$ ；pl．41，ioth line：the order of 通and 9 after 3 h．ty has been inverted；pl．42， ist line：$\odot$ is substituted for $\omega$ in the divine name $R\ulcorner$ ；ibid．：the order of $\mid$ and $\Delta$ in wr．t has been inverted；pl．42， 15 th line：the initial sign of hnty has been drawn incorrectly，with four vases instead of three；pl．42，20th line：the
     the $k$ of $k y$ has been reversed；pl．43，8th line：the order of $\triangle$ and $\Delta$ in $n m t$ ．wt has been inverted；pl．43，ioth line：a
    
     $\sigma$ has been omitted before $w p . t$ ，a mistake which is reflected in the translation on p .75 ，where one finds＇he who determines＇instead of＇in order to determine＇；pl．43，19th line：the order of $\sigma$ and $\odot$ has been inverted；pl．44， ist line：the determinative of $m ; i$ ，＇lion＇，has been reversed；pl．44，2nd line：mm and 完 have been omitted after $f$ ； pl．44，4th line：an extraneous stroke has been added after ．．．D；pl．44， 5 th line：the flesh determinative of hty．t， ＇throat＇，has been reversed；ibid．：\＄is substituted for 约 in the noun bks．（ $t$ ），＇pregnant woman＇；pl．44，6th line： the words $n \underline{d} m n m h . t$ have been omitted after $\underline{t} \xi w$ ；pl．44， 8 th and ioth lines：these do not belong here．According

[^173]:    ${ }^{1}$ I have noted the following: p. 70 n. 102, for 'R. Clothilde' read 'Clotilde Ricci'; p. 71 n. ro6, read 'Wandgemälde'; p. 115 n. 238, read 'Aulos und Kithara in der griechischen Musik'; p. 149 n. 33, read 'Basilikale Anlagen in der ägyptischen Baukunst'. In footnote 25 I on p. 124, F. Übel's book on the cleruchs should have been referred to as Abhandlungen der deutschen Akademie der Wissenschaften, Klasse fur Sprachen, Literatur und Kunst (1968), no. 3 .
    ${ }^{2}$ Her reference to the wooden statue Alexandria 23352 is misleading, for that is a seated statue of Sarapis from the temple of Theadelpheia, of the Roman period.
    ${ }^{3}$ E. Schmidt, Der grosse Altar zu Pergamon (Leipzig, i961), pl. 27.
    ${ }^{4}$ Ibid., pl. 66.
    ${ }^{5}$ A. H. Smith, Catalogue of Sculpture, iii, 240-4; C. M. Havelock, Hellenistic Art (1971), pl. 174.
    ${ }^{6}$ Havelock, $A \mathcal{F} A 68$ (1964), 43 ff. and pl. 22; idem, Hellenistic Art, pl. 165 . Reference to this relief should have been made in the discussion of the seasons, pp. 50-1.
    ${ }^{7}$ Smith, Catalogue of Sculpture, ii, 257-9; Havelock, Hellenistic Art, pl. 126.
    ${ }^{8}$ J. Chamonard, Les Mosaïques de la Maison des Masques (1933), in-22 and pl. 3; Havelock, Hellenistic Art, pl. xviii.
    ${ }^{9}$ E. Breccia, Terrecotte figurate greche e greco-egizie del Museo di Alessandria (Monuments de l'Egypte gréco-romaine, ii, I (1930), pl. 39.6; G. Grimm (ed.), Götter/Pharaonen (exhibition catalogue, Essen, 1978), 141.

[^174]:    ${ }^{1}$ L. Curtius, Die Wandmalerei Pompejis (1929), 297, fig. 171; Enciclopedia dell'arte antica, iii, colour-plate facing p. i12. $\quad 2$ On these, see C. Reinsberg, Studien zur hellenistischen Toreutik, (Hildesheim, 1980).
    ${ }^{3}$ BM 38442 and 38443; see C. C. Edgar, $\mathscr{F} H S 26$ (1906), 281-2 and pl. 18; H. Kyrieleis, Bildnisse der Ptolemäer (Berlin, 1975), pl. 9.
    ${ }^{4}$ Götter/Pharaonen, 85-6. $\quad 5$ Dorothy Burr Thompson, Ptolemaic Oinochoai (Oxford, 1973), 33.

[^175]:    ${ }^{1}$ This follows from the new inscription for Kallias of Sphettos: T. L. Shear, Jr., Kallias of Sphettos and the revolt of Athens in 286 BC (Hesperia Supplement 17, 1978), 33 ff.; see R. p. 182.
    ${ }^{2}$ See also Edgar, Mélanges Maspero, ii, 53-6.
    ${ }^{3}$ P. Ryl. IV, 562, line $10=$ SB 7645; P. Mich. Zen. 46; P. Grad. 6, line 7; PSI III 409a; see R. p. 187.

[^176]:    ${ }^{1}$ Z. Z̆ába, The Rock Inscriptions of Lower Nubia (Czechoslovak Concession) (Prague, 1976).

