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EDITORIAL FOREWORD

READERS of the present number will note that the editor has been able to publish an unusually wide range of material this year. At the same time it will be evident, even from a cursory review of the contents of recent issues, that there are areas of study falling within the traditional range of our interests which have been very sparsely represented of late. Coptic Egypt is a clear case in point. Coptic scholars are, of course, few and far between, and no editor of The Journal of Egyptian Archaeology could expect a flood of articles in this field. Nevertheless, work of great importance is still being done, and we would give sympathetic consideration to any manuscripts which deal with aspects of this period, whether historical, archaeological, or linguistic in emphasis. There is, however, an even more glaring lacuna in our present coverage. Not so long ago this journal was a major organ for the discussion of Graeco-Roman Egypt in all its aspects, whereas, at present, we are rarely publishing more than book-reviews on this period. Papyrologists should be aware that this situation is not, in any way, a consequence of editorial policy, but reflects the stark fact that we now rarely receive articles which deal with this subject. The Journal of Egyptian Archaeology is as committed as it ever was to the promotion of this branch of Egyptian studies, and the editor would be the first to welcome a reversal of the present trend.

The past year has not been one of the easiest or most active in the Society's history of field-work in Egypt. Nevertheless, a substantial amount of archaeological research was successfully undertaken. During 1980 work on the temple-town at North Saqqâra was perforce confined to the study of the results of earlier excavations, but Professor H. S. Smith informs us that the publication of the site is now well advanced. Mr Barry Kemp returned to El-'Amarna, and reports on his progress as follows:

The expedition, under the direction of Barry J. Kemp, commenced excavations on 20 January and finished on 28 March. In addition to the main work at the Workmen's Village site, some exploratory excavations were carried out in the North City, under the local direction of Michael Jones.

A. Workmen's Village site. The excavation here was a direct continuation of the work of the two previous seasons in the extra-mural area lying to the south of the walled village. In the sector beside the southern enclosure wall complete removal of the collapsed brickwork from the wall itself, and a thick underlying drift of sand, revealed a flat terrace of brown soil which ran up to the gateway into the village, which was also cleared and planned. Within the terrace, at various levels, a whole series of T-shaped basins was found embedded, some superimposed upon others. In a second sector, to the south of chapel 450 discovered in 1979, excavation revealed a deep and complex stratigraphy, involving at least three different building levels, of which that of the chapels was only the last. Indeed, part of the hillside seems to have been a miniature tell. One activity carried out here was the extraction and puddling of desert marl clay, presumably for bricks.

A new excavation was also begun at the southern edge of the site. This disclosed a brick-paved courtyard surrounded by a wall, standing beside a large and deep cutting made in ancient times into the valley floor for a purpose as yet undiscovered. Platform and cutting do not belong to the same phase of activity. The stratigraphy contains signs of at least two weathering stages and a period of apparent abandonment between the two, but, despite this suggestion of the passage of a good many years, nothing as yet found amidst the pottery and other artefacts belongs unmistakably outside

the limits conventionally set for El-'Amarna, although one Hieratic jar label bearing the year-date 21 was recovered from a sealed context. A date of this order presumably belongs to the reign of Amenophis III.

B. North City. The principal aim here was to complete the records left by the Society's earlier excavators who worked in the 1920s and 1930s, as a preliminary to the producton of a further volume in the City of Akhenaten series. The two main areas comprised, first, the grounds of a large estate, U. 24.4, which contained an impressive set of circular granary bins as well as a smaller house and, secondly, the ground in front of the main gateway in the Great Wall of the North Riverside Palace. The surprising discovery was made here, in ground beneath the level reached by Pendlebury's workmen, of a series of large and deep circular holes. These had the appearance of having been made to contain masts or wooden supports for a building, and may well have pre-dated the building of the wall. Within the brickwork of the main gate the foundations were also uncovered of a massive stone door-jamb. Three other old excavation sites were also investigated: at the northern end of the Great Wall the existence of a second gateway was confirmed; in the large building at the far northern end of the site cleared in 1924 clarification of certain points was attempted; at the extreme southern end of the North City plans were made of a group of houses where Pendlebury had evidently only begun an investigation.

The season also saw continued work on the Amarna Survey. The completed map-sheet for the North City was field-checked by Salvatore Garfi, who also added contours and further archaeological details, including the location of gallery quarries running along the top edge of the cliff face above the North City.

The resumption of Dr Geoffrey Martin's work on the New Kingdom necropolis at Saqqara has met with predictable success:

Work this year was concentrated in an area of the Saqqâra desert immediately to the west of the tomb of Horemheb. The season opened on 12 January and closed on 23 March 1981. The staff provided by the Society comprised Dr G. T. Martin (University College London, Field Director), and Mr D. A. Aston (Birmingham University), and those representing the Rijksmuseum van Oudheden, Leiden, were Dr M. J. Raven, Mr M. Vinkesteijn (photographer), and Dr J. van Dijk (Groningen University). Dr H. D. Schneider (Director of the Rijksmuseum) worked with the Expedition during the month of January, recording material for publication in *The Memphite Tomb of Horemheb*, II.

The principal discoveries this season have been two tomb-chapels of Ramesside date, loose blocks from the tomb of Horemheb, and isolated material from neighbouring tombs which have been dismantled or partly destroyed. In addition to funerary objects from the surface debris and substructures, two contexted groups of New Kingdom pottery were found, as well as three caches of Late Period date. Two small fragments of Mycenaean wares form a welcome addition to the growing corpus of imported foreign pottery from Saqqâra.

The first tomb excavated was that of Paser, who bore the titles $s\bar{s}$ nsw and imy-r kdw, and his wife, the smcyt n (t) Imn Pepwy. A stela from the Salt Collection in the British Museum (no. 165), doubtless from the tomb, has been known since 1835, otherwise no other monuments of Paser survive.

The tomb is of mud-brick, consisting of a cult-chapel flanked by magazines, the latter originally vaulted, an open courtyard entered from the east with a shaft descending to the substructure, and a forecourt, the west wall of Horemheb's tomb forming its outer wall. The chapel has a small antechapel in front of it, and the architecture of this area of the monument is of limestome, most of the blocks of which were found thrown down. These have all been restored in place by the Expedition, and the north magazine, found entirely destroyed, has been rebuilt in mud-brick. The chapel itself was doubtless covered with limestone slabs, the roof thus formed supporting a brick pyramid and stone pyramidion. An unfinished stela set against the west wall forms the focal point

of the chapel, and there is one unfinished scene, surviving partly in outline on the north wall of the antechapel. A Hieratic graffito recording the name of a certain washerman, Nakhtmin, is to be found opposite, on the south wall. Two stelae originally flanked the entrance to the antechapel, and one of these must be BM 165, referred to above. The architecture of the tomb is thus simple, but the tomb is doubtless a typical Memphite tomb-chapel of the New Kingdom, contrasting with the great tombs of high officials of the realm, like that of Ḥoremḥeb.

The second tomb, a simple rectangular chapel of limestone, originally with two bud columns set askew at the entrance, is built on to the south wall of Paser's tomb at its east end. It was owned by Raia, who bears the title hry hsw (w) n Pth nb msct, and his wife Mutemwia. In contrast to the tomb just described its three walls are entirely covered with reliefs (en creux) and texts, with only a few blocks lacking from the scheme of decoration. A number of blocks have been restored to their original positions by the Expedition; the exterior has been built up with stone to protect the reliefs, and a roof and metal door have been set in place. Originally the ceiling of the chapel would have consisted of slabs of limestone, surmounted by a brick pyramid, as in the tomb of Paser.

The tomb of Raia is the best example extant of a decorated Memphite New Kingdom chapel of simple type. Originally it had an open courtyard to the east, in which the shaft was located, but only a small section of the east wall of the court survives. The owner of the tomb, who held an important position in the sacerdotal hierarchy in the Ptah temple at Memphis, perhaps preferred to spend his resources on the decoration of his funerary monument, whereas his neighbour Paser, who by his profession presumably had easy access to materials and workmen, preferred a larger tomb but with simpler decorative elements. It will be interesting to see if future work in the necropolis reveals a similar state of affairs.

It is not suprising that blocks from the tomb of Horemheb should have been found outside his great monument, particularly as its western end was very badly destroyed when we found it in 1976. On present evidence all the blocks found this season belonged originally to the second or inner court-yard, and it is particularly gratifying that one fragmentary block settles once and for all the problem of the date of the tomb. The block bears the lower part of the cartouches of Tut'ankhamūn (the traces are indisputable), which have been overcarved with the prenomen and nomen of Horemheb. It comes from the south wall of the inner courtyard, where Tut'ankhamūn and 'Ankhesenamūn were shown seated in state, receiving Horemheb who introduces lines of bound Asiatics being exhibited as trophies in the royal court. The lower part of the latter scene was found in situ in 1976; the upper register forms part of the celebrated Leiden reliefs, and a further block of exceptional quality additional to these and adjoining their eastern end was found by us in the debris of the tomb.

Another interesting discovery was a large block showing Horemheb seated with his army scribe behind him, very similar in style to the relief found at the entrance to the Statue-room in 1975. My interpretation of the traces of the name Ramose carved over an original name are confirmed by the new block, and in addition the name and title of the original scribe, the si sct Smn-tswy, can be restored with certainty from the traces on the newly found block, and exiguous traces on the 1975 block can now also be interpreted in like manner. The significance of the presence of Sementawy, and later Ramose, in a position usually occupied by a son of the deceased, opens up an interesting line of inquiry. Yet another block, of remarkable workmanship, shows attendants holding leashes to which are attached felines (the heads are missing).

To the south of the tombs of Paser and Raia there are vestiges of dismantled tombs. It is clear that there was a street of chapels wedged in between the tomb of Horemheb and a presumed large tomb further to the west. From work carried out in 1975 we know that a group of small chapels occupies an area immediately south of Horemheb's tomb. By contrast there are no such chapels adjacent to its north side, the large area here being taken up by the tomb of Tia, sister of Ramesses II. There may have been important reasons why a member of the Ramesside royal house chose to attach her tomb to that of Horemheb, and it is here that our work will probably be concentrated in the forthcoming seasons.

It will take many years of excavations to realize the full potential of the New Kingdom Memphite necropolis, in respect of new facts bearing on Egyptian history, architecture, art, and religion in the New Kingdom. The work of the past six years has shown that the necropolis is exceedingly rich in new information, and we look forward with confidence to future work in the concession.

Finally, we have been asked by the Committee for the Third International Congress of Egyptology to publish the following circular:

For the first time, the Canadian members of the International Association of Egyptologists will host the International Congress of Egyptology. The congress will be held from 5 to 12 September 1982 at the Skyline Hotel in Toronto, Canada. It is expected that between 700 and 800 delegates will attend the congress which is held every three years.

The meeting is still in its planning stages but to date two themes have been developed: 'Archaeology of Egypt', on which thirty-two reports will be given on current activities; the second theme, 'Egyptian Philology', will have thirty-two papers which will include linguistics, inscriptions, and literature. There will also be an opportunity for delegates to present their own papers at the congress. The topics will range from Pharaonic history, history of art and architecture, and the Mediterranean World to Graeco-Roman Egypt. During the congress, delegates will discover something of southern Ontario in a day-long tour.

Information about the conference and hotel registration is now available and can be obtained from Mr Jeff Freeman, 6 Glencairn Avenue, Toronto, Ontario, Canada M43 1M5 (telephone (416) 487-9604).

PRELIMINARY REPORT ON THE EL-'AMARNA EXPEDITION, 1980

By BARRY J. KEMP

The second season of excavation, again confined to the Workmen's Village, extended between 24 February and 10 April. The team comprised Barry J. Kemp as director, and Michael Jones, Susan Allen, Josephine Goode, Christopher Hulin, Mark Lehner, Patricia Lynch, and Angela Milward. Professor J. J. Janssen joined the expedition for two weeks, and contributed a preliminary study of the hieratic jar labels found. The Antiquities Department was represented by Gamal Mustafa Amin as Inspector, who eased the many local problems of organization and greatly helped the expedition to pursue an uninterrupted programme of work. A great expression of gratitude is also due to the Higher Committee of the Antiquities Department for granting an excavating permit, and in particular to Dr Shehata Adam, Dr 'Abd el-Kader Selim, Dr 'Ali el-Khouli, and Mr Mutawwa Balbush in Cairo, and to Mahmoud Hamza and Samir Anis at El-Minya and Mallawi.

Except for a short period of mapping of surface features on the desert to the south of site X_I excavated last year, the work of the 1980 season was confined within the grid of 5-m squares immediately to the south of the walled village (see fig. 1 and pl. II, 1). This was in direct continuation of excavation begun last season. The picture that is emerging is a relatively complicated one for the site as previously understood, indeed, for El-'Amarna as a whole. This naturally has an effect on the pace of the work. In particular, the considerable and unexpected depth of archaeological deposit in certain places (up to 3 m) has greatly slowed down progress in clearing individual squares to bedrock. On the other hand, we have shown that the disturbed and unpromising surface appearance of the extra-mural area hides a zone of considerable interest, where structures and stratigraphy seem to be usefully preserved. The Workmen's Village as hitherto known is just a part of a more complex whole, both spatially and chronologically. It cannot be properly understood in isolation, without taking full account of what else lies around it. This can only be achieved by a good deal of further excavation. Furthermore, the small scale and close juxtaposition of individual features demands excavation and recording with care and precision. The system developed last year was, with some refinements, used throughout this season, and fully justified itself, whilst suggesting further scope for improvement in the future.

A part of last season's work, it will be recalled, lay in a group of squares adjacent to the south-east corner of the Walled Village. The principal discovery was the front of a chapel, numbered 450, belonging probably to a row lower down the slope of the hill

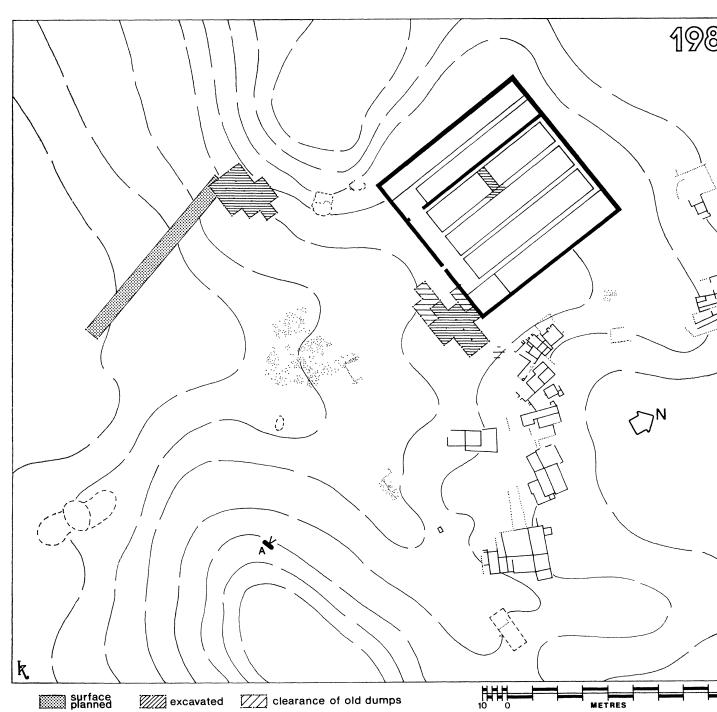


Fig. 1. General site map of the Workmen's Village showing cumulative areas of field-work in 1979 and 1980. The photograph in Plate taken from point 'A'



Key: 1, desert marl brick; 2, wall of stones set in desert marl mortar; 3, floor of desert marl; 4, packed (trodden?) surface; 5, bedrock (1 pebbles); 6, powdery, disintegrated bedrock; 7, loose sand; 8, packed sand; 9, dark, ashy sand; 10, ash; 11, dark sand with charcoal; 12, loose, gr

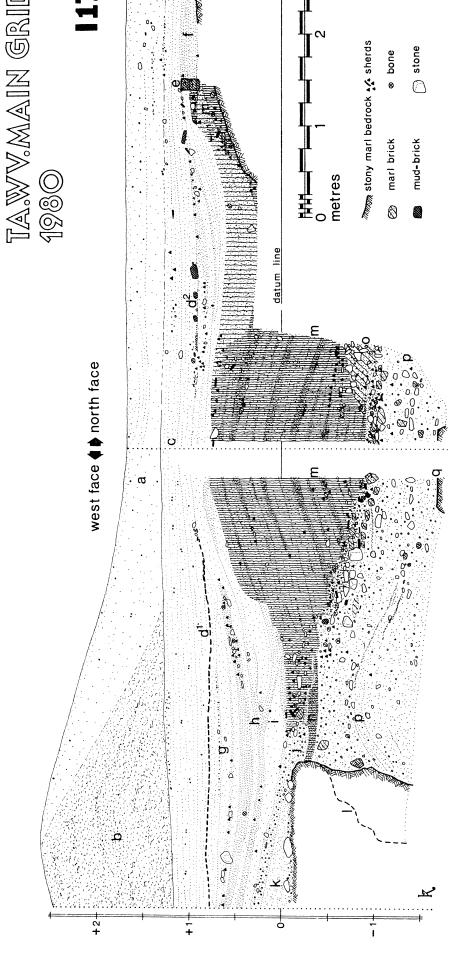
FIG. 2. Excavation within the Main Grid: plan at the end of the 1980 season. Heavy arrows in square L17 indicate the location section drawings of fig. 3. The photographs in pl. II, 2 and III, 1 were taken from points 'B' and 'C' respectively. Originals by M. C. Hulin, and A. Milward

than those investigated in 1921. This year's squares were an extension of this area westwards, in front of the village (see figs. 2 and 5). Because of the relative brevity of the season no attempt was made to clear or to lift any more of the collapsed brickwork from the south enclosure wall of the village, which occupies the line of 5-m squares immediately in front of the village. This will be one of the tasks for the next season. Before excavation the ground was partly occupied by dumps from the Society's earlier work, was partly disturbed by old illicit digging, and was partly covered with compacted yellow sand offering no signs of underlying archaeological material. This last aspect turned out to be misleading.

Bedrock in this part of El-'Amarna is a crumbly marl, rusty-brown to orange in colour, containing patches of large pebbles and stones. As mentioned in last year's report, it was used as raw material for many of the bricks in both the houses and the chapels. By the end of this season it had become clear that some of the marl had been dug from pits on the spot. Three such diggings were uncovered, but time permitted only one to be followed down to its base. Much of square N18 was occupied by one, with a circular edge. It was partly filled with stones in a loose marly matrix (presumably dumped deliberately from clearance whilst parts of the site were being developed) apparently thrown in from the area of the chapels, and with interbedded layers of sand and dark, compacted ashy soil. The two types of fill are themselves interbedded, a situation implying that both filling activities overlapped to some extent.

When this pit had filled up to the level of the adjacent unquarried marl surface, it became the site for an activity of a different character. In the north-west corner of the square, at this level, an irregular patch of compacted mud was uncovered, with a concave surface. On its own its significance may have escaped notice, but, in view of what lay beside it in the next square, it should be interpreted, with some likelihood, as the remains of a T-shaped basin (such as was discovered last year in front of chapel 450) which had been allowed to deteriorate. Adjacent to it, in square M18, was a very well-preserved basin of this shape. It had been dug out and plastered over from a higher level, and thus presumably served as a replacement for the other one. Its fine condition and the absence of a clearly defined floor level extending away from its edges imply that it was in use for only a brief time, and was then deliberately filled, as was the one found last year. The purpose of this basin is yet to be explained. Its northern edge, the leading, business-end of a T-shaped basin, still lies beneath the adjacent square to the north, and must await next season's excavations. A space of about 4 m must separate it from the enclosure wall of the village.

The most conspicuous aspect of the stratigraphy of this part of the site is an even, compacted surface of a pale-grey colour overlain by sand. This sweeps without interruption over the later T-shaped basin, and is very visible in pl. II, 2. If one follows this surface across the various section drawings of both this and of the last season, it transpires that it is the very same surface on which chapel 450 was built, and into which its own T-shaped basin was cut. One can thus reconstruct a local sequence of events: the digging of the brick pit—the pit filling with soil and stones—two basins made in succession, pointing towards the village enclosure wall—formation of the packed surface



KEY: a, old excavation dump, mainly sand; b, old excavation dump, ashy sand with some bedding; c, bedded sand with occasional horizons of fine gravel; d', distinct layer of clay, with drying c d2, horizon with pieces of crumbled rubble and some alluvial mud-brick fragments, probably from the collapse of the village enclosure-wall; e, wall running into section; f, bedded layers of dusty g, bedded sand with occasional horizons of fine gravel; the larger stones occur in a dusty layer; h, bedded dusty sand, with charcoal flecks; i, clean yellow sand; j, fine gravel in greyish, sandy n k, dark, coarse sand; I, line of back of cavity in the rock, as it develops east of the section face; m, layers of ashy soil containing large amounts of broken pottery, chaff, and pieces of twig; the divisio tween the layers are frequently not well defined; n, ashy layer with charcoal; o, zone of loosely compacted stones, sherds, and pieces of bone; probably the heavier debris to have rolled down the slc layers 'm'; p, compacted brown sand containing pebbles and occasional small pieces of charcoal, and showing some faint bedding; q, area of grey marl bedrock, apparently bearing a layer of mud J

Fig. 3. Section drawing of the north and west sides of square L17

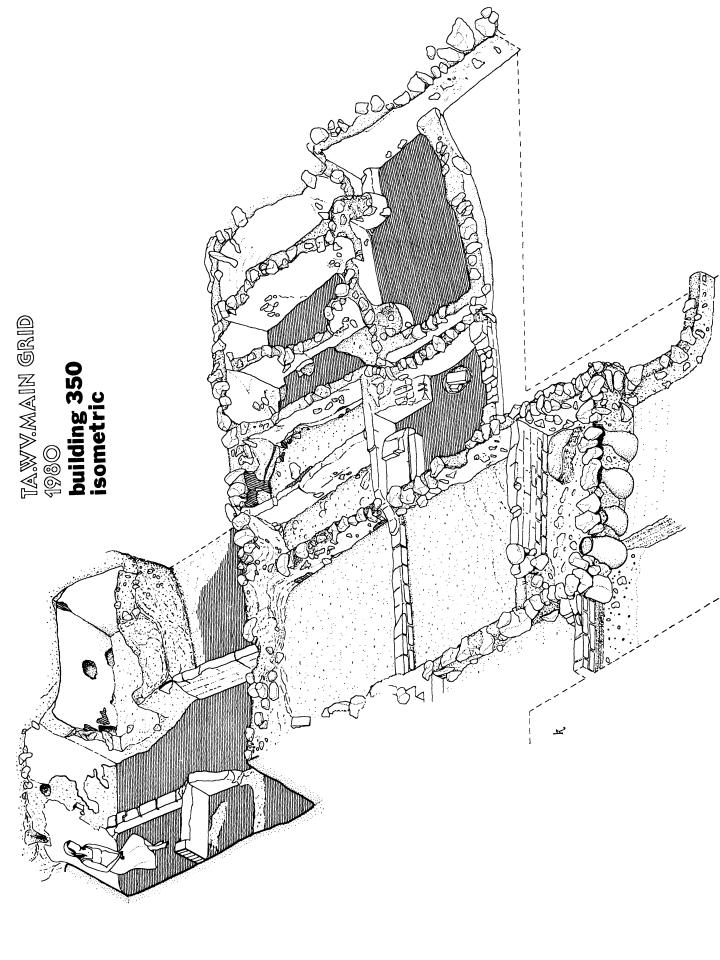
over this and over the area to the east—the building of chapel 450 with its own basin—abandonment of the whole site and progressive collapse of the brickwork, also the digging of shallow pits over parts of the site.

Further to the west, in square L17, a second irregular pit was located by means of a narrow exploratory trench along the western side of the square. The western and northern sides of the trench appear as a continuous section drawing in fig. 3. At the top is the dump from the Society's excavations in 1922. This lay over a deposit of evenly bedded sand, interrupted at one point by a conspicuous horizon of clay marked with pronounced drying cracks, the product of an ancient rain storm. Beneath the sand comes the pit, with its own filling. The sections show clearly that, as with the pit in square N18, this one was filled with different materials, to some extent simultaneously from two directions: dark, ashy soil from the direction of the village, and stones and brownish sand from the south. At a depth of 3 m beneath the top of the old sand covering (c.1.75 m below the site datum) the excavation had to be stopped because of the danger of collapse of the trench walls. By this point a small patch of grey marly rock had appeared in the north-west corner, apparently covered with a layer of mud plaster, but otherwise the bottom of the pit was not reached. On the east side the rock also appeared, as a ledge in which was cut what looked like a step, whilst on the south side of the trench the irregular edge of the pit, deeply undercut, was exposed.

The section drawing in fig. 3 reveals a further point of significance. It was only when the pit was virtually filled that the walls of the little building complex which occupies the centre of the excavated area were laid out. For its westernmost walls, one of them constructed on a base of large pottery jars, rest actually on the pit filling itself.

This building unit represents a zone of buildings below the two rows of chapels. The number 350 has been given to it (fig. 4). As so far uncovered, it consists of a group of five small chambers, each roughly oblong in shape. Entry into most of them was by means of one or more steps (see pl. III, 1), and each had been thickly coated on walls and floor with white gypsum plaster. Their entrances lie within two small courtyards, separated by a semicircular space, and these in turn seem to have opened from a larger courtyard which still lies largely unexcavated in square L16. On the north side of this group are three more enclosed spaces, evidently an integral part of the whole. It is the most westerly of these, its wall part formed of old pottery jars, that rests on the edge of the filled pit. Further to the north still is an isolated enclosure built against the north wall of building 350, and not necessarily connected with it. Indeed, its life may have been short since, by the time that the grey packed surface in square M18 was formed, its walls had been largely demolished.

The third zone of interest comprises squares N17 and N16. The upper part of the former was excavated towards the end of last season, when the existence of a lower level of structures cut into the rock was revealed. This year the floor of this lower level was reached at about 1.35 m below the desert marl surface. It was found to be a rectangular area, the rock walls plastered with marly clay. It had been subdivided by brick partition walls, and also by a wall cut from the rock itself (see fig. 4). The means of access is not yet apparent, presumably because it lies further to the south, in ground still unexcavated.



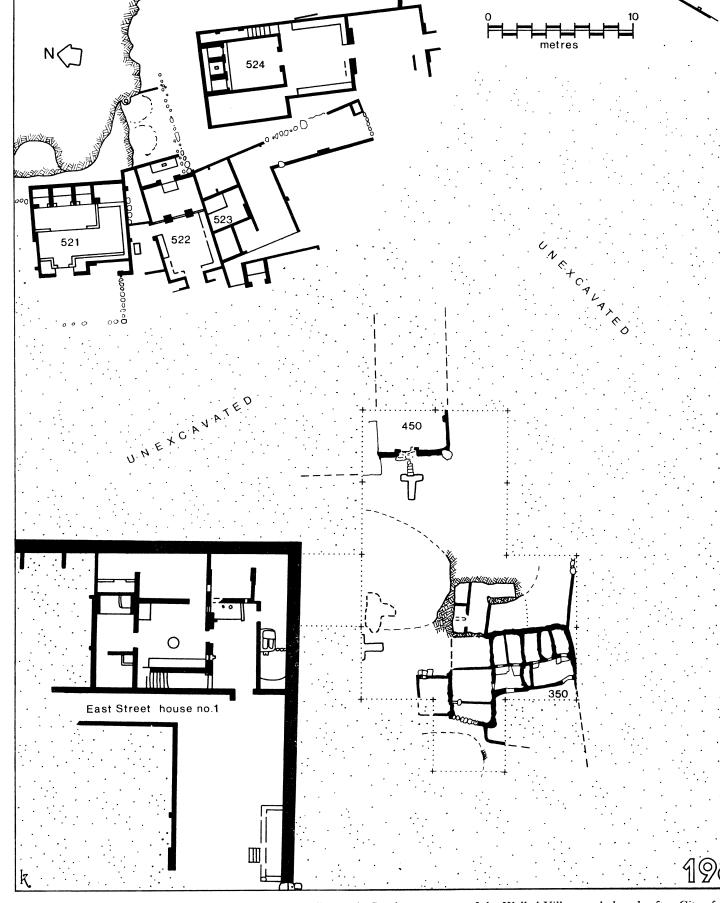


Fig. 5. The current excavations within the context of earlier work. South-east corner of the Walled Village and chapels after City of I, pls. xvi, xxiv

During its life it, too, was partly filled with stones and pale marly clay, apparently thrown in from the south. This fill sloped down towards the north, and it is likely that the southernmost partition wall was actually intended to be a low retaining wall, forming the edge of a step, to keep the rubble back from the other chambers whilst they continued to be in use. This fill of clay and rubble is banked against the rear wall of the southern part of building 350. This and the general agreement in alignment of the various walls involved imply that the cutting of these deeper chambers corresponds roughly in time to the erection of building 350. Eventually, however, the whole deeper part was left to fill up with the same dark ashy earth that covers so much of the site. Only then, when largely filled, was chapel 450 built. Whether building 350 remained in use once the chapel had been built is something that the stratigraphy still does not tell us. A further late event was the building of a narrow wall to join the south-east corner of building 350 to a group of stones in the south-east corner of square N16 which perhaps belong to another chapel.

It is still premature to try to decide on the purpose of the features that have so far been revealed. The excavations have uncovered only a fragment of a much larger area, and in the diversity of what is to be seen lies a warning against premature generalization. Furthermore, not all of the features were in use at the same time, and in the precise order of events there may be some clues also as to the meaning of things. Nevertheless, as with other aspects of the Workmen's Village site, the Theban site of Deir el-Medîna offers a possible parallel to what has been found, even if this does not in itself provide an explanation of function: many features at Deir el-Medîna also remain without full explanation, or even informed discussion. Amongst the chapels to the west and northwest of the north-west corner of the Deir el-Medîna village are buildings containing groups of chambers constructed in pits cut in the rock, analogous to what has been found in square N17.2 These were labelled 'silos' by the French excavators, though this leaves the meaning of their presence in an apparent cemetery unanswered. One group also contained a 'divan' within a niche, normally a feature of domestic architecture.³ Another group, cut into the hillside, was approached along a cutting from ground level further down the hill, and this may explain how our group in square N17 was entered.4 The parallelism is made the more conspicuous by the presence at Deir el-Medîna, in a courtyard between two chapels in this same area, of a T-shaped basin.5 If this general parallel between the two sites holds good, then the finds of this year would seem to belong with the chapels, and both to form parts of an area given over to activities which are not, strictly speaking, domestic. But it must be emphasized again that premature explanation is dangerous. The stratigraphy seems to show that by the time that chapel 450 was built the sunken chambers had fallen out of use. The same explanation may not, in other words, apply to all features of the site.

² For a general map of the French excavations at Deir el-Medîna see now Tosi and Roccati, Stele e altre epigrafi di Deir el Medina, 28-9; for the specific area see Bruyère, Rapport sur les fouilles de Deir el Médineh (1931-2).

³ Bruyère, Rapport (1933-4), 1, 24-6, pl. xiv. For silos near other chapels see Bruyère, Rapport (1945 et 6), 10-11, fig. 1, 32-5, pl. i; Rapport (1948 à 1951), 120-3, figs. 38, 39.

⁴ Bruyère, Rapport (1929), 37-8, pl. i.

A valuable supplement to the chronology of the site is provided by the hieratic jar labels. This season saw fifty-three brought to light. Nine of these bore year dates, and to them one from last season's work in the Main Grid can be added. Preliminary readings have been provided by Professor J. J. Janssen, and, for the 1979 label, by M. A. Leahy. Six date to year 13, one to year 14, two to year 1 (presumably of a successor to Akhenaten), and one to year 10 or perhaps 10 + x (the numeral is only partly preserved). In addition, site X1 excavated last year produced two more, dated to year 2 in one case, and to year 2 or 10 in the other. This is an interesting range in that the majority come from year 13, a year which, with year 14, was entirely lacking in the series from the earlier work at the site, and, indeed, from all of the material covered in City of Akhenaten, 1. This should make one particularly cautious in drawing conclusions from frequency tables of dated material. It is also worth noting that many labels came from the sieving of the excavated soil, a standard practice on the current excavations, a few from the Society's old dumps.

All but three of these dated labels derive from deposits found at or near the surface. The three exceptions are all of year 13. Two come from rubble towards the bottom of the north-east corner area of the rock-cut chambers in square N17, thus from within material which is related stratigraphically to the layer of debris on which chapel 450 was built. Chapel 450 is thus likely to have been built after year 13. The other label was found in a thin floor deposit in building 350, the central area on the northern side, in square M17. The low partition wall which divides it from the next space to the east was built on top of this deposit, thus, again, after year 13. The equivalent deposit in the space to the east contained a fragment of a faience ring bezel which bears a damaged royal name, probably the prenomen of Smenkhkarēc. Either the sherd with the label must have been a few years old when it came to form part of this layer, or the ring bezel was trodden into the layer, there being a difference of some five or six years between them.

It should be pointed out that, so far, excavation in the Main Grid has been primarily in deposits which are, stratigraphically, late in the village sequence. Of earlier debris, principally the lower levels of village rubbish filling the pits, only small areas have been sampled, in square L17. It is to be hoped that further sampling of this lower material will produce direct dating evidence for the early years of the village's existence.

Amongst the season's finds were two groups which deserve mention. One comprised two grass mats, object nos. 416 and 842, found not far from each other in square N17 (they are marked on the map, see fig. 2). Although found folded, they are in a fairly good state of preservation. One of them, no. 416, is illustrated in pl. III, 2. The other group of finds consists of parts of four votive cobra figurines in pottery (see fig. 6). Two of them, nos. 206 and 330, represent the head and extended hood; in the best preserved, no. 182, the figurine rises from the base of a bowl with crinkled rim; the fourth, no. 1069, is a fragment from another bowl, comprising just the body of the cobra and the central portion of the base of the bowl to which it was attached. The first three come from debris filling the chambers in square N17, the fourth from not far

⁶ Object no. 1020, reading (probably) (nh-hpr[w]-rc.

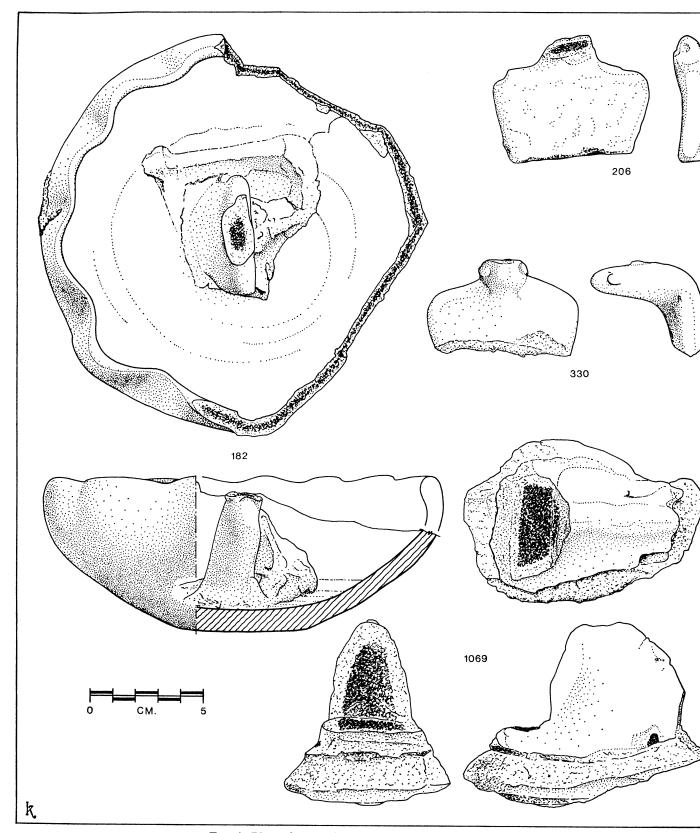


FIG. 6. Pieces from votive pottery bowls with cobra figurines

away, in square N₁6. Cobra figurines were found in the village debris by the previous expedition, though the two illustrated examples seem to be free-standing figurines with a tiny cup fixed to the front of the hood.⁷ Cobra figurines in mud are known from other sites.⁸ The debris in which the first three were found is rubbish probably thrown in from the direction of chapel 450, but thrown in most likely before chapel 450 was actually constructed.

The study of the pottery at El-'Amarna

In terms of quantity, pottery far exceeds any other class of find, but the peculiar character of El-'Amarna raises in acute form the question of the ultimate purpose of pottery study. Does it have more than a limited future? On most sites detailed treatment of the pottery can at present be justified on two main grounds: pottery in Egypt is still insufficiently studied in its own right as an aspect of Egyptian culture; it is a valuable aid in distinguishing and dating different periods. For El-'Amarna an adequate corpus of shapes already exists in the published reports of earlier excavations, and a detailed study of the technology and of the decoration is already in an advanced state of preparation.9 Further technological study is now more a laboratory than a field matter. Although the history of occupation at the Workmen's Village site is more complex than one might have envisaged, nothing found so far even hints that the dates involved are any different from those already widely accepted. For an interval of time as brief as this—twelve to fifteen years—one can have small expectation that the further study of the pottery will lead to a contribution to the internal chronology of the site. This is much more likely to come from inscriptions. One therefore begins at El-'Amarna with certain basic given information which on many sites represents a programme of research to which the pottery can be expected to make a significant contribution. One is at the frontier of relevance. Is there anything else worth doing with it? Since pottery study absorbs more time, and ultimately money, than any other single aspect of recording, and is an important determining factor in the over-all pace of the excavation itself, yet seems to have a general tendency to produce ambiguous results, it is a matter of no small importance. The subject has thus been approached at El-'Amarna with an element of scepticism, and with a hope for some clarification as to how worth while it all is. It hardly needs to be said that the results so far are themselves ambiguous in this direction.

For previous excavators at El-'Amarna the problem cannot have loomed so large. Their reports show clearly enough that they thought essentially in terms of establishing a basic corpus. Consequently, notice was only taken of whole pots or of fragments large enough to provide identification with a specific whole shape. Lists were also kept and published of the identifiable pots found, building by building, although this information does not seem to have given rise to any serious analytical studies; indeed, it hardly seems to have been used at all by anyone. In the Workmen's Village it is now possible, from the current work, to see what was involved in this process of natural selection. Thirty-seven of the basic unit houses were tackled by our predecessors. The total number of fully identified pottery entries in the lists of finds is 128 (this is excluding the 'overseer's house', no. 1 in East

⁷ City of Akhenaten, 1, 66, pls. xxiii, liv.

⁸ Some from the Pennsylvania-Yale excavations at Abydos: see Expedition, 10, no. 1 (Fall 1967), 16 (not illustrated); also Leemans, Aegyptische Monumenten, 1, 21, no. 500, pl. xxv. For bowls with crinkled or wavy rims see Nagel, La Céramique du Nouvel Empire à Deir el Médineh, 1, 164-5, pl. vi. It is just possible that the type is already present in the El-'Amarna corpus, as City of Akhenaten, 11, pl. liv, type xxiii. 1, although the detail is not well drawn out. But if so, it is interesting to find that all five specimens listed in the text come from the same area in the North Suburb (the occurrences are: T36.11; U36.20; U36.28; U36.32; U36.41). Was there a shrine in the area?

⁹ This is the work of Colin Hope at the Department of Egyptology, University College London.

Street), an average of 3.5 per house. In 1979 the expedition cleared a further unit house, Long Wall Street, no. 6, as reported in the last issue of the Journal. The entries for identifiable pieces in the pottery register for this house came to 1176. The view of Peet and Woolley, both competent archaeologists, would probably have been that it was enough to establish what kinds of pots occurred at El-'Amarna, and to indicate where in the excavations the type specimens came from, 10 and to accept that further work was pointless, if, indeed, the idea was ever present that there was anything else that could be done. This is a simple, common-sense approach which enables progress in the excavation itself to be maintained, and with a relatively small staff of archaeologists. The possibility that Peet and Woolley, and many others, were right is a proposition that should not be ignored.

What other propositions are there? Recent archaeological writing would suggest that there is only one. This is that, within variations in the frequencies with which different types of pots are found in different parts of the site, there is a clue to the various activities carried on: bread moulds at bakeries, storage jars at warehouses, to put it at its simplest. However, to investigate this one needs to do much more than pick out the better-preserved pieces, as Peet and Woolley did.

The processing of the pottery at El-'Amarna begins with the dry sieving of all material dug from the site. Sieving greatly increases the amount of broken pottery to be dealt with, but can be justified on the grounds that certain types, small thin bowls in particular, tend to break only into small pieces, so that failure to sieve is likely to produce a biased sample at the outset. The recovered pottery is then divided into pieces on which diagnostic work is possible (rims, bases, handles, also decorated pieces) and pieces on which it is not (most body sherds). The latter are discarded after a simple count. It should be noted that a high proportion of sherds from some levels have suffered a degree of decomposition of their surfaces so that even trying to class body sherds by ware type is difficult, and is no longer done. For each diagnostic sherd a series of tabular entries is made, some mensural, some descriptive. The former consist of an estimate of the original rim diameter, and of the percentage of the original rim represented by the sherd. The descriptive entries derive from a system of classification worked out by Colin Hope and kindly placed at the disposal of the expedition. Its most important element is a typology of rims which, with additions made by the expedition, offers 226 varieties. Finally, and most importantly, there is the corpus of whole-pot shapes published in the City of Akhenaten volumes, to which Colin Hope has provided a supplement.

In applying the system two related difficulties arise. Many of the rim sherds are tiny, and sometimes worn as well, so that determining the original diameters of the vessels and deciding to which rim types they belong are not easy. In consequence the all-important correlation between rim type and over-all shape type is often not made easily. In a few cases it is fairly obvious. In many cases it can be made within fairly broad limits with some probability, but with some there is a deep ambiguity, particularly in deciding whether thin plain rims belong to bowls or to storage jars with flaring necks and plain rims. A significant element of imprecision is therefore inherent from the beginning.

So far, only the pottery from the 1979 season has been fully dealt with; that from the 1980 season has merely had the diagnostic sherds abstracted and counted. For the 1979 pottery a start on the compilation of the statistics was made by the author at the time of excavation, but the bulk of the work by far was done with great patience and diligence by Mrs Susan Allen during the 1980 season. The analysis of the figures which follows is a very preliminary and exploratory one, and open to much refinement. Much of the work of abstraction of the essential summaries of figures was done in Cambridge by Mrs Moira Malfroy.

In the search for meaning a decision has to be made at some stage on the whole-vessel shapes to ¹⁰ It is less easy to see what purpose they felt was served by listing pot types—and there are many—the drawings of which were not included in the published plates.

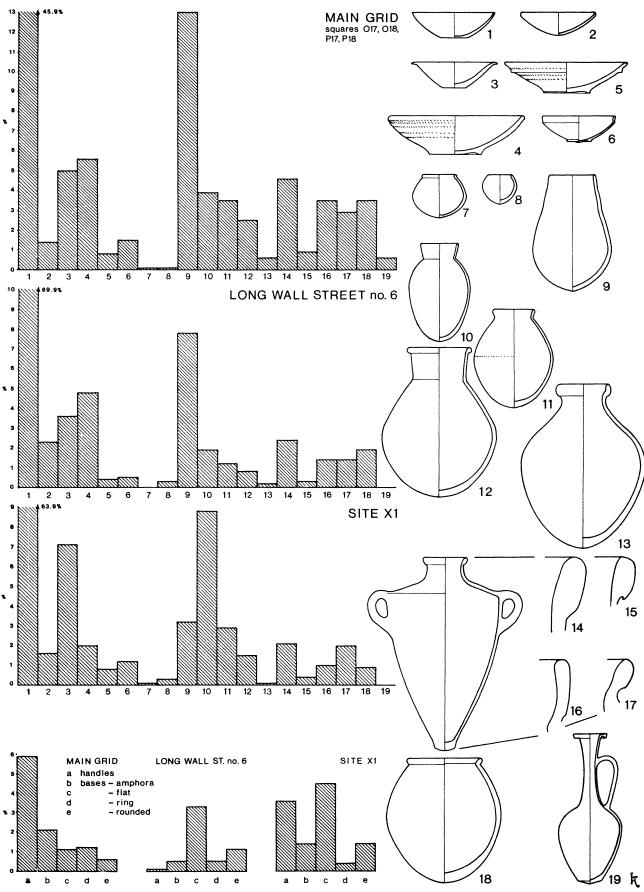


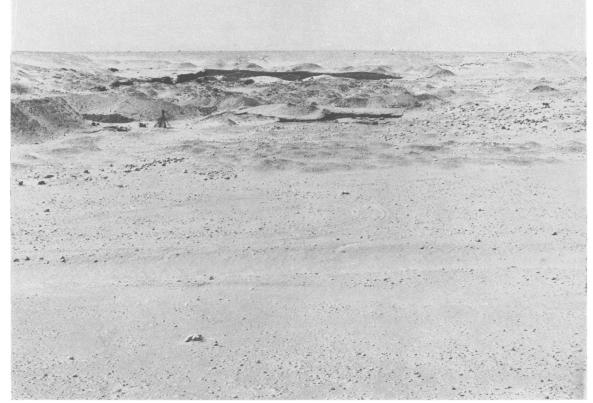
Fig. 7. Chart showing the percentages of different types of pottery vessels in three separate areas of the Workmen's Village, based on the pottery from the 1979 season

which the various rims belong. This is, as noted, far from easy, and is bound to contain an arbitrary element. In the preceding chart (see fig. 7) most of the rims have been allocated to nineteen broad categories of pot type. Each illustration, drawn from *City of Akhenaten*, I, represents only one of a range of possible variants, and should not be taken too specifically. Three separate parts of the Workmen's Village site are involved: site XI, presumed to be an administrative building connected with access to the site; one of the unit houses within the Walled Village, viz. Long Wall Street, no. 6; the area around chapel 450, specifically squares O17, O18, P17, and P18, all of the material coming from levels above the surface on which the chapel was built. Thus the dense pottery accumulations from square N17 were excluded, since they probably belong to slightly earlier activity at the site.

Fig. 7 summarizes the basic data. Down the right-hand side are drawn the nineteen basic shapes, nos. 14 to 17 being variations by rim of what are probably all amphorae. The three main parts of the site just defined are represented by bar charts. The nineteen pot shapes are arranged along the horizontal axis. The height of each column represents the percentage of each shape within the total number of rim sherds for that area (not counting a relatively small number to which no whole shape could be readily ascribed). At this early stage in the work only the most general observations can be made, the main purpose of fig. 7 being to indicate in what general direction the considerable effort expended on pottery study is leading. The first observation is that there is a broad over-all similarity in the general profiles of the three charts. Despite the difference in the nature of the three areas the range of vessels present in the sherd counts is much the same. Most noticeably, between 46 per cent (Main Grid) and 70 per cent (Long Wall Street, no. 6) of all rim sherds derive from smallish bowls. Many of them are, it is true, tiny and derived from sieving, but smallish bowls must still have formed the majority group. The meaning of some variations is not obvious, e.g. the reversal of profiles of classes 9 and 10 between the Main Grid area and Long Wall Street, no. 6, on the one hand, and site X1 on the other. A more suggestive variation is the greater percentage of amphorae apparently present in the chapel area (Main Grid) than in either of the other two. If classes 14 to 17, plus 19, are grouped together this becomes more obvious (12.5 per cent as against 6.5 and 5.5 per cent). Is the ratio of smallish bowls to amphorae an index to occupation intensity? The counts of handles and bases to some extent bear this out, although the figures here have to be treated with even greater caution: round bases and amphora bases are often whole; flat bases come mostly as small sherds; with round-based bowls the base sherds are probably often almost impossible to distinguish from body sherds. Three more bar charts for rims and bases are provided at the bottom of fig. 7. In each case the percentages are of totals comprising handles plus rim sherds from a single area, and all bases plus rim sherds from a single area. In the chapel area it can be seen that numbers of handles and bases from amphorae are up, flat bases from smallish bowls down; this is reversed in Long Wall Street no. 6; site X1 is in between.

At such an early stage in the work, and within the limits of a preliminary report, the search for more positive conclusions is inappropriate, and almost certainly unrealizable. The total area of the Workmen's Village involved in the analysis is still very small, to the extent that it is possible to imagine that in some of the rarer classes of pottery a single broader-rimmed specimen shattering into many fragments would have a significant effect on the statistics. Already, the sorted sherds from the 1980 season, which it is planned to catalogue next year, are several times as numerous as those from 1979, despite the season having been shorter. As the sample grows, so the statistics should become more reliable. Furthermore, as the work of cataloguing progresses, and more experience is built up, it should become possible to relate rim types to whole-pot shapes with more confidence. In the end, however, the answer to whether the exercise can yield results that can make a worth-while contribution to reconstructing the sociology of El-'Amarna may yet be a long way off. The comparison that we cannot begin to make for a long time is that between parts of the Workmen's Village, or the Workmen's Village as a whole, and parts of the main city itself. Little of the data

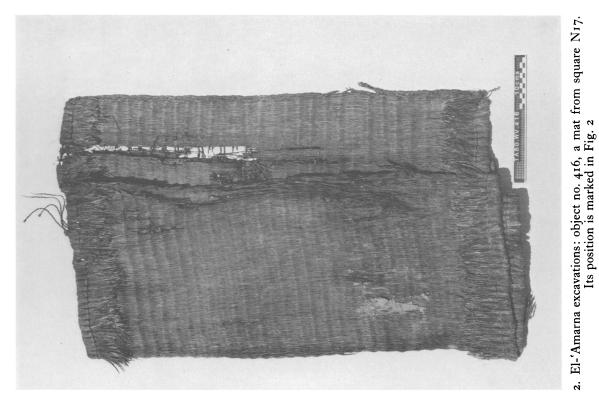
collected by previous expeditions is of much use here, so that this direction of comparison must await fresh excavation in selected parts of the main city. Extracting social meaning from pottery is a tantalizing goal that cannot be lightly set aside, even though one may suspect it to be something of a chimera. Certainly for the present the methodical compilation of pottery statistics must remain an inevitable and central chore of the expedition's work.



1. El-'Amarna, Workmen's Village at the end of the 1980 season, looking north from the point marked 'A' in Fig. 1



2. El-'Amarna excavations: north end of square M18, looking north, showing T-shaped basin, from the point marked 'B' in Fig. 2. The scale is one metre long



El-'Amarna excavations: building 350, looking north-east from the point marked 'C'
in Fig. 2. The scale is one metre long



EL-'AMARNA EXPEDITION, 1980

THE ANUBIEION, NORTH SAQQÂRA

PRELIMINARY REPORT, 1979-80

By H. S. SMITH and D. G. JEFFREYS

The Society's expedition arrived at Saqqâra on 1 October 1979 and departed on 15 December 1979; excavations were carried on from 7 October until 25 November. The staff were: H. S. Smith, Mrs H. F. Smith, P. G. French, Miss L. L. Giddy, D. G. Jeffreys, J. D. Ray, C. N. Reeves, and Miss P. J. Rose. Dr M. J. Price of the Department of Coins and Medals of the British Museum joined the expedition for ten days in October; the Society owes him a debt of gratitude for his outstanding contribution. Dr Shehata Adam, head of the Antiquities Organization of Egypt, Dr 'Abd el-Kader Selim, Director General, Dr Ibrahim Nawawi, Director General, and members of their staff at the Antiquities Service extended their usual courteous co-operation to the Society. At Saqqâra Dr Ahmed Moussa, the site Director, and Mr Said el-Fikey, the Chief Inspector of Antiquities, were of special help in the administration of the work.

The excavation of the settlement behind the central temple in the Anubieion enclosure was completed down to the base of the Late Period levels. This leaves the north-east corner of the mortuary temple of the Teti Pyramid free for clearance by the Antiquities Service should that be thought desirable. The work was concentrated on the northern portion of Area 5 which was opened at the end of the 1978–9 season. Though the settlement undoubtedly extended still further to the north, pitting and dumps would almost certainly make further excavation unremunerative in terms of scientific results.

The plan of the settlement is now more clearly intelligible. In the first major construction phase (iva), two rectangular blocks of dry-stone buildings were constructed either side of an east-west street leading through a postern gate in the west enclosure wall of Anubieion. These blocks were in all probability enclosed within a stone surrounding wall dividing them from an area of brick magazines to the east, though this wall is preserved only at the south-east corner of the settlement. Within the blocks there was subdivision into rooms, though it is uncertain whether all of these were roofed; the area north of the street contained sunken storage jars, and may have been open. Domestic activities such as cooking and washing were provided for outside the blocks in open areas.

In phase ivb the settlement was extended by the addition of the two long rooms flanking a corridor, excavated in 1977-9, probably designed to serve communal functions. Contemporaneously there was a rebuilding and subdivision of other parts of the blocks to provide dwellings for a community which had evidently increased in numbers. Gradually during this and the succeeding phase (ivc) the buildings were extended in the open areas within the West Enclosure Wall and between the blocks, with some

internal reconstructions and changes. Phase ivd represents a period of decline in the use of the settlement during which there were probably some local collapses, and occupation may not have been continuous.

Dr Price's work on the coin hoard, found in 1978-9 in a jar deposited against the foundations of the south-east corner of the surrounding wall of the settlement under the phase iva pavement, has shown this to be a 'circulation hoard' comprising two groups of issues. The first is represented by seventeen worn bronze coins of a single type, the issue of which should be dated just after the Chremonidean War about 260 BC. The second is represented by 439 bronze coins belonging to four different types, the issue of which should belong at the end of the reign of Ptolemy II Philadelphus and during that of Ptolemy III Euergetes, between 250 and 225 BC. While the exact date of deposition of the hoard is not deducible, Dr Price would incline to place this somewhere in the decade 240-230 BC. These datings result from certain revisions in Svoronos's attributions necessitated by the hoard. Coins recovered from the walls and floors of the phase-ivb constructions are now dated to the reigns of Ptolemy III Euergetes, Ptolemy IV Philopator, and Ptolemy V Epiphanes. On review Dr Price believes that none of these coins should be dated to Ptolemy VI Philometor. While a number of imitations of Ptolemaic issues has been found in the debris of the phase-iv settlement, these are not at present precisely datable; some may belong to the late second and first centuries BC. Coins of the first century AD (Livia: 2; Tiberius: 1; Claudius: 1; First Jewish Revolt: 2), together with lamps of the early Imperial Period, probably show that the phase-iv occupation was not finally abandoned until at least AD 67. A coin of Hadrian was discovered beneath the pavement of a new phase of occupation overlying the debris of the destruction of the settlement. This pavement must accordingly belong to the Christian settlement (phase v). Coins from the debris, while not precisely stratified, define the main duration of this occupation as lying between AD 347 (Constans) and AD 423 (Honorius). A single coin of Heraclius, together with others from the temple site, may indicate a very brief reoccupation inspired by fear of the consequences of the invasion by 'Amr ibn el-'As in AD 641.

Thus the dates given for the foundation of the settlement (phase iva, c.230 BC) and its extension (phase ivb, c.203–181 BC) fit well with a first Ptolemaic reconstruction of the central temple of Anubieion under Ptolemy II and a major rebuilding under Ptolemy V, attested by cornice fragments and a relief block from the temple site. The dating of these construction phases should be of real assistance to Mr French in the major task of analysing his very large collections of stratified sherd material, from which we hope for a new classification of Memphite pottery of the Ptolemaic Period. The difficulties of this analysis are compounded by the very frequent reuse of sherd material in pit-fills, in reconstructions, and in making-up for new floor levels. The material is, however, better articulated than any from published sites.

A trench cut immediately east of the mastaba of Rēc-wer at the south-east corner of the mortuary temple of the Teti Pyramid revealed the precise location of the south-west corner of the great enclosure wall of Anubieion. It also demonstrated that this

was not continuous with the west enclosure wall of Bubastieion, as it is shown on de Morgan's map. Though the north-west corner of the Bubastieion enclosure was not revealed because of the mass of overburden, an esplanade or pavement of bricks outside its west wall was discovered, which showed clearly that, as expected, the alignment of the west wall of Bubastieion was at right angles with that of its north wall and on a different alignment to the west wall of Anubieion. Examination of the stratification of this pavement in relation to that of the foundation trench for the enclosure wall of Anubieion suggested, though it did not conclusively prove, that, constructionally at least, the wall of Anubieion was earlier.

A shaft at the bottom of the escarpment below the granite demipylon on the site of the central temple had been partly excavated in 1977-8, but left incomplete because of danger from falling stones. After cementing the shaft, the Society completed its excavation. It proved to be an abandoned shaft, leading neither to catacomb nor tomb chamber. Its purpose and date remain uncertain. Two further shafts in Area 1, originally opened by the French Mission Archéologique de Saqqarah in 1966-7 during their excavations in the mortuary temple of Teti, were recleared for recording purposes. They lead to decorated sarcophagus chambers of the Middle Kingdom belonging to Sk-wsht and Sz-Hwt-Hr-Ipi, in which Coffin Texts are preserved. The presence of these shafts was of interest, since it shows that the site of the Teti Pyramid mortuary temple started to be used as a cemetery in the Middle Kingdom and continued to be so until the construction of the Anubieion temple enclosure, perhaps in the fourth century BC.

TWO OLD KINGDOM TOMBS AT GÎZA

By Y. M. HARPUR

In the East Field at Gîza, among the burials on the fringes of the Fourth Dynasty mastabas, there are two tombs both clearly dating later than the original cemetery. These are the mastaba of Itti (G 7391) and the rock-cut tomb of $Rc-hc\cdot f-cnh(w)$ (G 7948 = LG 75). According to Badawy, the tomb of Itti should be placed in the late Fourth or early Fifth Dynasty, but Málek³ estimates that it belongs to the late Fifth. The reliefs of $Rc-hc\cdot f-cnh(w)$ are published in Lepsius's Denkmäler, but the tomb has never been the subject of a full report. Málek⁵ gives the broad estimate of Fifth Dynasty or later, but Smith⁶ and Fischer⁵ both narrow this down to the first half of the dynasty.

In his publication of the tomb of Itti, Badawy⁸ states that $sh\underline{d}$ webw Wr-[Re-he]f Re-he]f-enh(w), who is depicted in the reliefs, possesses the same name as a son of Rackhacef, who also held a priesthood of the king's pyramid and is buried in G 7948. However, there is no evidence in this tomb that its owner was one of the king's sons—in fact, the position of his burial and relatively modest titles argue against the assumption. Badawy does not pursue the subject any further, but, by accepting that Re-he-f-enh(w) in the tomb of Itti was not, he would apparently see no link between G 7391 and G 7948. Nevertheless, evidence in both tombs suggests that the owners were related to each other, so that their tombs should be of a fairly similar date. Apart from the large family complexes there are few Old Kingdom tombs at Gîza which can be linked by kinship; thus, the case of Itti and Re-he-f-enh(w) is unusual, and merits thorough examination.

The main evidence for a connection between the two men is on the east wall of the chapel of $Rr - hr \cdot f - rnh(w)$ (see fig. 1).9 Here, he is depicted leaning upon his staff, overlooking the work of scribes as they record an animal count. On most occasions a wife or son might be expected to accompany the deceased, but, instead, $Rr - hr \cdot f - rnh(w)$ is with a man called Itti, who appears equal in size, and wears the animal-skin robe of a priest. In the tomb of Itti, a man called $Rr - hr \cdot f - rnh(w)$ figures quite prominently in the decoration. He is shown on the inner jamb of the external false door, and probably

¹ PM 111², 1, plan 18.

² A. Badawy, The Tombs of Iteti, Sekhem ankh-Ptah and Kaemnofert at Giza (California, 1976), 10-11.

³ PM III², 1, 193.

⁴ LD II, pl. 8-II; LD Ergänzungsband, 28b, c. For the remaining bibliography see PM III2, 1, 207-8.

⁵ PM 1112, 1, 207. G. Reisner, Giza, 1, 314, gives the estimate of Dynasty V to VI.

⁶ W. S. Smith, A History of Egyptian Sculpture and Painting in the Old Kingdom (London, 1946), 189.

⁷ H. G. Fischer, Dendera in the Third Millenium B.C. down to the Theban Domination of Upper Egypt (New York, 1968), 23-4.

⁸ Badawy, Iteti, 12-13 n. 55.

 $^{^{9}}$ LD II, pl. 9. I would like to thank Mrs M. E. Cox for her very skilful reproduction of the major figures in this plate.

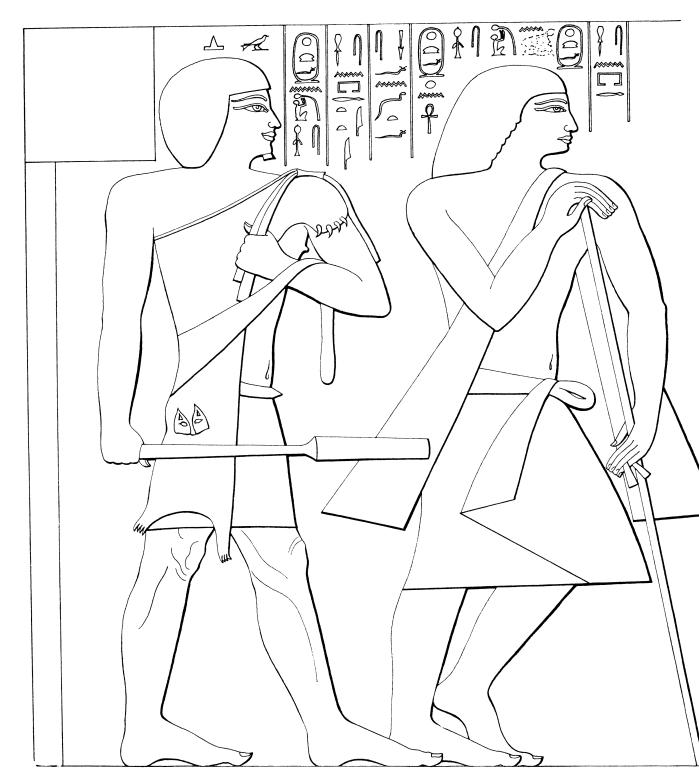


Fig. 1. East wall of the chapel of $R^{c}-h^{c}\cdot f$ -cnh(w)

again on the north wall of the chapel.¹⁰ The titles and relevant terms describing these names in the two tombs are as follows:

```
Rc-hc\cdot f-cnh(w)
                                                        written as smr on inner false-door drum;
                                                        G 7948, east wall)
sn·f
    (G 7391, external false door)
                                                   shd webw n Wr-Re-he-f
smr n pr-(3
                                                        (G 7391, statue, written as webw Wr-Re-
    (G 7948, north, south, east, and west
                                                        hc \cdot f on north thickness of entrance,
                                                        written as wb on south thickness of
shd wcbw n Wr-Rc-hc-f
                                                        entrance; G 7948, east wall)
    (G 7391, north wall, written as sha
                                                   rh nswt
    wbw on external false door; G 7948,
                                                        (G7391, north thickness and drum of
    north, south, east, and west walls)
                                                        entrance, inner false-door lintel, north
rh nswt
                                                        wall)
    (G 7391, external false door; G 7948,
                                                   imy-r; pr-c;
    north, south, and west walls)
                                                       (G 7391, drum of entrance)
                    Itti
                                                   imy-r; k;t nswt
sn \cdot f n dt \cdot f
                                                        (G 7391, south thickness of entrance,
    (\tilde{G}_{7948}, \text{ east wall})
                                                        west wall)
smr n pr-c3
    (G 7391, north thickness of entrance,
                                                    . . . wis cs
    drum of entrance, inner false-door lintel,
                                                       (G 7391, statue)
```

These titles raise some significant points. In his publication of the mastaba of Itti, Badawy¹¹ identifies $smr \ n \ pr-c_3$ as $shd \ n \ pr-c_3$, and comments that the use of the genitival n is exceptional. However, on the inner false-door lintel and drum, the title is written with the chisel-hieroglyph $\[]$ rather than the mace $\[]$, and the first two signs must, therefore, read as smr, not shd. This is particularly well indicated by comparing the title with the writing of $shd \ wcbw \ Rc-hc\cdot f-cnh(w)$ on the external false door of the tomb; for here the round hd-macehead is clearly visible. The corrected reading exactly matches the title of $smr \ n \ pr-c_3$ given to Itti in the tomb of $Rc-hc\cdot f-cnh(w)$, and the inclusion of the genitival n in the same title of $Rc-hc\cdot f-cnh(w)$ proves that its use, in this title at least, is not unique. On the other hand, the writing of $smr \ n \ pr-c_3$ is very rare, and, apart from these examples, it does not seem to be attested in any other tomb of Old Kingdom date.

¹⁰ Badawy, Iteti, pls. 3, 8, fig. 11. The inscription next to the figure of $R^c - h^c f - cnh(w)$? on the north wall is only executed in red paint, and the palimpsest is the result of the artist's effort to rearrange the text vertically. The empty cartouche of the title is certainly to be filled with $R^c - h^c f$, since the word W^r is written, and this is part of the name of Rackhacef's pyramid. The cnh sign is almost certainly part of the name of $R^c - h^c f - cnh(w)$ who is recorded elsewhere in the tomb as shd w^cbw . The reading of shd w^cbw $W^r - [R^c - h^c f] - cnh(w)$ is suggested by S. Curto, Gli scavi italiani a el-Ghiza 1903 (Rome, 1963), 39, and is accepted by Badawy, Iteti, 6. Note that both write the name as $cnh - H^c f - R^c$: cf. also C. Firth and B. Gunn, Teti Pyramid Cemeteries, 1 (Cairo, 1926), 102.

¹¹ Badawy, Iteti, 4, 8, 11, pls. 7, 10, figs. 6, 10, 15; Curto, Gli scavi, 36-8, 45 also has this reading.

¹² Badawy, *Iteti*, pl. 10. Note the shortening of the title on the drum. The word *smr* is frequently isolated in this way but *shd* tends to remain with part or all of its full title.

¹³ Badawy, Iteti, pl. 3; Curto, Gli scavi, pl. 7.

Itti possesses several titles not recorded for $R^{\epsilon}-h^{\epsilon}f^{-\epsilon}nh(w)$, but, since there are destroyed inscriptions in G 7948, it is possible that some of the titles of $R^{\epsilon}-h^{\epsilon}f^{-\epsilon}nh(w)$ are lost.¹⁴

The title of $imy-r_s$ k_st nswt is recorded twice in the tomb of Itti. Curto¹⁵ notes it only once on the now destroyed south entrance-thickness, but Badawy¹⁶ identifies a second occurrence in a damaged text on the west wall. Though this is very faint, most of the title can be distinguished, and supports Curto's earlier evidence. The writing of the text on this wall is quite unusual; for the title of $imy-r_s$ k_st nswt follows after a destroyed initial title(?) and the name of Itti, which is repeated further on in the inscription. This may suggest uncertainty on the part of the scribe, but, since the names of the tomb owner are placed symmetrically on either side of his head, their repetition was possibly for artistic effect. A somewhat similar arrangement occurs on the south wall of the tomb of Re-he-f-cnh(w) (LD II, pl. 10b), where the repetition of the tomb owner's name was certainly intended to balance the length of each column of inscription. Another unusual arrangement appears on the north entrance-thickness of the tomb of Itti, where the name of the deceased is written between his titles of smr n pr-cs and $\langle shd\rangle wcbw$ n Wr-Re-he-f-in It is written in exactly the same way on the east wall of the tomb of Re-he-f-cnh(w), again between the same two titles (LD II, pl. 9).

Further details within the inscriptions may also connect G 7391 with G 7948, even though parallels can be found in other Old Kingdom tombs. For example, both *Itti* and $Rc-hc\cdot f-cnh(w)$ use the term z: f n ht·f when describing their sons, and the postures of the children are almost identical. In addition both tomb owners not only have sons called after them, but show a marked preference for names compounded with the cartouche of Rackhacef. Although these names are not identical, they resemble one another closely, and show a regard for the king that is not so evident in other tombs of his priests. 20

Hence, on the basis of correspondences in names, titles, and their arrangement, it seems fairly certain that the inscriptions in G 7391 and G 7948 refer to the same men, named Itti and $Rc-hc\cdot f-cnh(w)$, who are depicted in both tombs.

- There is no sure way of telling if the chapel decoration records the titles of R^c - h^c -f-cnh(w) at the peak of his career, though one would expect this to be the case: cf. K. Baer, Rank and Title in the Old Kingdom (Chicago, 1960), 40–1. According to Badawy, Iteti, 1–3, some time elapsed between the date of the mastaba core of Itti, with its external false door, and the completion of his chapel. Badawy suggests that the latter may have been built by the sons of Itti after his death, when his full titulary was known, but the evidence is inconclusive.
 - 15 Curto, Gli scavi, 37, fig. 6. 16 Badawy, Iteti, 7, pl. 9, fig. 13.
- ¹⁷ Badawy, *Iteti*, 4, fig. 10. Curto, *Gli scavi*, 37, reads the inscription from left to right, like the registers immediately below, but these two groups of signs are facing *opposite* directions. Despite the unusual reading, the order of titles given by Badawy is correct.
- This term occurs spasmodically from Dynasty IV to VI, but the majority of examples date before mid Dynasty V. Of the numerous children who stand beside their father in Old Kingdom reliefs, less than ten show the posture used in the tombs of *Itti* and R^{c} - h^{c} -f-c-nh(w); LD II, pl. 8a; Badawy, *Iteti*, fig. 13.
- 19 $Rc-hc\cdot f-cnh(w)$ has two sons called $Rc-hc\cdot f-cnh(w)$ and an eldest son called $Wsr-ksw-Rc-hc\cdot f$. Itti has an eldest son called Itti, and two others, $Wr-ksw-Rc-hc\cdot f$ and $Wss-ks-Rc-hc\cdot f$. Like $Rc-hc\cdot f-cnh(w)$, Itti may have another son named after him, who appears as a naked child on the west wall. Badawy, Iteti, 7, fig. 13, thinks that this is probably the eldest son while still young, but since the scene includes the mature figures of $Wr-ksw-Rc-hc\cdot f$ and $Wss-ks-Rc-hc\cdot f$, the identification is questionable; Curto, Gliscavi, 38, fig. 8.

 20 Badawy, Iteti, 11.

Whether there was any blood relationship is difficult to determine. According to the inscriptions of $Rc-hc\cdot f-cnh(w)$, Itti is $sn\cdot f$ n $dt\cdot f$, 'his "brother" of his endowment(?)', ²¹ while Itti refers to $Rc-hc\cdot f-cnh(w)$ as $sn\cdot f$, 'his "brother" '. ²² Evidence given in the Appendix below shows that the sn dt was not necessarily a real 'brother' of the deceased; for the term could be applied to other family members—or even to non-kin. In the reliefs of Ntr-wsr, ²³ for example, the wife of the deceased is designated snt dt $hmt\cdot f$, 'the "sister" of the endowment(?), his wife', while the inscription of $Pn-mrw^{24}$ provides the clearest proof that the role could be performed by someone outside the family circle. This is also suggested in the family tomb of Nfr and $Ks-hs\cdot i$. ²⁵ Wr-bsw and $Sn-it\cdot f$, whom Altenmüller identifies as brothers of Nfr, both have false doors in the tomb, but the sn dt Tnti does not, presumably because he was unrelated.

Apart from the probable example of $Rc-hc\cdot f-cnh(w)$ and Itti, there is no evidence in the Old Kingdom that the $sn \ dt$ referred to the man with whom he was linked as $sn \cdot f$. Instead, inscriptions of the $sn \ dt$ refer to his own status in relation to the deceased and allude to the dead man by the pronoun f, never $sn \cdot f$; thus, the occurrence of $sn \cdot f \ Rc-hc \cdot f-cnh(w)$, 'his "brother" $Rc-hc \cdot f-cnh(w)$ ', in the tomb of Itti is more probably explained as meaning that the two were related. It is, however, possible that $sn \ dt$ was sometimes abbreviated to $sn \cdot f$, which could cause confusion in genealogical reconstructions. Such a case may be found in the tomb of 3hti-mrw-nswt, 'here three men, each called $sn \cdot f$, 'his "brother", round up supplicators before the deceased's father, and a better-dressed $sn \ dt$ stands in the register above. Very likely the three are $snw \ dt$, who are unrelated to the major figure and work under the direction of the fourth man. In the reliefs of $Pth-htp(w)^{28}$ as many as eleven $snw \ dt$ are depicted, and it is even more unlikely that these are all the real brothers of the deceased.

The Appendix shows that, when the sn $\underline{d}t$ is represented in tomb decoration, his figure is much less important than that of the tomb owner. This is not surprising if he was an official and his designation was a legal title. However, reliefs also tend to stress the privilege of being a sn $\underline{d}t$ by the prominent position and appearance of his figure in relation to others. Perhaps one of the functions of the sn $\underline{d}t$ was to be responsible for

²¹ See Appendix.

²² G. Robins, 'The relationships specified by Egyptian kinship terms of the Middle and New Kingdoms', *CdÉ* 54 (1979), 197-209.

²³ M. A. Murray, Saggara Mastabas, I (London, 1905), pl. 24.

²⁴ B. Grdseloff, 'Deux inscriptions juridiques de l'ancien empire', ASAE 42 (1943), 39, fig. 3.

²⁵ A. M. Moussa and H. Altenmüller, *The Tomb of Nefer and Kahay* (Mainz, 1971), 16. Note that the *sn* dt in this case was appointed despite the probability that there were other adult family members living after the death of Nfr.

²⁶ See, for example, Tzmw, who refers to himself as Pth-htp(w) sn $dt \cdot f$, 'his brother of the endowment(?) of Pth-htp(w)', Selim Hassan, Excavations at Saqqara, III (Cairo, 1975), 9, fig. 4. Two further cases are given in nn. 35, 36.

²⁷ W. Wreszinski, Atlas, III, pl. 69.

²⁸ R. F. E. Paget and A. A. Pirie, *The Tomb of Ptah-hetep* (London, 1898), pls. 31-2, 34-6, 38. According to W. Helck, *Wirtschaftsgeschichte des alten Ägypten im 3. und 2. Jahrtausend vor Chr.* (Leiden, 1975), 90, these men possibly divided the responsibilities of the role among themselves during the course of the year. If they were co-property owners, as Grdseloff maintained, they no doubt exercised their functions continuously (*ASAE* 42 (1943), 48).

the building and decoration of the deceased's tomb, and, if so, this was an ideal way of being commemorated, especially if he was unable to afford an impressive burial of his own.²⁹ There are only two exceptions to the usual pattern of depicting the sn dt, and these are the sn·f n dt·f Itti, 'his "brother" of his endowment(?) Itti', in the tomb of $Rc-hc\cdot f-cnh(w)$ (LD II, pl. 9), and the sn dt Nfr-hr-nmti, 'the "brother" of the endowment(?) Nfr-hr-nmti', in the tomb of Whm-k3·i.30 In both cases these men are shown the same size as the tomb owner. Among the major figures in Old Kingdom tombs only important relatives are depicted equal in size to the deceased, and rarely, if ever, are people who are not members of the nuclear family or grandparents rendered in this way.31 Nfr-hr-nmti is shown with his wife, the probable daughter of Whm-k3·i, and is therefore likely to be the son-in-law of the deceased.³² Similarly, unless *Itti* was accorded an extraordinary degree of favour as a non-relative, he is probably equal in size because he is related to $Rc-hc\cdot f-cnh(w)$. This assumption is also supported by the way R r - h r - f - r n h(w) is depicted in the tomb of *Itti*; for not only is he shown on the external false door facing rht nswt snt.f Rwd, 'the King's acquaintance, his sister Rwd', but he is probably to be identified with a man seated at an offering table, directly below a large seated figure of Itti (see above, n. 10). This seems to be a family scene with important figures joining Itti in a funerary repast.³³ Rwd is also shown here, but, unlike her depiction on the external false door, she is not given the same significance as $Rc-hc\cdot f-cnh(w)$, who is larger in size and has his own small offering table.

The titles of Itti preserved in the tomb of $Rc-hc\cdot f-cnh(w)$ suggest that, at some stage of his life, his rank and that of $Rc-hc\cdot f-cnh(w)$ were roughly equivalent, though he may have attained a higher status later in his career, perhaps after the death of $Rc-hc\cdot f-cnh(w)$. Regardless of the near equality of their priestly titles, the $sn \ dt \ Itti$ does not seem to have given $Rc-hc\cdot f-cnh(w)$ any independent honour comparable to the chapel which the $sn \ dt$

Grdseloff believed that a $sn\ dt$ habitually exercised the same professional function as his 'master', or sometimes a slightly less important one (op. cit. 46). This is often true, but by no means always. Probably the titles recorded for the $sn\ dt$ are ones giving him his highest status, and, if he was usually less important than the deceased, this may explain why only two tombs of $snw\ dt$ are known (i.e. Itti and $Ny-m^{pr}t-R^{r}$; see n. 35). However, others, perhaps including Itti, may have fulfilled the role and then risen to a higher status, without mentioning in their tomb inscriptions that they were once $snw\ dt$.

³⁰ H. Kayser, *Die Mastaba des Uhemka* (Hanover, 1964), fig. on p. 24.

³¹ Grandparents, wives, sisters, brothers, and sons may be shown equal in size to the tomb owner, but a doubtful case occurs in the joint tomb of Ny-(nh-hnmw and Hnmw-htp(w)) at Saqqâra, where two major figures are depicted in the same scenes, and their relationship is never stated. Possibly they were brothers—in fact the unique and painstaking way in which the representations of both men are balanced makes one wonder if they may have been twins. To my knowledge, the only clear case of twins in Pharaonic Egypt is that of Hor and Suty: H. Grapow, Kranker, Krankheiten und Arzt (Berlin, 1956), 16. The symmetrical arrangement of the offering texts on the lintel of their stela, as well as the balanced composition of the figures below (now partly erased), closely parallels the reliefs and inscriptions in the Saqqâra tomb: I. E. S. Edwards, A General Introductory Guide to the Egyptian Collections in the British Museum (London, 1964), 124, fig. 44; cf. A. M. Moussa and H. Altenmüller, Das Grab des Nianchchnum und Chnumhotep (Mainz, 1977).

³² This woman's exact relationship to Whm-k3' is uncertain, but, since she appears on the false door with a clear son and daughter of the deceased, the suggestion above seems reasonable.

³³ Badawy, Iteti, 2, 7, pl. 3, fig. 11.

³⁴ See nn. 14, 29. It is possible that *Itti* exercised his function as a sn dt while still relatively young, and that he surpassed $R^c-h^cf-cnh(w)$ in titles after the older(?) man had died.

Ny-m3ct-Rc built for Nfr-srs, 35 or the statue dedicated by the snt dt Hhi to K3-pw-Pth. 36 Instead, Itti included Re-he-f-enh(w) in his funerary scene alongside a man and woman of equal size and near equal importance, as if all three were linked in some way. The west wall in the tomb of $Rc-hc\cdot f-cnh(w)$ takes this a stage further (LD II, pls. 10a, 11). Here, the southern and central false doors belong to the tomb owner and his wife, but the northern one is owned by a woman called Yspt, who is depicted on the panel with her husband, Hr-mrw. This woman's name is almost identical to that of the woman sitting near $Rc-hc\cdot f-cnh(w)$ in the funerary scene of Itti, whose inscription is read by Badawy³⁷ and Curto³⁸ as rht nswt Ipt, 'the King's acquaintance, Ipt'. Despite this reading, the signs drawn by Badawy and Curto read Išp, but it is impossible to verify this from Badawy's pl. 8.39 Given the general rules of Old Kingdom iconography, she could scarcely be the daughter of Re-he-f-enh(w), but might be his sister, or—less likely—his mother.40 Should this woman be the Tspt in the tomb of Re-he-f-enh(w), her husband, Hr-mrw, may be the Hr-mrw who squats directly above Rwd in the on the external false door of the tomb.41

If these identifications are accepted, there are two possible explanations. Either people related to, or closely connected with, the $sn \ \underline{dt} \ Ttti$ were given the great privilege of being commemorated in the tomb of $Rc-\underline{h}c\cdot\underline{f}-cn\underline{h}(w)$ in preference to the deceased's own kin, or, more plausibly, Tspt and $\underline{Hr}-mrw$ were his sister and sister's husband, and bore the same relationship to Ttti, who was the brother of $Rc-\underline{h}c\cdot\underline{f}-cn\underline{h}(w)$.

Because we cannot define the range of meaning of the term sn in the Old Kingdom (see n. 22), the evidence I have given above is inconclusive; however, if these men were not brothers, the iconography of their tombs is quite exceptional. The multiple correspondences of names and titles are very strong evidence for a close connection, but, regardless of whether they were relatives or not, the reference to Ttti as the sn dt of $Rc-hc\cdot f-cnh(w)$ places their tombs very close together in time.

Appendix

The sn dt in tomb reliefs of the Old Kingdom

(Those marked by + are recorded by M. A. Murray, *Index of Names and Titles of the Old Kingdom* (London, 1908), 41.)

The role of the sn dt is discussed by H. Junker, Giza, II, 194-5; III, 6-7; IX, 73; B. Grdseloff, 'Deux inscriptions juridiques de l'ancien empire', ASAE 42 (1943), 39-49; Yu. Ya. Perepelkin,

- 35 Selim Hassan, Giza, 11, 205, fig. 226.
- ³⁶ H. G. Fischer, 'Old Kingdom inscriptions in the Yale Gallery', MIO 7 (1960), 301, fig. 2.
- ³⁹ Note also the difference in the reading of the middle figure's name. This man is recorded by Badawy and Curto as Nfr, but Badawy, Iteti, fig. 11, gives the quite different name of Ršd(?), which is partly visible in pl. 8. Possibly this was a brother of $R^c-h^c\cdot f-cnh(w)$ and Itti, though his name is not mentioned again in either tomb.
- ⁴⁰ In the representation of major figures, daughters are never shown equal in size to their father, whereas sisters and mothers sometimes are: cf. LD II, pl. 14 (mother and sister?), pl. 20 (mother).
 - 41 Badawy, Iteti, 2, pls. 3, 8, fig. 11.

'Chastnaya sobstvennost' v predstavlenii egiptyan Starogo Tsarstva', *Palestinskiy sbornik*, issue 16 [79] (Moscow-Leningrad, 1966); H. Goedicke, *Die privaten Rechtsinschriften aus dem Alten Reich* (Vienna, 1970), 122-30; W. Helck, *Wirtschaftsgeschichte des alten Ägypten im 3. und 2. Jahrtausend vor Chr.* (Leiden, 1975), 80, 85, 89-90. Their opinions are summarized very briefly below:

In the opinion of Junker sn dt should be interpreted as a 'companion of the tomb'. This was a favoured person, given the privilege of being depicted near the deceased in order to share with him the offerings brought to the chapel from his funerary estate(s). According to Grdseloff a sn dt acted as the deceased's 'co-property holder' even during the latter's lifetime. Thus, he was economically and morally indebted to his benefactor, and continued to be attached to him by obligation after his death. Perepelkin tries to explain the term dt as simply meaning 'own', and as being devoid of any administrative function; therefore, sn dt must refer to a real brother of the deceased. The manner in which the sn dt is distinguished from commoners in reliefs and inscriptions is considered by Perepelkin to be strong evidence of a blood relationship. Not only are snw dt sometimes depicted with family groups, but they also receive affectionate epithets identical to those written next to wives, daughters, and sons of the deceased. A quite different interpretation is given by Goedicke, who suggests that the sn dt was a man appointed to take over the affairs of the funerary endowment for the widow. In this capacity he acted as a 'brother', and gained from his position as well as guaranteeing the security of the woman. The funerary character of the inscription of *Inti* on which the argument is based does not allow of more general conclusions. Helck sees the sn dt in fully funerary terms, as a man chosen to supervise the hmw-k; of the funerary estate in the absence of any suitable next-ofkin. Such a role, according to Helck, could also be undertaken by the wife or even shared by the children of the deceased.

Below is a list, with brief comments, of the snw dt known to me from the reliefs of the Old Kingdom, arranged according to site. Though the institution of the sn dt is mentioned in provincial tombs of the period, snw dt are never singled out and individually designated in the decoration. Evidence of this is confined to the mastabas and rock-cut tombs at Gîza and Saqqâra:

Gîza

1. 3hti-mrw-nswt G 2184

(Wreszinski, Atlas, III, pl. 69), imy-rs pr $sn\cdot f$ n $\underline{d}[t]\cdot f$, shown as a minor figure. Below him in a rendering of accounts scene are three minor figures each termed $sn\cdot f$ (a possible abbreviation of $sn \ dt\cdot f$).

2. Whm-k3·i D 117

(H. Kayser, Die Mastaba des Uhemka, figs. on 24, 32), rh nswt shd webw Nfr-hr-nmti sn dt, shown as a major figure with his wife; sn ms·f dt zh pr-md t Snb, shown as a minor figure heading a line of eight men. It is uncertain if the inscription should read snw msw·f dt.

3. Mrw-k3·i West Field

(H. Junker, Giza, IX, fig. 33), sn·f dt Ny-k3-Rc shown last in a line of four minor figures, including a z3·f, each of whom carries a haunch of beef to the table of Mrw-k3·i.

4. Ny-m3ct-Rc Central Field

(Selim Hassan, Giza, II, 205, fig. 226). A rare case of a tomb belonging to a sn dt. He records himself as $sn \cdot s dt$ of Nfr-srs, for whom he built a separate chapel in his tomb. She is shown as a major figure here, but never with $Ny-ms \cdot t-Rc$. Note the professional link in their titles.

5. Rc-hc-f-cnh(w) G 7948 = LG 75

(LD II, pl. 9), sn·f n dt·f smr n pr-c; Ttti shd wcbw Wr-Rc-hc·f, shown as a major figure next to Rc-hc·f-cnh(w) overlooking an animal count and scenes of agriculture, fishing, and fowling. Note the professional link in their titles.

6. Hnmw-htp(w) Fakhry 4

(Ahmed Fakhry, Sept tombeaux à l'est de la Grande Pyramide de Guizeh (Cairo, 1935), 13, fig. 6), sn dt zib zh cnh-wd·s(?), shown as a minor figure handing a list to the tomb owner, and placed between his forward leg and staff, like a son.

7. $Z_t w^+ G 4710 = LG 49$

(LD Ergänzungsband, 27b), zh sn dt Inti, shown as a minor figure on the thickness of the false door.

8. $S \tilde{s} m - n f r I + G 4940 = LG 45$

(LD II, pl. 28), <u>hry-tp</u> nswt Sšm-nfr sn <u>d</u>t. This inscription is confusing because it runs above the figures of three men in a line of seven. It may mean that the first three minor figures, <u>imy-rs</u> pr Bw-nfr, Wni, and Wnn-nfr, are snw <u>d</u>t of Sšm-nfr. Murray lists all of the named figures, excluding the first, as snw <u>d</u>t.

9. Inti+G 4920 = LG 47

(LD II, pls. 30, 31b), sn \underline{dt} rh nswt $T_{i}zn$, shown as an intermediate-sized figure beside the false door; $\underline{sn} \lceil \underline{d} \rceil t$... shown as a minor figure on the south wall, slightly larger than the figure next to him; $[\underline{snt}?] \underline{dt} nswt \lceil \ldots \rceil [\ldots, a \text{ woman shown as a minor figure on the south wall. Note that Murray only records <math>T_{i}zn$.

Individuals named as sn dt in inscriptions at Gîza

- 1. Pn mrw G 2197
 - (B. Grdseloff, 'Deux inscriptions juridiques de l'ancien empire', ASAE 42 (1943), 39, fig. 3). Inscription mentions sn dt hm-k; Nfr-htp.
- 2. K3-pw-Pth Found near G 1227
 - (H. G. Fischer, 'Old Kingdom inscriptions in the Yale Gallery', MIO 7 (1960), 301, fig. 2; Cairo Mus. Ent. 37716). Inscription of $snt \cdot f dt Hhi$ on the base of a statue dedicated to K_3 -pw-Pth.
- 3. Inti

(H. Goedicke, Die privaten Rechtsinschriften aus dem Alten Reich, pl. 13; Cairo Mus. 57139). Legal text of *Inti*, mentioning the sn dt hm-k; K;·i-m-nfrt.

Saggâra

1. 3hti-htp(w)+D 64

(N. de G. Davies, Ptahhetep, II, pl. 34), mdh pr-c3 wnm hrt c3t sn dt mry f Sšm-nfr, shown third in a line of bearers led by 23 f smsw Pth-htp(w) and Pth-htp(w) (probably Tfw, another 23 f).

- 2. Ppi
- (G. Jéquier, Tombeaux des particuliers, 101, fig. 116). Two registers each with three minor figures acting as bearers. The readings are doubtful, but behind the zif smsw in the top row is

 $n \, \underline{dt} \cdot f \, sh\underline{d} \, hmw-k_{i} \dots n_{i}$ and $n \, \underline{dt} \cdot f \, imy-r_{i} \, hmw-k_{i} \, \underline{Hb}-sn\cdot i$. In the bottom row are $sn\cdot f \, hq_{i}-hwt \, smr \, w\cdot ty \, \underline{Hnw}, \, z\cdot f \, mry\cdot f \, \underline{Hni}(?)$, and $n \, \underline{dt} \cdot f \, \underline{Hi}y$. Since the $n \, \underline{dt} \cdot f$ appears only after $z\cdot f$, it is possible that the figures which follow are also $z\cdot f$, a designation omitted for reasons of space. The fact that $sn\cdot f$ is clearly written above one figure argues against the assumption that $n \, \underline{dt} \cdot f$ reads $sn \, \underline{dt} \cdot f$. On the other hand, it is possible that \underline{Hnw} is $sn \, \underline{dt}$ of \underline{Ppi} .

3. $Ph\cdot n-wi-k \cdot \cdot i^+ D$ 70 = LS 15

(LD II, pls. 46, 47), sn·f dt zib zh c nswt n hft-hr imy-r3 zhw Ki·l-tzw, shown as a minor figure near scenes of fishing and fowling, and facing the tomb owner; sn dt imihw·f zib imy-ri zhw zh c nswt hft-hr Ki·l-tzw, squatting near the deceased below a similar figure of his son, near scenes of agriculture and recording scribes.

4. $Pth-htp(w)^{+}$ D51

(A. Mariette, *Mastabas*, 315). A man shown with the sons of the deceased called *sn dt Nfr-hr-ny-hty-hty*; below, a woman called *snt dt Nfrt-Hwt-Hrw*, followed by twelve other women referred to as *ms·s*.

5. $Pth-htp(w)^+ D 64$

(R. F. E. Paget and A. A. Pirie, The Tomb of Ptah-hetep, pls. 31-2, 34-6, 38). North wall: sn dt zib imy-r; zhw 3hti-htp(w), sn dt imy-r; pr smsw hrt Itwy, sn dt zib shd zhw Pth-htp(w), sn dt imy-r; wobt imy-r; fnhw Stf(?), sn dt 3hti-wr(w), sn dt mry-f Ipi. South wall: sn dt mry-f hry-h(;)bt Wsh-k; i. East wall: imy-r; šnwt sn dt imy-r; pr K; i-hp, imy-r; šnwt sn dt imy-r; pr K; i-hp (possibly the same man as the last, though they are shown just above each other). West wall: sn dt zib zh 3hti-htp(w) (possibly the same man as on the north wall), sn dt zib zh Nfr-hww-Pth, sn dt im; hw hr nb:f shd hsw Ifw, Wp-m-nfrt, Sbk-htp(w). This last inscription runs above the three figures and presumably refers to them all. On the same wall is sn dt hry-h(;)bt Wsh-k; i (possibly the same man as on the south wall). All representations of the sn dt show him as a minor figure either squatting with others before the deceased, or acting as a bearer. One (Pth-htp(w)), hands him a list, while another (K:i-hp) leads a procession of cattle and holds a papyrus scroll.

6. Ny-cnh-nswt

(W. Kaiser, Ägyptisches Museum Berlin (Berlin, 1967), 28 [237]; W. Wreszinski, Atlas, 111, pl. 54), hm-nir web nswt sn dt Ny-nmti, shown as a minor figure dressed in an overseer's kilt. He stands in a boat offering marsh products to the tomb owner; hm-nir web nswt sn dt Ny-nmti, shown as a minor figure walking away from an agricultural scene and offering a bird to the tomb owner.

7. Ny-k3w-Pth

(M. A. Murray, 'Some fresh inscriptions', Ancient Egypt 4 (1917), 62-3), zh pr hd sn dt Pth-hc·f, depicted on the panel of the false door beside a slightly larger seated figure of the deceased. Note the professional link in their titles.

8. *Nfr*

(A. M. Moussa and H. Altenmüller, The Tomb of Nefer and Ka-hay 17, pl. 8), sn dt rh nswt imyht pr-c3 mr wpwt pr-c3 Tnti, shown as an intermediate-sized figure holding a papyrus roll and overseeing scenes of wine making and agriculture.

- 9. Ntr-wsr+ DI = S 901
 - (M. A. Murray, Saqqara Mastabas, I, pl. 24), sn(t) dt hmt f mryt f [hkrt] nswt[]im; hwt hr nswt Hn[wt] crouching at the feet of the deceased next to the false door.
- 10. Shm-k3:i+ NW of D 62
 - (M. A. Murray, Saqqara Mastabas, 1, pl. 7). A line of seven officials shown as minor figures next to the false door of Shm-k3·i. The first and second are entitled sn dt wb mry ntr M3cty and sn dt 23b zh Ny-k3·i-(nh.
- II. K3·i-m-hzt
 - (J. Capart, Monuments, 1, pl. 13). Inscription of the deceased's father making his youngest(?) son, $Htp-ks\cdot i$, the sn dt of his older son, $Ks\cdot i-m-hzt$. $Htp-ks\cdot i$ is shown between the staff and forward leg of the large figure of $Ks\cdot i-m-hzt$, which is a usual position for a son. However, his adult status is implied by the staff which he holds. In the text he is referred to as sn dt and imy-rsiqdw, 'Overseer of builders', the latter title linking him by profession with $Ks\cdot i-m-hzt$.
- 12. *Izmw* Found in shaft of D 65

(Selim Hassan, Excavations at Saqqara, III, 9, fig. 4). Lintel of <u>Tzmw</u>, with an inscription showing that shad pr-c3 <u>Tzmw</u> was Pth-htp(w) sn dt·f. Possibly this refers to Pth-htp(w) II (D 64), though <u>Tzmw</u> is not depicted in his chapel.

- 13. *D3d3-m-(nh* D11
 - (A. Mariette, *Mastabas*, 200). A woman seated at a small offering table on the panel of a false door, next to the larger table scene of the owner, *Ḥm-mn*, son of $D \cdot d \cdot m \cdot cnh$. Her inscription may read $hmt \cdot f \cdot s \cdot t \cdot dt \cdot Hm(t) shti$. Compare this with the wife of $N \cdot t \cdot m \cdot cnh$. who is called $snt \cdot dt$.

I would like to thank Dr Jaromír Málek (Topographical Bibliography) for his advice in the writing of this article, particularly in relation to the titles of *Itti* and the Appendix.

Postscript

The review of Badawy's book by Rosemarie Drenkhahn came to my attention after the submission of this article (*Bibliotheca Orientalis* 35 [1977, appeared 1979], 86-9). Drenkhahn recognizes the link between G 7391 and G 7948, but the following comments can be added:

- 1. Unless one is prepared to accept from the start that the two men are real brothers, Ttti's title of $smr \ n \ pr-c$; in the tomb of $Rc-hc\cdot f-cnh(w)$ is not the basic reason why an adjustment should be made to $shd \ n \ pr-c$; in his own tomb. There is clear proof in the inscriptions of Ttti that the second title is incorrect: cf. p. 26 above.
- 2. The multiple correspondences of names almost certainly show that members of a single family are depicted in the two tombs, as I have attempted to demonstrate in relating the owners.
- 3. According to Drenkhahn, the name of Nfr occurs in both tombs (LD II, pl. 9 and Badawy, Iteti, pl. 3 and figs. II and I3); it is not clear if she follows Curto and Badawy in identifying the brother(?) of Itti as Nfr, although this name appears to read Ršd: cf. n. 39 above.
- 4. In n. 19 Drenkhahn states that Badawy fails to note that there are two people called Rwd in the decoration of Itti: the sister of Itti (Badawy, Iteti, pl. 3) and a man in the table scene (op. cit.

- fig. 11); this second figure Drenkhahn identifies as the hm-ks Rwd who butchers an ox in the tomb of Rc-hc-f-cnh(w) (LD 11, pl. 10b). However, Badawy could be right in not making this distinction (Iteti, 2, 6). The person called Rwd in his fig. 11 is a woman and probably identical with the sister of Itti already shown in pl. 3; despite her short cropped hair (not uncommon in Old Kingdom reliefs), she squats in the attitude of a female, not a male. The occurrence of Hr-mrw and Rwd in this scene suggests that the group are kinsmen of the deceased: cf. p. 29 and n. 33 above.
- 5. In conclusion, Drenkhahn observes that G 7391 and G 7948 are on the edge of the East Field and should therefore date to Dynasty VI, like the similarly situated G 7101 (Q:r), G 7102 (Idw), and G 7152 (Shm-cnh-Pth). Although most of the large mastabas in the East Field belong to the Fourth Dynasty, the smaller tombs encircling them should logically date from Dynasty V onwards. In fact, being first in a line of rock-cut tombs, G 7948 could date quite early in Dynasty V, as Smith and Fischer suggest on other grounds: cf. p. 24 above.

THE CONCLUSION TO THE TESTAMENT OF AMMENEMES, KING OF EGYPT

By JOHN L. FOSTER

I

THE Instruction of King Ammenemes I for his Son Sesostris I—or what might more accurately be called The Testament of Ammenemes—was, to judge from the number of surviving copies, rather popular with scribal teachers in the schools of the New Kingdom. Written by Khety, as New Kingdom tradition would have it, and serving as a piece of political propaganda to support Sesostris' right to the throne, as de Buck and Posener have argued, it is a very interesting piece of literature. Though its value as history may be questioned (it is incompatible with 'facts' presented in other texts like Sinuhe—which itself may well be fiction), the Testament is intriguing because the murdered king is dramatically presented as a ghost returning to this world in a kind of dream-vision to set the record straight for his son, who is now to occupy the throne of Egypt; and the late King Ammenemes, in speaking to Sesostris, gives the reader 'an account of the Truth' (wpt mict), or the 'true facts' about his death. But he does more than this; for his revelation is also a warning to his divine son about the calibre of those near him, and includes some very practical and rather bitter advice about royal intimates. It is also an apologia (a rather rueful one) for allowing himself to be killed, when, according to his own account, he had been such a splendid monarch. But most of all, this text is a testament; for in it we can now read, more clearly than hitherto possible, the assignment of the throne to Sesostris—as that fact is made crystal clear for the survivors of the royal family. The latest evidence for this reading (not a new one, of course) appears primarily in the two concluding sections of the poem.

The *Testament* is written in the genre of didactic verse (a 'wisdom text'), some eighty-eight verse lines long (almost all attested by verse points), divided into fifteen sections (or stanzas), and stylistically constructed in thought couplets with the occasional triplet as variant. Because of the fine copy of P. Millingen, and because of the substantial number of other fragmentary copies, the text is in good order—that is, except for the conclusion of the poem, where page three of P. Millingen is largely torn away. Indeed, for the final two stanzas (xiv and xv), the text has been in a very poor state; and translations have all been conjectural. Of those recently done into English, both Faulkner² and Lichtheim³ have great difficulty making any continuous sense of the

¹ For thought couplets, triplets, and versification in general see now my 'Sinuhe: The Ancient Egyptian genre of narrative verse', JNES 39 (1980), 89-117.

² R. O. Faulkner in [W. K. Simpson (ed.)], *The Literature of Ancient Egypt*, 2nd edn. (New Haven, 1973), 193-7.

³ Miriam Lichtheim, Ancient Egyptian Literature, 1 (Berkeley, 1973), 135-9.

final passage; and the same is true of Helck in his parallel-text edition.⁴ The latter, in an attempt to weave some sense into the fragments of the conclusion, conjectures too freely, and new evidence often does not bear out his suggestions.

It is now possible to improve our understanding of the conclusion to *The Testament of Ammenemes*. While a definitive text is not yet possible, a significant advance upon our current reading of the concluding passage can be made, first, because of the many fragments published by Posener in the first fascicle of Volume III of his *Catalogue* of the Deir el-Medîna ostraca; second, because of Vienna Ostracon 19 and Turin Ostraca 57048 and (supplementary numbers) 9589 and 9593; and third, because of Ostracon 13636 in the collection of the Oriental Institute in Chicago (here published for the first time) which, though now badly faded in places and somewhat broken, originally gave a complete text of the two final stanzas.

H

OIC 136367 is of limestone and was purchased by Breasted in Egypt during the season of 1926-7. It is approximately 30×14 cm in size and virtually complete (see pl. IV). It is clear at the top, with the upper right corner broken away (and possibly the upper left as well), with only a few signs abraded on the left, and with most of the bottom line of the Hieratic now gone. It is badly faded in several places and beginning to flake, particularly in the lower left corner. The top, lower right, and lower left edges seem to be original. The ostracon is inscribed essentially only on the obverse, although one or two traces of ink can be detected on the reverse. The obverse contains seven lines of Hieratic written from right to left in a good literary hand with the last two sections of *The Instruction of Ammenemes I* (= P. Millingen III. 6-12). There are no rubrics, but red verse points are visible in spots.8

The significance of OIC 13636 lies in the relative completeness of its copy for that portion of the original text which has been most difficult to recover due to lacunae in P. Millingen. The only other ostraca offering fairly complete texts for these sections

- 4 W. Helck, Der Text der 'Lehre Amenemhets I. für seinen Sohn', Kleine Ägyptische Texte (Wiesbaden, 1969).
- ⁵ G. Posener, Catalogue des ostraca hiératiques de Deir el Medineh, III (fasc. 1), Publications de l'Institut français d'archéologie orientale, XX (Cairo, 1977). I would call attention to the virtue of publishing even the smallest fragments of such literary pieces, as Posener has done; for several of these ostraca offer portions of a verse line, or sometimes only a word, which turn out to be crucial in the reconstruction of the last stanzas of this text. Posener deserves warm thanks for his painstaking work with apparently insignificant fragments of text.
- ⁶ For Turin 57048 see J. López, Ostraca ieratici, N. 57001-57092, Catalogo del Museo Egizio di Torino, Serie Seconda (Collezioni), 111, i (Milano, 1978), pl. 31-31a. For Turin (supplementary numbers) 9589 and 9593^r I owe a debt of gratitude to Professor López, who has very kindly allowed me to publish his transcription of these pieces. They will appear in facsimile and transcription in a subsequent fascicle of his Ostraca ieratici. For Vienna 19 see H. Goedicke, 'Hieratische Ostraka in Wien', WZKM 59/60 (1963-4), 1-8 and pl. xix.
- ⁷ I should like to thank John A. Brinkman, Director of The Oriental Institute, University of Chicago, for permission to publish this ostracon. I should also like to thank Barbara Hall, Conservator and Associate Curator, The Oriental Institute, for a timely cleaning of the ostracon, which not only arrested its decay but also made visible for the first time some twenty to thirty additional signs, markedly improving the reading of the text.

⁸ See pl. IV.

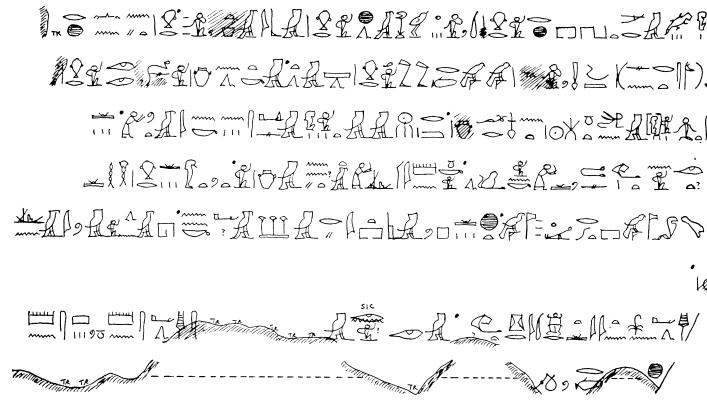


Fig. 1. Transcription of OIC 13636

have been DM 1103 (xiv), DM 1093 (xv), V 19 (xv), and more recently T 57048 (xv); and OIC 13636 appears to have better readings than any of these. It is not of excellent quality, as a comparison with the surviving fragments of P. Millingen will demonstrate, but it seems to be nearer the textual tradition of P. Millingen than the Deir el-Medîna, Turin, or Vienna ostraca.

OIC 13636 diverges from P. Millingen in several instances. At the end of line 1 the ostracon has hr nty nn rather than P. Millingen's hr ntt n; in line 2 it adds the msc hrw to the name of the (then) still living Sesostris; it adds a final t to isw at the end of line 3; in line 4 there is irr $n \cdot i$ or $irt \cdot n \cdot i$ for P. Millingen's apparent $sdm \cdot n \cdot f$ form $ir \cdot n \cdot i$; and so on. In later lines of the text fading of the ink makes readings less easy to confirm. On the other hand, there are significant contributions to the restoration of the original text. In line 2 the $hr \cdot k$, with verse point, is immediately followed by the name of Sesostris, which clears up a problem of interpretation instigated by the incorrect readings of P. Sallier II and DM 1103 (see Helck's edition, p. 87). The m tkn $ib \cdot i$ $ds(\cdot i)$ at the end of line 2 confirms the reading of Mi20bis (Helck, p. 87). In line 3 the word following hnmmwt is ms, 'to present', which clarifies the grammatical structure of that verse line $(N + sdm \cdot f)$. In line 4 hst is readable, with stroke or book-roll determinative. Late in

III

With OIC 13636 providing the basic continuity and a good text for these last sections, with a version of the final lines supplied by T 57048 and T 9593^r, and with crucial support here and there from the fragmentary pieces recently published by Posener, López, and Goedicke, it is now possible to reconstruct an eclectic text of the final two stanzas of the *Testament* with a fair degree of probability—a text which no longer depends so heavily upon DM 1103 and DM 1093 and which can almost ignore P. Sallier II.

In the recent past Posener (pursuing the interpretation of de Buck⁹) was the one to make an extended study of this work in chapter two of *Littérature et Politique* (1956). His purpose did not include a restoration of its ending, but he noted that, owing to few and poor copies of the conclusion of the text, 'le sens des derniers versets échappe dans une large mesure'.¹⁰ He continues, 'Toutes les théories qu'on peut échafauder à son sujet sont à la merci d'une phrase, notamment de la fin qui contient les conclusions'.¹¹ The present group of newly published ostraca forces many new readings of the final two stanzas, settling certain scholarly arguments over the text, but (most importantly) confirming the interpretation of de Buck and Posener.

López has also been concerned with the *Testament*, publishing a facsimile and transcription of the surviving copy of P. Millingen along with a short commentary on new readings.¹² Other studies of the text, with attempts to restore and interpret the ending, have been made by Volten, *Zwei altägyptische politische Schriften* (1945)¹³ and Helck (1969) in the parallel-text edition cited earlier.

Helck's edition is the current reference for the *Testament*, and an inspection of this edition confirms that, for the final two stanzas, P. Millingen is largely lost, that there have been but two ostraca with relatively continuous texts (DM 1103 for Stanza xiv and DM 1093 for Stanza xv), and that the only complete text is P. Sallier II—one of the worst possible papyri to have to use for reconstruction of a text. There are other ostraca, but they are badly broken. And because of the lack of copies surviving for this part of the text, there has not been much evidence for determining which are better and which inferior. The publication of the new group of ostraca happily changes this situation.

⁹ A. de Buck, 'The instruction of Amenemmes', Mélanges Maspero I, MIFAO 66/2 (1935-8), 847-52, and 'La Composition littéraire des Enseignements d'Amenemhat', Muséon, 59 (1946), 183-200.

¹⁰ G. Posener, Littérature et politique dans l'Égypte de la XIIe Dynastie (Paris, 1956), 62.

¹¹ Ibid. 63.
¹² J. López, 'Le Papyrus Millingen', RdÉ 15 (1963), 29-33 and pls. 4-8.

¹³ A. Volten, Zwei altägyptische politische Schriften, Analecta Aegyptiaca, 4 (Copenhagen, 1945).

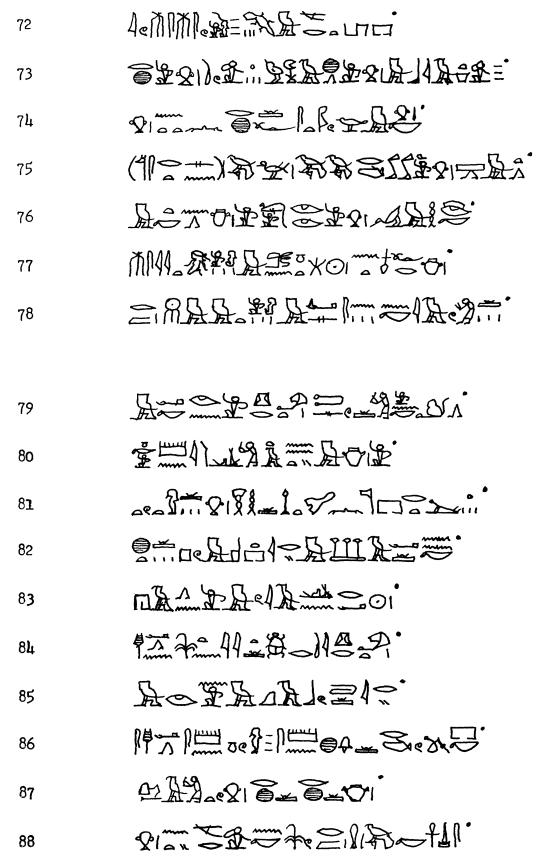


Fig. 2. The Testament of Ammenemes, Stanzas XIV-XV Eclectic Text)

Enough new fragments now exist to form a much firmer series of parallel passages for the final stanzas. There are anywhere from eight to nineteen copies for the verse lines here, which usually allow for an assessment of their quality; and many have verse points to divide lines and clauses. This is of great help; for verse-pointed copies of these stanzas were in especially short supply. As a result, both Volten and Helck divided verse lines wrongly at times (Helck, pp. 87–8, for instance, in Stanza xiv, sections d-f), and thus made interpretation of dark passages still more difficult.

Verse line division is crucial in ancient Egyptian literary texts, as I have argued elsewhere, ¹⁴ and the couplets of *The Testament of Ammenemes* are no exception. The new copies for the first time give a firm sequence of verse points for this passage, and that sequence confirms the verse nature of the ending as well as its densely packed poetic texture. I have numbered the individual lines and arranged them as they should be, in verse, in the eclectic text which follows below. Such arrangement is a major aid to interpretation, if only to enhance the parallelisms of thought, rhetoric, and grammar which are a fundamental part of most verse texts. Stanza xiv is some seven lines long, commencing with a triplet, and Stanza xv is comprised of ten lines, all in couplets. This arrangement of the lines into their proper verses forces major changes in our understanding of the conclusion of the text, fundamentally altering the current tentative renderings of Faulkner, Lichtheim, and Helck.

The eclectic text (see fig. 2) is based upon a study of all the surviving copies of Stanzas xiv and xv known to me. These copies are transcribed in parallel in the plates accompanying this article.¹⁵ A translation of the eclectic text follows, and this, in turn, is followed by a commentary in which I argue for the choices I have made both in text and translation.

Translation

XIV

- 72 Now see! Many (of my) children are in the street:
- 73 The wise agrees, and the uninformed denies
- 74 (Simply) because he did not understand it, deprived of your presence.
- 75 Sesostris, my divine son, my feet are leaving,
- 76 Although my very heart would draw near, and my eyes would gaze upon you.
- 77 The children shall be (living) in a time of gladness;
- 78 And those who are beside the Sun-folk—they offer you adoration.

XV

- 79 Behold what I have done heretofore, that I might knit together success for you;
- 80 It is I who have brought to shore this (much) of what was in my heart.
- ¹⁴ See my 'Thought couplets in Khety's "Hymn to the Inundation", JNES 34 (1975), 1–29, and Thought Couplets and Clause Sequences: The Maxims of Ptahhotep, Publications of the Society for the Study of Egyptian Antiquities V (Toronto, 1977), as well as the article on Sinuhe cited in n. 1.
- 15 See pls. V-XI for the surviving texts in parallel of Stanzas xiv-xv.

- 81 The images of the gods are offering the White Crown to the divine seed of the god;
- 82 And everything is in order concerning what I have initiated for you.
- 83 I have descended into the bark of Rec;
- 84 Rise (thou) to the kingship which came to be in the beginning!
- 85 And do not act on my behalf with deviousness (?) therein;
- 86 (But) erect the statues of the gods, furnish your burial causeway;
- 87 And fight to defend the wisdom of one who was wise of heart,
- 88 For you once loved (to have) him beside your Majesty.

IV

Commentary¹⁶

72. msw/msywt. This word must refer to 'offspring' or 'progeny'. Helck's argument that it is a mistake for 'hatred' is too speculative, and does not respect the brute facts of the surviving copies (of which there are now ten for this passage);¹⁷ for, while the man-with-hand-to-mouth determinative is persistent, P. Millingen most definitely does not write it (though Helck has erroneously transcribed it as such—see pl. V), and other determinatives occur on other copies (the pregnant woman, the sitting child with hand to mouth), and OIC 13636 appears to have the seated woman and the plural strokes remaining as determinative for the missing word. 'Offspring' or 'children' fits the context more closely, and Helck's 'hatred' would destroy the parallel to, and thus the point of, any quotation from (or by) the Admonitions. 18 Msw, as 'offspring', can be interpreted in one of two ways. It can mean 'children' in the sense of all the populace—the Egyptian people in general; Ammenemes would then be thinking of them as given into his care as king, much like a flock is given into the care of the shepherd—a conception certainly in the air in Dynasty XII. If so, the king shows his concern for the people of Egypt in their bewilderment over the succession. The other, and more likely, interpretation suggests that the 'children' are limited to the progeny of the royal family. Many royal offspring are alive, and there is confusion and conflict among them over who is to succeed to the throne. Thus, although the person directly addressed in the Testament is Sesostris I, the 'instruction' is intended for other royal ears also. Finally, the msw/msywt of v. 72 is echoed by the msywt of v. 77, where the progeny of the royal house are to enjoy a time of gladness under the reign of Sesostris I.

- 73. No special difficulties. All texts except P. Sallier II give essentially the same readings.
- 74. OIC 13636 supplies the verse point ending this line. St is perhaps the crux for interpreting the entire conclusion. I read the word as 'it', referring to the king's decision to fix the succession upon Sesostris—which indeed is the theme of the *Testament*. It is this which bewilders other royal offspring, causing the wise among them to approve the decision while the uninformed foolishly oppose it. $M \ hr \cdot k$: there is a second-person suffix pronoun after 'face'. The phrase would then refer to Sesostris' face, of which the doubters and deniers are deprived when, in their ignorance, they refuse to accept the decision. Had he been present, their doubts presumably would have been allayed, but, according to vv. 41-3 (= P. Mill. II. 4-5), he was absent when the king was murdered. Sesostris' 'face' is what the dead king longs to see (vv. 75-6)—an affection mirrored in the poignancy of the final line (v. 88), as the king recalls the close bond between them while he was on earth. This suffix
 - ¹⁶ The text of P. Millingen is followed wherever it survives.
 - ¹⁷ W. Helck, 'Eine kleine Textverbesserung', JEOL 19, 464-7.
- ¹⁸ A. H. Gardiner, *The Admonitions of an Egyptian Sage* (Leipzig, 1909; rptd. Hildesheim, 1969), pl. vi, ll. 121-4.

pronoun, of course, destroys the possibility of hr's belonging to a phrase like 'empty-headed' as it might refer to the deniers of v. 73.

- 75. The verse line is clearly divided this way (against Helck). OIC 13636 and DM 1382 give the correct beginning of the line, while DM 1389^r confirms the s:i of DM 1103 (a not particularly reliable copy). Rdwy:i hr šmt is certain, as is the fact that no verse point occurs before this phrase in any text. Thus, we have the vocative followed by the main-clause statement, 'My feet are departing'.
- 76. M = 'although' (Gardiner, Egyptian Grammar³, § 162, 11c). Tkn, 'draw near', is confirmed, and there is no verse point separating $ds \cdot i$ from $irwy \cdot i$. Thus, we have a two-element verse line (two clauses), with the verse point supplied by P. Sallier II and T 9589. The couplet of vv. 75–6, then, contrasts the necessary withdrawal of the dead king's ghost with his longing to continue in the presence of his son. His heart and eyes draw him near, but his feet drag him away.
- 77. The texts harmonize. The *msywt* here refers again either to the royal line or to the people in general (cf. v. 72). *Nfr-ib* as 'goodness' or 'beauty' of the heart probably translates into something like 'gladness' or 'happiness'.
- 78. A $N + sdm \cdot f$ clause, clarified by the ms, 'to present', the m of which occurs only in OIC 13636, although P. Sallier II shows the m while miswriting the word. The reading of OIC 13636 clears up an apparently superfluous s in what has been read as $di \cdot s sn$. The $ms \cdot sn$ then suggests that the initial word of the verse line is a compound: iryw-gs inmmwt = 'those who are beside the Sun-folk'. The plural determinative would then refer to the entire compound. This reading brings v. 78 into conjunction with the first half of its couplet: the living royal line on earth shall be happy, and the dead of the royal family (now with their ancestors) offer their adoration to Sesostris because he has been selected as king. 19

Stanza xiv thus calls attention to the present state of affairs. The offspring are confused over the succession; Ammenemes' ghost grudgingly takes leave of the son he has selected for the throne, and, in leaving, he asserts that the living will be happy under the reign of Sesostris, while the blessed dead pay him homage.

79. The line is difficult, complicated by Helck's readings of 'bow-rope' and 'stern-rope'. With the appearance of T 57048 and OIC 13636 the situation is improved. Both copies indicate that irini is probably not a sdm·n·f but rather a participial form. T 57048 shows plural strokes under the eye (nominalizing the verb), while OIC 13636 exhibits a sign under the eye which looks rather more like a t than an r. Thus, the ir·n·i of P. Millingen could well be a participle lacking the feminine ending. Most of the copies, including T 57048 and unlike OIC 13636, show a hr-h·t following the participle, which would result in the translation above. Alternatively, the clause could read, mk ir·n·i hit = 'Behold, I have made a beginning'. One looks for another participle in the second half of v. 79, particularly with the apparent w after is, but the seated man (as suffix pronoun) is certain in every surviving copy, a fact suggesting a prospective sdm·f. Therefore the w is probably better read as a string-determinative for the verb 'knit together'. The ph which ends the line also is spelled phwy or phwt, but the context seems to suggest the meaning of 'an arriving' to 'an end', an interpretation which is possible from the mention of those who have 'arrived' in v. 21 (= P. Mill. I. 6-7). The abstract sense of 'an arriving' would thus probably be something like 'success'. This reading stems from the walking-legs determinative after the word in OIC 13636.

Gardiner translates lines 76-8 in AEO while considering the word hnmmt, but, because he ignores the verseline divisions, he garbles the reading of the passage. His interpretation of hnmmt as referring to earthly beings may be correct, but the stylistic contrast of the couplet seems better served if one adopts the reading of Sethe, which Gardiner there combats: 'die verklärten Menschen, die früher verstorben sind'. For the reference see A. H. Gardiner, Ancient Egyptian Onomastica (Oxford, 1947), I, 112.

- 80. A fairly straightforward line. The alternate reading of OIC 13636 and Mi20bis (t: n nty m ib·i) seems preferable to the readings lacking t: n, though the sense is all but identical. But the meaning of the verse as a whole, particularly when taken in conjunction with the other half of its couplet, is that the king had, while alive, completed (= 'brought to port') certain accomplishments from among those he had wished to pursue. They were, at any rate (v. 79), sufficient apparently to ensure Sesostris of success during his reign.
- 81. Another crux—one of the most difficult of those lines where the text survives in fairly good order, and one of the most significant lines of the final stanza. Twt has been called an independent pronoun, but the persistence of the plural strokes in several copies is disturbing, and the line might better be read as the pseudo-verbal form introduced by a noun subject—the 'divine images of the gods'.20 This reading makes better sense when paired with the second half of the couplet (v. 82). Although the parallelism with ink of v. 80 (not in the couplet) is intriguing, the sense seems more significant if one understands that the very gods—through the intermediaries of their statues—are offering the crown to Sesostris. If Ammenemes was indeed a usurper, he has since made it right with the gods, who now ratify his choice of a successor. The n of P. Millingen is another difficult word since it cannot logically appear in that portion of the clause as a negative. No other copy of this verse shows n, but P. Millingen is probably correct. We have a dative n indicating for whom the White Crown is intended—the divine seed of the god, which would refer to the royal line of Ammenemes. That the n could be drawn as an apparent negative is indicated by Wb. II, 193. The Hieratic writing shows a dot over the stroke for n (as wave) before nouns, and it would be no great error to transcribe the sign as the negative n. The gods thus offer the crown to the progeny of Ammenemes.
- 82. One of the more recalcitrant lines until the appearance of the new group of ostraca. Helck follows P. Sallier II, and speaks of the royal seal-ring, but his reading simply shows the difficulties of having to use the papyrus. All other copies have some variant of iht, and OIC 13636 and V 19 certify the meaning with the earlier writing (ht) followed by book-roll determinative, plural strokes, and then pw. We thus have a nominal pw-clause with the idiom for good order: 'It is "things are in their places"'. This is followed in turn by $m \, \delta s c \cdot n \, n \cdot k$, and, much as one would like to see δs , 'ordain' or 'consecrate', here, all of the surviving texts spell out the word for 'begin' or 'initiate'. Thus the conclusion of the line reads, 'concerning what I have begun for you'—a participle with the suffix pronoun $(\cdot i)$ suppressed followed by the dative. In the couplet of vv. 81-2 the gods preserve the crown for the line of Ammenemes, while he himself has put his affairs in order for his chosen heir.
- 83. The most important single reading to emerge from the new copies. King Ammenemes is dead; he has descended with the bark of the sun-god into the underworld as it makes its daily cycle about the universe. Earlier texts were not clear on this line, even though P. Sallier II preserves the n of the sdm·n·f form. T 57048 almost preserves the correct reading but lacks both the ·i suffix pronoun and the crucial preposition m. OIC 13636, however, clearly shows the complete reading: h·n·i m wii n re, and T 9589 and T 9593^r all but duplicate it.
- 84. The preceding line patterns exactly with this. As King Ammenemes 'descends', he exhorts his son to 'rise' to the throne. Although P. Millingen preserves the beginning of this line, other copies indicate how the signs are to be understood. OIC 13636 shows both the walking-legs determinative (missing in P. Millingen) and the prepositional n, which signals that the auxiliary chen is not present; this inference is confirmed by the chent of DM 1318, which shows that an imperative was intended.

<u>Hr-hit</u>, especially when it is combined with <u>hpr</u>, signifies something which was instituted at the beginning of time—such as the Egyptian kingship.²¹ As the old king goes down, the king-to-be rises.

- 85. From here to the end, except for the next line, the text remains somewhat problematical, and for these lines the reconstruction and translation are tentative, though more probable than before publication of the new ostraca. V. 85 probably opens with a negative imperative ($m \dot{r} =$ 'Do not do') rather than the nn m ir, which makes no sense. Because of the reading of OIC 13636 I believe that the mr of DM 1093 should be ignored: three copies show m ir, while two others show the same preceded by nn. Also, OIC 13636, Mi20bis, and T 9593^{τ} all preserve $n \cdot i$ directly following the ir (or *irrt*). Interestingly, OIC 13636 here exhibits a second *ir* (the eye) with the $n \cdot i$ written heavily over it, apparently cancelling it. One of the difficulties with interpreting this line is that all the copies are fragmentary, and thus the spacing and total number of signs in the line are hard to determine. According to T 9593° the full line would read *m ir n·i m kibw iry*—a negative imperative followed by a dative and then a prepositional phrase. Helck's knn is not given enough support by better copies, and his suggestion to alter the kibw to knn in Mi20bis should probably be disregarded.²² Kibw is difficult to interpret; it meant the 'interior' of the earth or the land in v. 55, where it appeared in the singular, but, following a negative imperative, ksbw must represent something to be avoided; it might better be connected with the root for 'crookedness' or even 'deviousness'. Ammenemes would then be adjuring Sesostris to rule with openness: 'Do not act on my behalf $(n \cdot i)$ with deviousness(?) therein.'
- 86. This line is clear in the copies, with one significant alteration. The mummiform standing figure as determinative of T 57048 is puzzling, especially when coupled with a similar determinative displayed by P. Sallier II (a text one usually tries to ignore). However, a close scrutiny of OIC 13636 reveals a very faint vertical line between the sche and the mnw; that there is space for an extra sign is certain. The reading, therfore, is most probably s, producing the word smnw (the cult statues of the gods, in which they become manifested). It would make intelligible the determinative just noted and would certainly be superior to the word 'monuments', which often appears in such contexts. Sesostris would not be indulging in self-aggrandizement here but subscribing to an act of piety. And this tone also seems characteristic of the second half of the line, where, in a clearer context, Sesostris is exhorted to build some appurtenance to his tomb, a 'stairway'(?) or, as Faulkner translates, his 'causeway'.
- 87. A difficult line, and impenetrable before publication of the new copies. The only probabilities are 'h,', 'to fight against' or 'avoid', apparently an imperative form from the context of the surrounding lines, augmented by a double occurrence of words involving the stem, rh. Since the six copies offering a complete or partial text of this line vary so widely, it is difficult to choose among the alternatives. However, the only text which seems to make sense is DM 1318v. On this ostracon the 'tw following the verb indicates the imperative, and, when it is realized that the hr can mean 'to fight for' or 'defend' something or someone, then the line is clarified: Sesostris is enjoined by his father to fight for the wisdom of the one wise of heart, to defend it, to ally himself with it. When the meaning of this line is taken in conjunction with v. 88, the 'one wise of heart' might well be King Ammenemes himself.
- 88. The final line of the poem. The only complete texts are T 57048 and T 9593^r, though the latter is faded. Once again divergence of the copies at the beginning of the line makes choice difficult. One might use the reading of T 57048, regarding the construction as another example of an

²¹ Wb. 111, 23.

²² The texts writing knn (DM 1318^v and P. Sallier II) are probably erroneously repeating the *m ir knn* of v. 53 (= P. Mill. II. 9).

emphasized noun forwarded to the beginning of the clause (a non-verbal equivalent of the $N + s\underline{dm} \cdot f$ clause in v. 78): 'For that face of yours, it is at the side of his (= my) Majesty.' However, three of the four copies show the verb mri (not the noun mrwt). This suggests that T 9593^r might, after all, render the correct reading, a $s\underline{dm} \cdot n \cdot f$ form: 'For you have loved him beside your Majesty.' Ammenemes then would be recalling the time when he was still on earth beside the son who valued and loved his wisdom. If this reading is correct, the dream-vision ends with the father fondly remembering the strong bond uniting him with his son as he asks the latter to continue the policies he himself had begun.

V

Certain conclusions can be drawn from the reconstructed ending of the *Testament*. First, the controversy over whether or not the assassination attempt was successful seems to be settled. The king says he has 'descended into the Bark of $R\bar{e}^{c}$ ' (v. 83), and this can only mean that he is beyond the living and among the gods. Thus, the dramatic form of the *Testament* shows the dead king's ghost returning to caution and advise Sesostris, much as the ghost of Hamlet's murdered father returns. The reading also seems to clear up the interpretation of v. 7 (= P. Mill. I. 2: hr m ntr). Rather than constituting a command to Sesostris to 'rise as a god', it would apply to the dead king himself, who is now 'risen as a god'. As far as the *Testament* is concerned, Ammenemes was attacked in his bed, probably at the instigation of female members of the royal circle (v. 48 = P. Mill. II. 7), and while Sesostris was absent. Verse 83 shows the attempt on his life was successful.

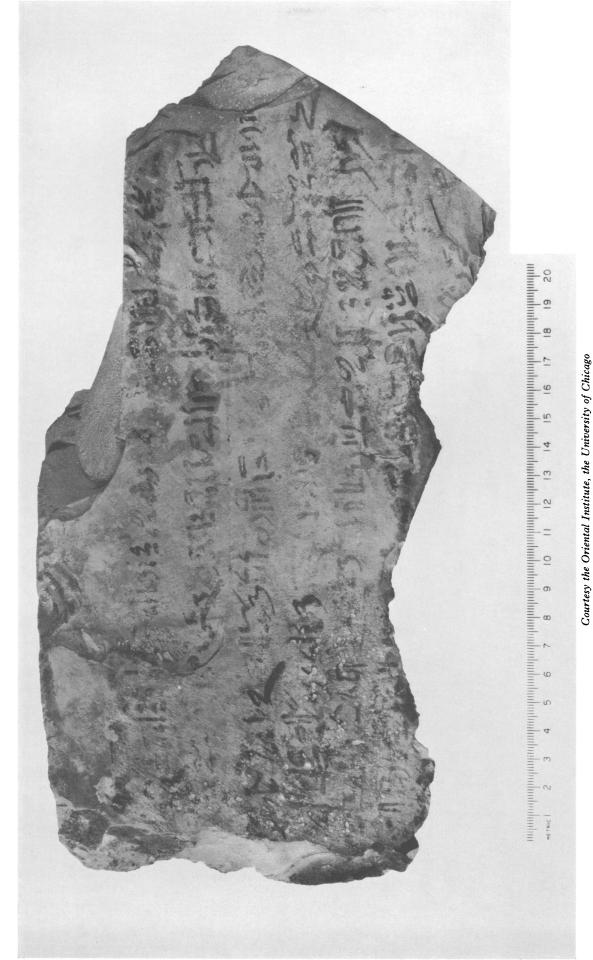
A second conclusion also seems necessary. We assume from Stanza viii (especially vv. 44-5 = P. Mill. II. 5-6) that Sesostris had not yet been made co-regent. Now it can be added that at the moment when the drama of the poem takes place—the moment when the king's ghost speaks to his son—Sesostris has not yet become king. In v. 81 the gods are offering the White Crown to the seed of Ammenemes I, 'the god', and in v. 84 the royal son is commanded to 'rise to the kingship' in Egypt. The present tense of both passages indicates that Sesostris had not yet assumed the duties for which Ammenemes had carefully prepared the way (vv. 79-81). In the *Testament* there is not only no co-regency; the old king dies before he can even publicly announce his choice of a successor. This is what necessitates the composition of the *Testament* itself.

A third conclusion to be drawn from the reconstructed ending reinforces de Buck's and Posener's interpretation of the text as propaganda to bolster Sesostris' claim to the throne of Egypt. The king is made to reveal his thoughts directly to Sesostris and, in this privacy, he clearly shows he has chosen Sesostris to be the next king. As one dead, Ammenemes knows that the 'offspring' are about to enjoy a good reign and that the blessed dead already worship him as the next god on earth (vv. 77–8). Ammenemes also states clearly that the beginning he had made during his own reign was for the purpose of aiding Sesostris; all is in order now for the son's accession (vv. 79–82). Then, after the dead king cautions his son to avoid deviousness, intrigue, or confusion(?) in his reign, he adjures him to *piety*—to worship the gods and prepare himself for

eternity (vv. 85-6). Such piety, casting both Ammenemes and Sesostris in a favourable light, could only impress the reader of that day with the rightness of Sesostris' claim.

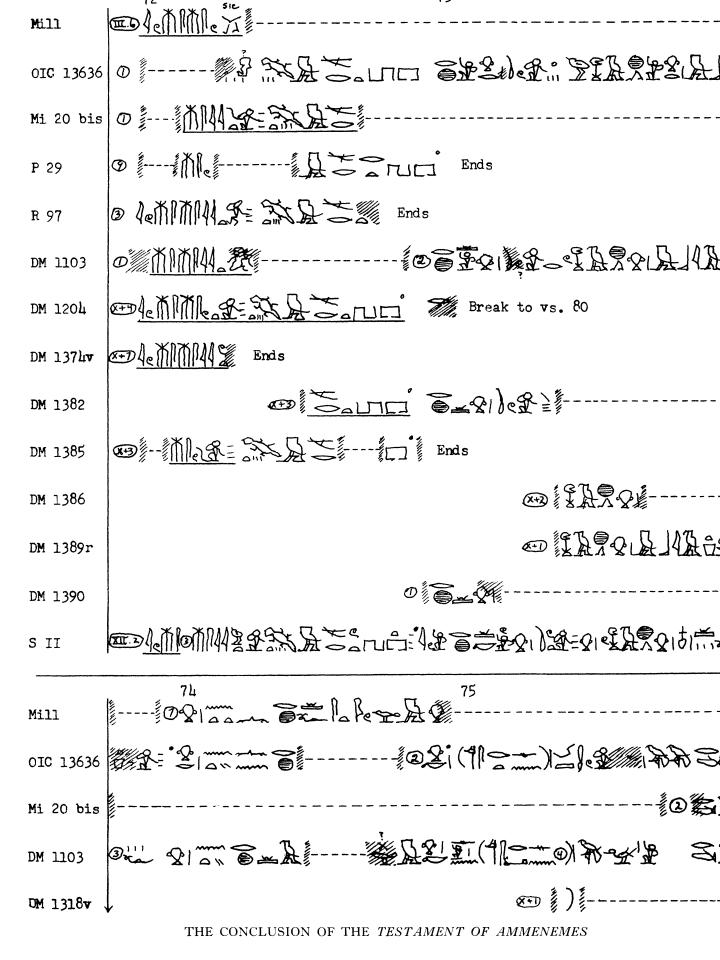
The nature of this text as a testament, rather than merely an instruction, becomes clear in these final two stanzas. Their main theme is to show that Sesostris is the chosen and legitimate heir to the throne, that Ammenemes has arranged the Kingdom's affairs especially for him (esp. v. 82). For any contemporary reader of this text—who would have been a member of the royal circle—the intent of the revelation could not have been clearer. And this interpretation is strengthened by vv. 72-4: many royal offspring survive and, while the intelligent ones already approve of the choice of Sesostris as king, others do not. The Testament is composed to put the doubters' fears to rest—the voice of one they have all respected, coming to them with testimony from beyond the grave, is to settle the uncertainty. Thus, while the ostensible audience is Sesostris, the real audience is the offspring of the royal house who are being courted to support the dead king's choice of a successor. This interpretation would then clarify v. 26 (snnw cnhw, pssw m rmt), and the plural imperative of v. 27: those addressed, those who ought to give proper obsequies to the king, are the other members of the royal house. They are the dead Ammenemes' '(still-)living images', his surviving 'shares' or 'portions' among mankind. In this passage they are all addressed, not only to give the king proper burial ceremonies, but also to hear the truth concerning events surrounding the king's death; for no one can expect good fortune who is ignorant of the past (vv. 29-30).

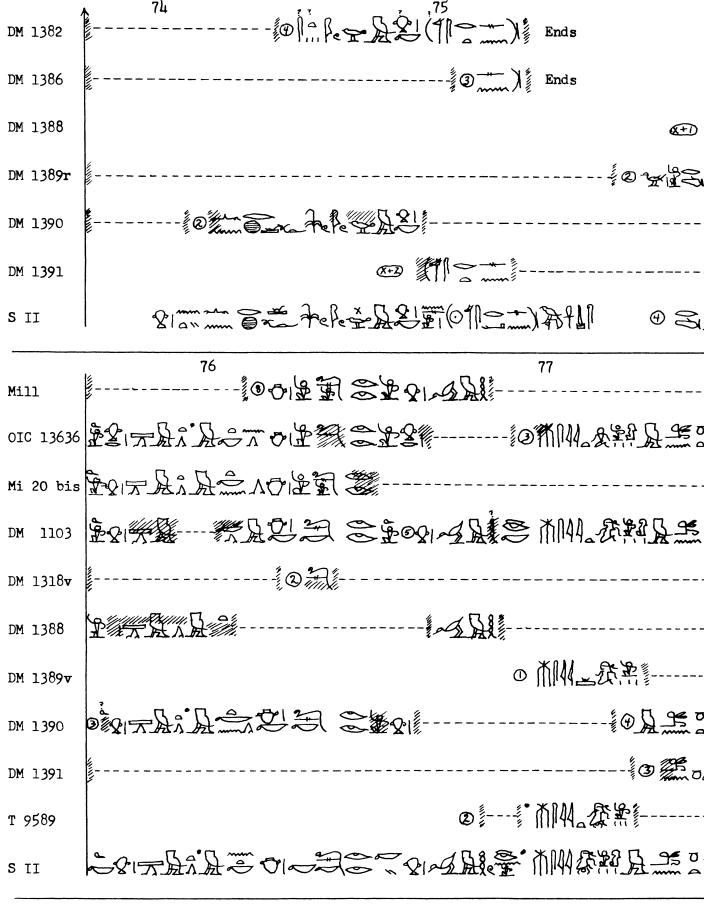
Thus, the 'Instruction' of Ammenemes is truly a testament: it designates the legacy and the legatee; it assigns the inheritance among the survivors; and it offers some last words of wisdom for the chosen son, including an apologia for the father's life and exhortations of piety. After all, a god-fearing king will not only ease a dead usurper's conscience; he will perpetuate the power of the royal house.



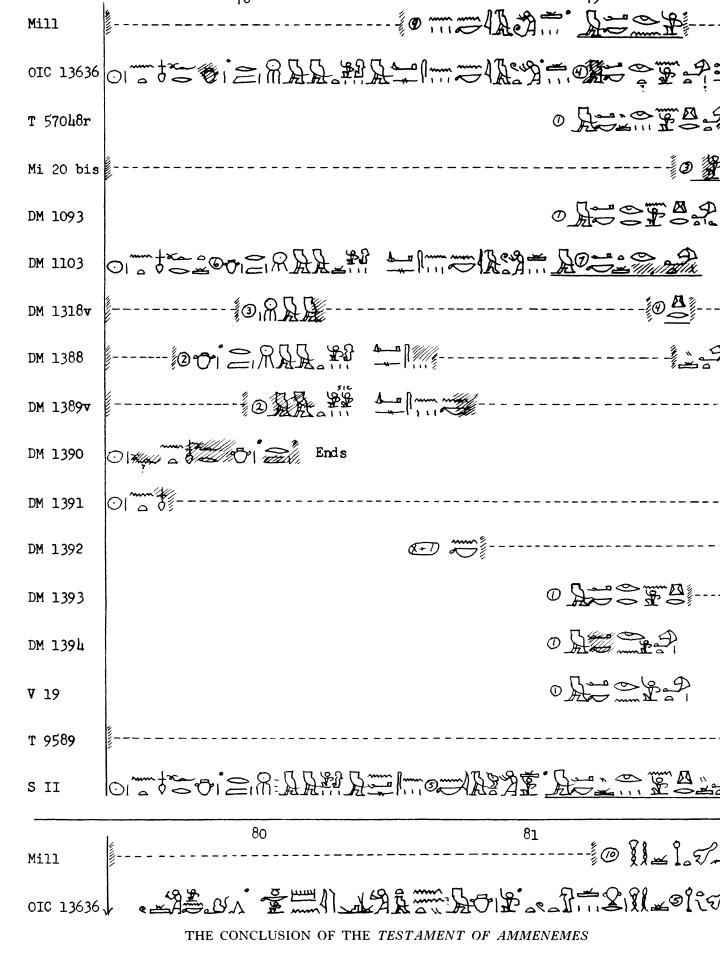
OIC 13636. Limestone ostracon, obverse, inscribed with the Testament of Ammenemes, last two stanzas

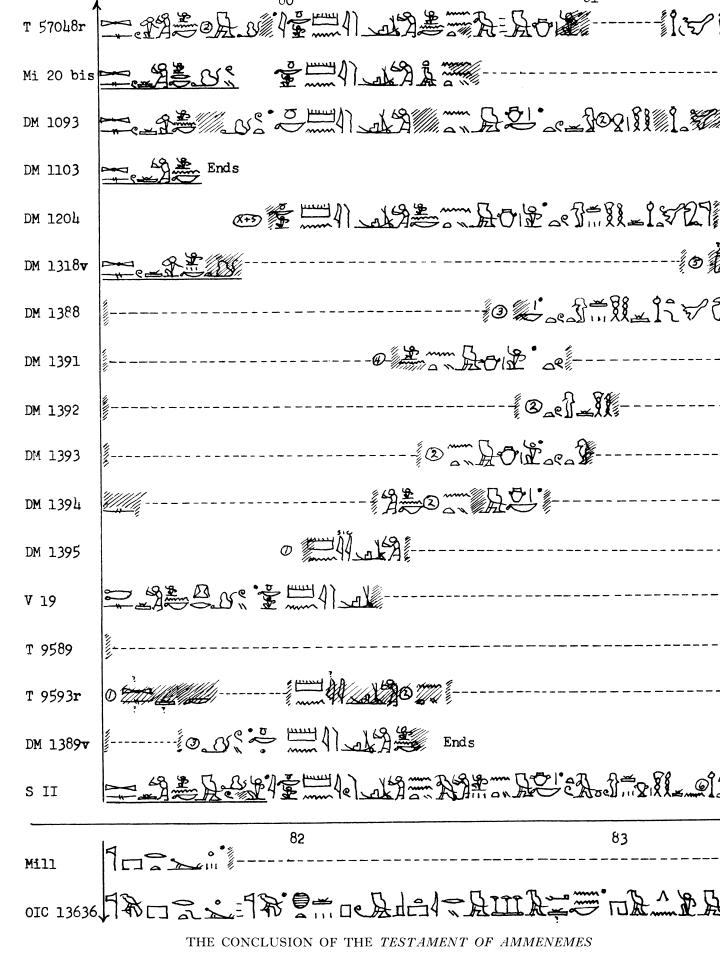
THE CONCLUSION OF THE TESTAMENT OF AMMENEMES

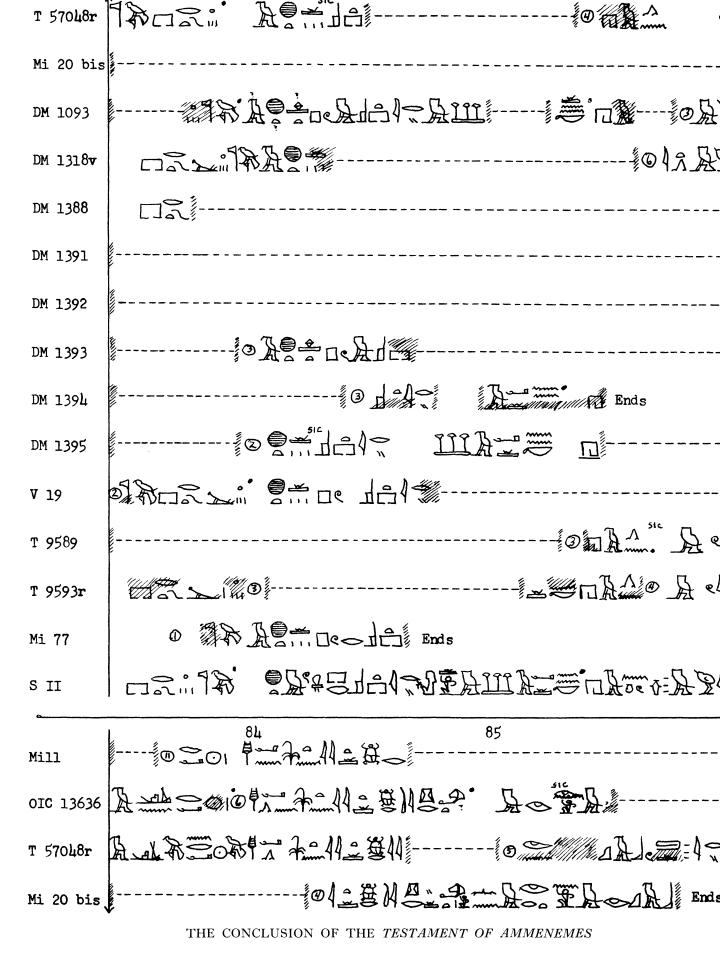


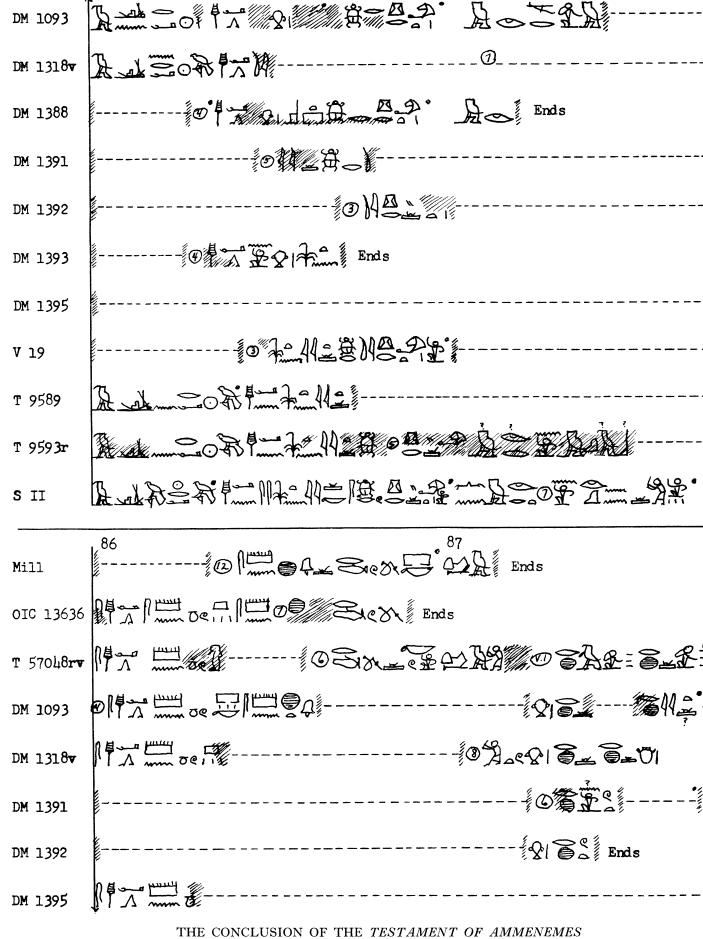


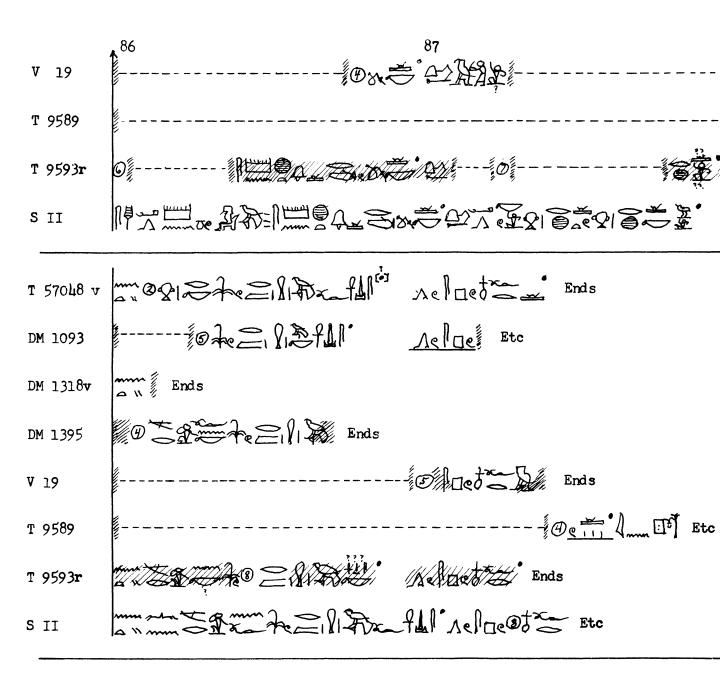
THE CONCLUSION OF THE TESTAMENT OF AMMENEMES











THE CONCLUSION OF THE TESTAMENT OF AMMENEMES

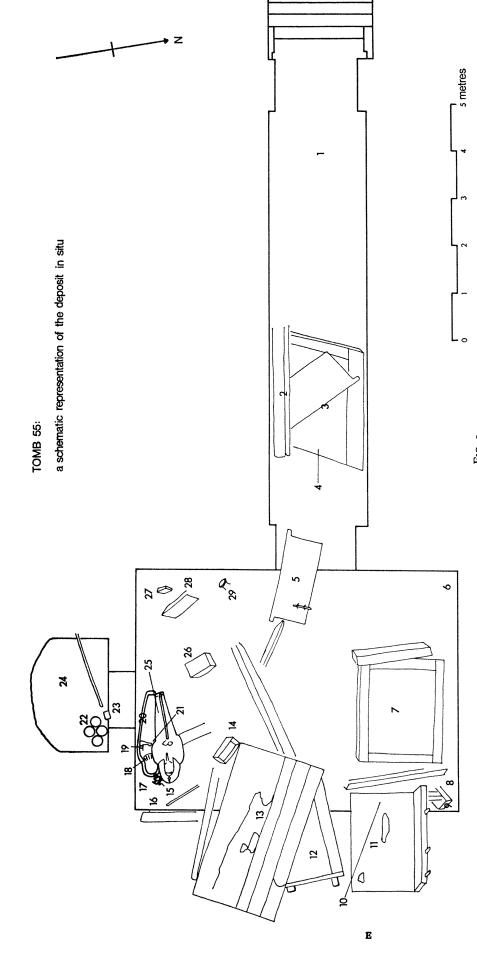
A REAPPRAISAL OF TOMB 55 IN THE VALLEY OF THE KINGS

By C. N. REEVES

In early January 1907 Edward R. Ayrton, working the concession of Theodore M. Davis in the Valley of the Kings at Thebes, uncovered a small, single-chambered tomb which, by its disturbed contents, had clear connections with at least two members of the Amarna royal family, yet contained but one mummy. Subsequent studies of this find have produced such contradictory and generally unsatisfactory results that the tomb's nature and attribution are still debatable. The aim of the present paper is to re-examine this controversial deposit in the light of recent research, and to draw attention to a number of hitherto neglected aspects of the burial. For the sake of clarity a sketch-plan has been drawn up of the deposit in situ, based upon the

My thanks are due to Professor J. R. Harris, Professor H. S. Smith, and Dr G. T. Martin for comments and suggestions relevant to the theme of this paper, and also to Mr J. D. Ray who kindly read through the final draft. Responsibility for the opinions here offered, however, lies entirely with the writer.

- ¹ Th. M. Davis, The Tomb of Queen Tîyi (1910) (abbr. Davis).
- ² In particular G. Daressy, 'Le cercueil de Khu-n-aten', BIFAO 12 (1916), 145 ff. (abbr. Daressy); A. Weigall, 'The mummy of Akhenaten', JEA 8 (1922), 193 ff. (abbr. Weigall); R. Engelbach, 'The so-called coffin of Akhenaten', ASAE 31 (1931), 98 ff. (abbr. Engelbach); D. E. Derry, 'Note on the skeleton hitherto believed to be that of King Akhenaten', ASAE 31 (1931), 115 ff. (abbr. Derry); A. H. Gardiner, 'The so-called tomb of Queen Tiye', JEA 43 (1957), 10 ff. (abbr. Gardiner); G. Roeder, 'Thronfolger und König Smench-ka-Rè', ZÄS 83 (1958), 50 ff. (abbr. Roeder); F. J. Giles, The Amarna Period: a study of the internal politics and external relations of the late 18th dynasty of Egypt (unpublished Ph.D. thesis, University of London, 1960), 112 ff. (abbr. Giles); H. W. Fairman, 'Once again the so-called coffin of Akhenaten', JEA 47 (1961), 25 ff. (abbr. Fairman); C. Aldred, 'The tomb of Akhenaten at Thebes', JEA 47 (1961), 40 ff. (abbr. Aldred); R. G. Harrison, 'An anatomical examination of the pharaonic remains purported to be Akhenaten', JEA 52 (1966), 95 ff. (abbr. Harrison).
- ³ Briefly: (i) that both tomb and mummy belonged to Tiye (Davis), a view later modified after Elliot Smith's examination of the body to propose that the mummy was that of Akhenaten (Weigall; Aldred, latterly abandoned upon Harrison's re-examination of the skeleton, C. Aldred, Akhenaten: a new study (1968)); (ii) that the coffin had been made for Tiye, modified for Akhenaten, but never used by him and occupied by Tut'ankhamūn (Daressy); (iii) (after Derry's re-examination of the skeletal material and Engelbach's review of the texts on the coffin) that the coffin had been used by Smenkhkarē', whose body was that contained within it (Derry, Engelbach); (iv) that the coffin was that of Akhenaten, and that the body, whatever its identity, was believed to be his when placed in the coffin (Gardiner), a view later adapted (JEA 45 (1959), 107 f.) to take into account the suggestion that the coffin had originally been intended for one of the Amarna princesses, but subsequently altered for their father; (v) that both tomb and mummy, the latter in an altered coffin of Meritaten, were to be attributed to Smenkhkarē' (Roeder, Giles, Fairman, et al.—a view seemingly substantiated by Harrison's anatomical re-examination in 1966).
- 4 Notably Yu. Ya. Perepelkin, Perevorot Amen-hotpa IV, 1(1967); id., Taina zolotogo groba (1968), translated as The Secret of the Gold Coffin (1978); J. R. Harris, 'Kiya', CdÉ 49 (1974), 25 ff.; R. Hanke, Amarna-Reliefs aus Hermopolis: neue Veröffentlichungen und Studien (1978); R. Krauss, Das Ende der Amarnazeit (1978).
- ⁵ The dimensions of the tomb are based upon Elizabeth Thomas, 'The plan of Tomb 55 in the Valley of the Kings', JEA 47 (1961), 24.



prenomen of the Aten, Davis, 22; 19, arm bent with three gold-foil bracelets, Davis, 9; 20, gold-foil sheets from interior of the coffin, Davis, 2, pl. xxx (one with cartouche of Akhenaten, Davis, pl. xxvii; 12, panel from shrine, Davis, pl. xxvii; 13, side-15, vulture pectoral upon detached head of mummy, Lindon Smith, 64; Davis, pl. xxx; 16, broken remains of a wooden carrying a vase, watt-eyes, and models of fruit, Ayrton, 280. See note to item 27: 17, (this general area): lion heads from 4, (underneath): lid of large alabaster vase, Davis, 9; 5, second door from shrine, Davis, pl. xxv; 6, 'magic brick', Davis, 10; 14-15, pls. xxvii, xxiv, xxxii-xxxiii; 8, (this general area): scattered blue beads, Davis, 10; 9, box, Davis, pl. xxix; 10, (underneath): 'magic brick', Davis, 10; 11, roof? of shrine, box containing 156 objects, including ointment vases, model papyrus rolls, wands, two figures of Bes, small figure of a girl bier; seal fragments; uraeus with late names of the Aten, Davis, 10; 18, gold collar, Davis, 9; cartouche amulet with early pl. xxiv; 3, panel and door from shrine, Davis, 1, 8, pl. xxiv; 7, panel from shrine with erased figure of Akhenaten, Davis, panel? from shrine, Davis, pl. xxvii; 14, box, Davis, pl. xxvi;

contents are to be regarded as approximate the connection with the tomb (C. Aldred, JEA 48 (1962), tenuous connection with the tomb (K. Bosse-Griffiths, JEA 160 ff.), the Harold Jones collection (K. Bosse-Griffiths, JEA 160 ff.), the Harold Jones collection (K. Bosse-Griffiths, JEA 160 ff.)

confused allusion in Davis, 4, to the contents of a 'small pit basically to refer to the embalmers' cache commonly associated with the burial of Tut'ankhamün (H. E. Winlock, Materials

47 (1961), 66 ff.) has been omitted from the present list.

tomb about three-hundred feet from Tîyi's tomb' seems

tion with the Tomb 55 deposit, and is thus outside the scope of the present survey.

1, (this general area): blade of a small copper graving tool;

Used at the Embalming of King Tüt-Cankh-Amun (1941), 7). This collection of objects has in itself no demonstrable connec-

Art (1957), 54 ff. The dimensions of the tomb are based upon Elizabeth Thomas, 'The plan of Tomb 55 in the Valley of the Kings', JEA 47 (1961), 24. The relative dimensions of the

Lindon Smith = J. Lindon Smith, Tombs, Temples and Ancient

"The tomb of Thyi"

M. Davis,

Ayrton,

KEY: the following abbreviations are employed: Davis = Th.

The Tomb of Queen Tiyi (1910), Ayrton = E. R.

', PSBA 29 (1907), 85 f., 277 ff.,

(i) inlaid gold flower, Davis, 22; cf. Ayrton (ii) beads, Davis, 22; (iii) gold foil with early names of the Davis, 22; (iv) ear-stud fasteners, Davis, 22; 22, canopi Davis, pl. xxvi; 23, statue plinth?, Davis, 26? pl. xxv 'magic brick', Davis, 10; 25, (underneath bier): 'magic l'seal fragments, Davis, 10; 26, box, Davis, pl. xxvi; 27, re of a small box containing pss-kf amulets and other m for the ceremony of opening the mouth', including the l of a chisel, four alabaster blocks, flint knives, and tw pebbles, Ayrton, 280. Elsewhere (Davis, 10) Ayrton des wands, and figures of blue-glazed ware; this was probab to confusion with the box recovered from the sout corner of the chamber (item 16); 28, box, Davis, 10, p (if not item 26); 29, alabaster 'vase stand', Davis, 8; un objects include: (i) fragment of furniture with the cartouc 39; (iii) two gold shroud discs, Davis, 40; (iv) two gilt-l shroud discs, Davis, 40; (v) irregular bronze patches, Dav bracelets around wrist, Davis, 10; unplaced ornaments Tiye and Amenophis III, Davis, 32; (ii) hieratic label, the box as containing faience items, including small

photographic record and text published by Davis⁶ and upon descriptions given by Ayrton and others⁷ (see fig. 1). From this plan a number of intriguing features emerges which, when studied in conjunction with the other available archaeological data, admit of an interpretation differing from the generally held view, viz. that Tomb 55 constituted a hurried burial for the ephemeral monarch Smenkhkarē⁵. On the contrary, there is evidence to suggest (a) that Tomb 55 at one stage contained more than one interment, (b) that these interments were secondary, consisting of the salvaged remnants from two plundered royal tombs, and (c) that the occupant of the mutilated coffin was a woman.

Let us first consider the chamber itself. Although Thomas⁹ is of the opinion that it had been employed for an earlier, non-royal burial, this appears unlikely. It is preferable to assume that Tomb 55 had been abandoned by its original owner before completion,¹⁰ possibly owing to the fault running across the ceiling,¹¹ which appears to have let in moisture,¹² and that the objects discovered within the chamber bear no relationship to this intended occupant.¹³

The plan clearly illustrates the disturbed state in which the contents of the tomb lay when discovered. Yet amidst this apparent chaos can be discerned a definite division into (a) objects which, by their function and the inscriptions which they carry, can be connected with the burial of Queen Tiye (notably the shrine, ¹⁴ but also other small items ¹⁵), and (b) items similarly pertaining to the funerary equipment of Akhenaten (altered coffin, ¹⁶

- ⁶ Davis, passim, pls. xxiv-xxx.
- ⁷ E. R. Ayrton, 'The tomb of Thyi', PSBA 29 (1907), 85 f., 277 ff. The following are also relevant to any consideration of the deposit in situ: G. Maspero, Causeries d'Égypte [1907], 343 ff., translated as New Light on Ancient Egypt (1908), 291 ff.; J. Lindon Smith, Tombs, Temples and Ancient Art (1957), 54 ff. Mrs Andrews's sketch (JEA 43 (1957), 25) adds little of note.
- 8 This interpretation has its improbabilities, both archaeological and in the light of recent observations by Harris et al., which suggest that the name 'Smenkhkarē' applied not to an individual historical personage but to Nefertiti at a later stage in her career: J. R. Harris, 'Nefernefruaten', GM 3 (1973), 15 f.; id., 'Nefertiti rediviva', Act. Or. 35 (1973), 5 ff.; id., 'Nefernefruaten regnans', Act. Or. 36 (1975), 11 ff.; Julia Samson, 'Royal names in Amarna history', CdĒ 50 (1976), 30 ff.; id., 'Nefertiti's regality', JEA 63 (1977), 88 ff. For differing interpretations regarding the identity of Smenkhkarē' cf. Krauss, op. cit., and Perepelkin, Gold Coffin, presumably elaborated in his Keie i Semnekh-ke-re (1979), which I have not seen. The more traditional view of Smenkhkarē' as an independent male ruler is conveniently stated by C. Aldred, 'Egypt: the Amarna Period and the end of the Eighteenth Dynasty', CAH³, II, 2 (1975).
 - 9 Elizabeth Thomas, The Royal Necropoleis of Thebes (1966), 146.
- The most obvious indication of its unfinished state is the back wall of the so-called 'canopic niche', which had doubtless originally been intended as a second chamber: cf. Valley Tomb 62 (Tut'ankhamūn), Porter and Moss, Topographical Bibliography, 1, 2 (1964), 558.
 - 11 Davis, 3.
 - 12 Lindon Smith, op. cit. 65; Davis, 3.
 - 13 Cf. Thomas, op. cit. 146.
 - ¹⁴ Davis, 13 ff., pls. xxiii-xxiv, xxvi-xxix, xxxi-xxxiii.
 - 15 Op. cit. 30-1, 32, 35-6, pl. iv.
- 16 Op. cit. 16 ff., pls. vi, xxvi, xxx. I am grateful to J. R. Harris for advance information regarding his projected paper on this coffin, in which he hopes to demonstrate that the sum of the various titles and epithets in the five bands of text—which in their final form were made to refer to the person for whom the coffin was then to be used—would not have been applicable to anyone other than Akhenaten. Cf. also Lindon Smith, op. cit. 65, where it is expressly stated that one of the gold sheets (now lost) from the lining of the coffin bore Akhenaten's name, apparently in no particular context. For the original owner of the coffin, evidence has been adduced to support Kiya's claim: Perepelkin, Perevorot, sect. 99, 136 ff.; id., Gold Coffin, 73 ff.; Harris, Cd£ 49 (1974), 27; Hanke, op. cit. 171 ff. It is to be noted that, contrary to Weigall, 199, Aldred, 49, et al., the coffin uraeus

canopic jars,¹⁷ and magic bricks¹⁸). This dichotomy is reflected in the positioning of the main items from each group, namely the shrine and coffin, which, when found, bore no obvious relationship to one another. Indeed, the impression gained is that the shrine, though dismantled, at one stage occupied the main area of the single chamber, whilst the coffin and canopic jars were consigned to the edge of the chamber, close to the entrance, as if having been introduced after the erection of the shrine. Thus, if we take into consideration both the implicitly personal nature of the funerary items involved, which would have been of limited value in the funerary ritual of a person for whom they were not inscribed (an important point overlooked in some previous studies), and the mixed nature of the material, it is evident that the deposit represents not one, but the remains of two, quite separate burials contained in the same chamber. This interpretation finds support in what we know of the successive sealings of the outer doorway,¹⁹ which suggest that the Tomb 55 'cache'—for such it seems to have been—had been deposited on at least two separate occasions, and partially cleared on a third.

It is equally clear that Tomb 55 constituted the original burial place for neither interment. The collection of funerary furniture²⁰ recovered from what was an admittedly

does not bear a cartouche. The inscribed uraeus in Davis, pl. ii, is a separate item, probably originally from a statue: cf. I. E. S. Edwards, *Treasures of Tutankhamun* (1972), exhibit 1, the wooden statue of the king (though here the uraeus is uninscribed). It follows that interpretations based upon this misconception are valueless.

Davis, 24 f., pls. vii–xix. On purely stylistic grounds it is apparent that the canopic jars are to be regarded as *en suite* with the coffin. Moreover, although the inscribed panels which these jars originally bore have been erased, the surviving traces of text (on each of the Cairo specimens at least) are to some extent complementary, and provide sufficient grounds for the assumption that each jar bore a similar, if not identical, inscriptional layout to that on Kiya's ointment pots (published Fairman, 29 f.).

Davis, 26 f., pl. xxii. Two of the bricks were inscribed in Hieratic, though unfortunately the name of the owner on these was illegible. Thomas, op. cit. 146, suggests that they are perhaps to be assigned to the tomb's original owner, but there is no good evidence for this. They are more likely (since they complete the set) to be hurried replacements for two previously destroyed or lost—and hence perhaps a further indication that we are here dealing with a reburial. The two remaining specimens have impressed hieroglyphic inscriptions, and in these the owner, Neferkheprurē Wa enrē is referred to as 'the Osiris'—a most unusual epithet for Akhenaten, as has been pointed out by Aldred, 52 f., et al., who in consequence would date them to early in the reign, before the Aten schism reached its height, though it is, of course, conceivable that they are to be dated to the period after his death, and thereby reflect the religious persuasion of a successor. While in the light of present evidence no totally convincing explanation seems possible, the inference drawn from the presence of the bricks appears certain (against Fairman, 38; Thomas, op. cit. 146); cf. J. Monnet, 'Les Briques magiques du Musée du Louvre', RdÉ 8 (1951), 151.

The original sealing had been accomplished with 'rough blocks of limestone cemented together and coated on the outside with cement' (Davis, 7). However, 'with the exception of a wall about three feet high, these had been pulled down' (op. cit. 1), and the entrance had been 'closed by a loosely-built wall of limestone fragments, resting not on the rock beneath, but on the loose rubbish which had filled the stairway' (op. cit. 6–7). According to Weigall, this second wall had itself 'been partly pulled down, and had not been built up again' (Weigall, 198). Unfortunately, Ayrton omitted to photograph these structures in situ (loc. cit.); nevertheless, we learn that upon 'fragments of cement' (Weigall, op. cit. 197) from the original plastered blocking was found 'the oval seal of . . . a jackal crouching over nine captives' (Davis, 7). Weigall's statement (The Treasury of Ancient Egypt (1911), 208) that 'the entrance . . . was sealed with the seal of Tutankhamon, a fragment of which was found' may indicate that the necropolis seal employed was of the type with cartouche (cf. H. Carter, The Tomb of Tut.ankh.Amen, I (1923), pl. xiv, right). Certainly the view is in accord with the dating evidence of the 'several lead [doubtless = lead-coloured clay] seals' of Tut'ankhamūn found within the chamber (Davis, 4).

²⁰ Davis, 26 ff., pls. i-vi.

disturbed, though apparently unrobbed,²¹ tomb is far too small to admit of this theory. Some of the stock items of funerary equipment seem not to have been represented at all. There are no shabtis, for example, and yet these would hardly have been a target for ancient theft. Moreover, evidence has been cited to suggest that Tiye,²² together with another queen, her daughter Sitamūn,²³ was originally buried in the tomb of her husband, Amenophis III, in the two chambers with small subsidiary rooms which adjoin the burial chamber of the king.²⁴ For Akhenaten, it must be confessed, we are in possession of little conclusive evidence, but the latest informed opinion on the matter²⁵ would favour a primary interment in the tomb in the Royal Wadi at El-'Amarna. Tomb 55, then, seems merely to have served as a convenient hiding-place for mummies and salvaged funerary goods from the burial of Akhenaten, presumably at El-'Amarna, and from the West Valley tomb of Amenophis III at Thebes.²⁶ From the disposition of the objects within Tomb 55 it appears that the reburial of Tiye took place first, perhaps during the reign of Tut'ankhamūn, to judge from the evidence of sealings found within the chamber.²⁷

The situation in the tomb immediately after the introduction of the second burial must have been very different from that obtaining when the deposit was discovered in 1907. As found by Davis, the tomb was in a state of disarray: the shrine had been dismantled,²⁸ as if to allow the removal of Tiye's coffined body from within, and one of the larger panels and a door had been dragged up the partially cleared rubble fill of the entrance corridor,²⁹ and abandoned.³⁰ This strongly suggests the planned removal from

- ²¹ As the presence of so much easily portable gold work would testify: Maspero, *New Light*, 295; W. R. Dawson, *JEA* 43 (1957), 25.
- ²² Howard Carter's unpublished excavation notes on the tomb of Amenophis III, now in the Griffith Institute, Oxford, record the torso of a wooden statue and two fragments of a box (Porter and Moss, op. cit. 1, 2, 550) together with, in the entrance to the tomb, a shabti (cf. J.-F. and L. Aubert, *Statuettes égyptiennes: chouabtis*, ouchebtis (1974), pl. vi, perhaps also from here), all bearing Tiye's name.
- ²³ A faience bowl fragment from the tomb bears Sitamūn's name, W. C. Hayes, *The Scepter of Egypt*, II (1959), 244.
 - ²⁴ Id., Royal Sarcophagi of the XVIIIth Dynasty (1935), 29.
 - 25 G. T. Martin, The Royal Tomb at El-'Amarna, 1: The Objects (1974), 105.
- It is a common misconception, based largely upon the evidence of the tomb robbery papyri (T. E. Peet, The Great Tomb Robberies of the Twentieth Egyptian Dynasty (1930)), that such plundering was in the main confined to the later New Kingdom. On the contrary, it seems that the practice became common during any period of internal stress—and hence quite probably during the religious turmoil of the later Eighteenth Dynasty: compare, for instance, the necessity for burial-restoration in the tomb of Tuthmosis IV, under Tutankhamun (plummet with restoration text: Oriental Institute, Chicago, Handbook and Museum Guide (1941), 16) and Horemheb (hieratic graffito, Th. M. Davis, The Tomb of Thoutmôsis IV (1904), xxxiii–xxxiv). It may be significant that the tomb of Amenophis III is not mentioned in the Twentieth Dynasty accounts, though of course this particular tomb is situated in the more remote West Valley, and may not, for this reason, have been included in the particular check represented by the surviving documents. It is as well to point out that the faience ring bezel bearing the cartouche of Ramesses II, found by Carter during his clearance of the tomb of Amenophis III and suggesting to him that it had first been entered in Ramesside times (Aldred, 59 n. 4), need not be taken to indicate more than that the tomb was accessible by the Ramesside Period.
 - ²⁷ See note 19, above.
 - ²⁸ Davis, pl. xxvii.
- ²⁹ The corridor had presumably been filled with rubble following the introduction of Tiye's burial, and partially cleared to facilitate the introduction of the second burial some time later.
- 30 Davis, pl. xxiv.

the tomb of Tiye's body and her immediate effects, which, owing to the unwieldy nature of the component parts of the shrine, was never completed. Happily, the recent identification of Tiye's mummy as being amongst those from the tomb of Amenophis II³¹ indicates her ultimate destination, presumably via an intermediate resting-place. This removal seems certain to have taken place before the end of the Twentieth Dynasty, by which date the accumulated debris from excavations for the tombs of Ramesses I, II, III, and IX, and of Sethos I, covered the tomb area.³²

Whether the remaining coffin was abandoned wilfully or of necessity owing to the shrine panel's blocking the corridor is difficult to establish; however, it seems likely that the erasures and defacement of the coffin and possibly of the shrine also occurred at this time, and consequently that the abandonment of the second body—to all outward appearances that of Akhenaten himself³³—was a deliberate act.³⁴ The identity of the occupant of this coffin is problematic. At the time of its discovery two doctors visiting the tomb (a Dr Pollock and 'a prominent American obstetrician'35) informed Davis that the badly preserved mummy was 'without doubt'36 that of a woman—an identification that would accord well with the manner in which the mummy was laid out (right arm straight down by the side, left arm bent with the hand on the breast,³⁷ a typically female pose³⁸). Only later did Elliot Smith proffer the opinion³⁹ that the bones examined by him were those of a man, a view more recently substantiated by Derry⁴⁰ and Harrison.⁴¹ Although Weigall, who was responsible for the transfer of the tomb's contents to Cairo, emphasizes his belief that the bones examined by Elliot Smith were those from the tomb, his evidence is not incontrovertible, and the possibility of some loss or confusion of the original skeletal material between the time of the discovery in early 1907 and Elliot Smith's examination later the same year cannot be ruled

- 32 Davis, xxv.
- 33 See note 16, above.

- 36 Lindon Smith, op. cit. 66.
- ³⁷ Davis, 9; Lindon Smith, op. cit. 65.

³¹ Oriental Institute News and Notes 30 (Oct. 1976), [1]-[2]; Sunday Times, 18 June 1978. The mummy in question is that of the 'Elder Lady' (G. E. Smith, The Royal Mummies (1912), 38, no. 61070).

³⁴ With Weigall, 197, a view supported by Harris, who has suggested to me a possible indication that the cartouches were erased *in situ*. With the shrine the intention seems to have been not so much to obliterate the name of Akhenaten as to replace it by that of Amenophis III: cf. Davis, 13. The explanation for this action eludes me, unless the intention was to make the shrine fit for removal with Tiye's body. That the alterations were never completed was perhaps due to the realization that the shrine panels were too large to extract from the only partially cleared corridor.

³⁵ Letter dated 5 Aug. 1907 from Davis to Elliot Smith in the possession of W. R. Dawson (cited by Aldred, 49); letter from A. H. Sayce to the editor of *The Times*, 17 Sept. 1907.

³⁸ Cf. P. H. K. Gray, 'Notes concerning the position of arms and hands of mummies with a view to possible dating of the specimen', JEA 58 (1972), 202-3. For sculpture in the round cf. S. Wenig, Die Frau im alten Ägypten (1967), passim. The positioning of the arms of the Tomb 55 mummy does not appear to be accidental. Though the head was separated from the body when discovered (Lindon Smith, op. cit. 64), the mummy itself was not disarticulated (cf. loc. cit.; Davis, 3). Only when touched did it crumble 'into ashes' (Lindon Smith, loc. cit.), the state in which Maspero evidently saw it (Davis, xiv).

³⁹ Letter from Elliot Smith to the editor of *The Times*, 15 Oct. 1907; Davis, xxiii f.; G. E. Smith, op. cit. 51 ff.

⁴⁰ Derry, 118.

⁴¹ Harrison, 111.

out.⁴² Alternatively, there may have been an element of deliberate deception in the affair.⁴³ The uncertainty surrounding the matter is such that one cannot assume that the full skeleton now residing in the Cairo Museum is that discovered in Tomb 55. Indeed, from the archaeological and first-hand medical information which has survived, it seems highly probable that the body was that of a woman, and not originally intended for the coffin in which it was eventually discovered.⁴⁴

To conclude: whilst the limitations of our evidence are only too apparent and the temptation for unfounded hypothesis great, the following sequence may fairly be deduced from the evidence still available to us:

- (i) the abandonment of the unfinished Tomb 55 chamber before any original burial was made;
- (ii) the subsequent utilization of the empty chamber for the reinterment of Tiye, whose shrine, to judge from the position of its component parts, occupied the main area of this chamber. The outer doorway was then closed with limestone blocks, plastered, and stamped with the (?cartouched) necropolis seal under Tutcankhamūn;
- (iii) the partial destruction of this sealed doorway and the introduction of a second burial, the body being contained in a coffin which showed signs of having been altered at some stage for reuse by Akhenaten. This body may well have been female;
- (iv) the destruction of this second wall and partial removal of the deposit some time prior to the Twentieth Dynasty, and the possibly deliberate abandonment of the body in the coffin attributable to Akhenaten which, together with the shrine, may also have been defaced at this time.

It is only to be expected, owing to the nature of the material available to us over

- ⁴² The fact that Weigall's only means of distinguishing the bones was that he had 'soaked . . . [them] . . . in paraffin wax so as to preserve them' (Weigall, 196) may be relevant here; 'there was no indication [on the basket containing the body] of the tomb from which the bones had come, merely the number on the tag for identification at the Antiquities Service' (Lindon Smith, op. cit. 66)—where it seems that they were not even registered temporarily until 1915 (and then twice!) (cf. G. T. Martin, op. cit. 36 n. 1). The much-publicized likenesses to the body in Tomb 62 would appear to negate this possibility, however, unless they should prove to be fortuitous (cf. Derry, 116 f.).
- ⁴³ Cf. perhaps the implications of R. Millar, *The Piltdown Men* (1972); I. Langham, 'Talgai and Piltdown—the common context', *The Artefact* (Journal of the Archaeological Society of Victoria, Australia) 3 (1978), 181 ff; id., 'The Piltdown hoax', *Nature* 277 (18 Jan. 1979), 170—for which references I am grateful to J. R. Harris.
- 44 The identity of this woman is a matter of speculation since, if the skeletal material has been interfered with, we do not possess the relevant bones from which an identification might be made. Nevertheless, since the indications are that the coffin in its final form had at some time been altered to accommodate the body of Akhenaten, and had only by chance been employed to contain the body eventually found in it, the likelihood is that the proposed female occupant of the coffin was from the same burial. Should this burial have been at El-'Amarna, then Mekitaten was almost certainly buried there (Martin, op. cit. 105, § 9), as might have been other members of the royal family for whom we have no direct evidence. It may be significant that the two inscribed pieces found upon the Tomb 55 mummy bear the early form of the Aten name (Davis, 22, 23), a fact perhaps suggesting that the body was that of a person who died in the earlier half of the reign. As regards the unprovenanced alabaster shabti now in Brooklyn (Acc. No. 33.51), once taken as a possible indication of Nefertiti's interment in the Amarna royal tomb, see now Krauss, op. cit. 97 ff.

seventy years after the tomb's discovery, that many aspects of the burial should evade convincing explanation. It is to be hoped that the suggestions put forward in the present paper will stimulate a thorough re-examination and republication of the deposit, object by object, upon which less tentative interpretations may be based.

AN EIGHTEENTH-DYNASTY LINEN IN THE MUSEUM OF FINE ARTS, BOSTON

By JOHN McDONALD

In 1872 C. Granville Way gave to the Museum of Fine Arts, Boston, the Egyptian antiquities that he had purchased from the collection of Robert Hay, the major share of which was acquired by the British Museum. Among the items which Way gave to Boston were several fragments of inscribed linen, the largest of which (MFA accession number 72.4727) measures 63 × 51 cm and contains sections from Chapters 71, 106, and 124 of the Book of the Dead.

The linen has approximately 55 warp and 35 woof threads per inch, and is thus a weave of medium quality.³ But it is not nearly so fine as the shroud of Tuthmosis III, which is also in Boston.⁴ All the edges are badly frayed, but comparison of the surviving portions of text with complete chapters from published papyri allows a reasonable estimate to be made of the original width of the linen (see note o below). It has been ruled into twenty-three columns which read from right to left. The first three of these have so thoroughly faded that no inscription can be detected in natural light.⁵ Under the action of ultraviolet, however, much of the third column and all of the lacunae in columns 14 and 19 can be restored (see pl. XII).

The text is written in a clear, large hand that makes frequent use of Hieratic as well as cursive hieroglyphic forms. The scribe made a few errors and omissions, most notably in column 6, where he wrote \neg rather than \neg , and in column 11, where he omitted the firestick in the writing of $w\underline{d}$?t. A transcription (see fig. 1) and translation with commentary follow.

Translation

Chapter 71.6 (column 3) . . . by the overseer of $(?)^a$ Seni, engendered by Mes the elder, born to the house mistress . . . (4) . . . who shines in Nun, lord of the celestial

- ¹ For a description of the collection see Hay, Catalogue of the Collection of Egyptian Antiquities belonging to the late Robert Hay esq. (London, 1869). The MFA linen is item number 1009 in the sale catalogue.
- ² A scrap of linen containing the remnants of three columns was originally mounted with the larger piece, but it cannot be incorporated into the longer text with any assurance and is not included in the plate.
- ³ This determination is based on comparison with linens of varying grades discovered in the cache of Tut'an-khamūn's embalming materials. These are discussed by Winlock in *Materials Used at the Embalming of King Tut-Ankh-Amun* (New York, 1941), 8.
- ⁴ By my own count the shroud has approximately 75 warp threads per inch. For a discussion of the history of the linen and its text see Dunham, 'A fragment from the mummy wrappings of Tuthmosis III', JEA 17 (1931), 209-11.
- ⁵ The faded sections were not executed in the unstable red ink but in the usual carbon-based ink. The apparent randomness of the fading is, therefore, difficult to explain.
 - ⁶ For correlations between the Coffin Texts and the three chapters preserved on this linen see Allen,

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Fig. 1. Transcription of Boston MFA 72.4727

kine.^b May you make me hale even as you make yourself hale. Pray,^c release him, free him. Set^d him upon earth. Let . . . (5) . . . I open for the one who wears^e the fringed garment. So says^f Horus, son of Isis. O Horus, son of Isis, may you make me hale even as you make yourself hale . . . (6) . . . the one-faced lord regarding me. I am the falcon in the southern sky and Thoth in the northern sky, the one who satisfies^g the raging, fiery one. I have uplifted . . . (7) . . . yourself. Pray, release him, free him, set him upon earth. Place^h him according to his desires. So says the one-faced lord regarding me. I am . . . (8) . . . May you make me hale even as you make yourself hale. Setⁱ him, free him. Set him upon earth. Grant . . . (9) . . . May you make me hale even as you make yourself hale. Set^j him, free him. Set him upon earth. Grant . . . (10) . . . Place him according to his desires. So says the one-faced lord regarding me. Stand up, Sobek, as one who is amid the heights . . . (11) . . . the arms of the balance on that night of restoring the Oudjat-eye, who cut off . . . (12) . . . I [know] your number.^k When I approach you,^l so do you approach me. When you live through me, so do I live [through you] . . . (13) . . . days to my days of life and numerous nights to my nights of life . . .

Chapter 106: ... (14) ... ^a Seni, engendered by Mes the elder, born to the house mistress Ta-Aamu in Ḥut-ka-Ptaḥ^m ... (15) ... Hail, thou ferryman of the fields of Iaru. Bringⁿ[me] the bread offerings^o ...

Chapter 124:...(16)... Busiris. [My] crops are in Pe. By means of my own forms have I ploughed [my] fields...(17)... to me therefrom. I shall not approach it with my two hands... nor tread...(18)... recitations^p of the White Crown, and may [I] be uplifted...(19)... the elder, born to the house mistress Ta-[Aamu]...(20)... he is accountable to the ancestors...(21)... I have [spoken] with the Sun-Folk of Heliopolis...(22)... the equipped [spirit comes] that [you] may uplift [truth]...(23)... I have flourished^q....

Commentary

- a: Seni is an overseer, but of what is not certain. Here and at the top of column 14 only the end of his title is preserved: a seated man with plural strokes.
- b: The vignette which most commonly accompanies this chapter shows the deceased adoring a mummified, couchant cow (*mht-wrt*). In the Coffin Text paralleling the chapter (Spell 691), Faulkner translates *mht-wrt* as 'celestial kine'. The presence of the long-horned cow as determinative supports a similar translation here. However, an alternative rendering as 'the Great Flood' is justified where the cow-determinative is lacking, and where *mht* is written with the three water-strokes.
- c: Traces of wh^c remain. The group $\underline{\mathbb{A}}_i$ is, therefore, most probably the enclitic particle mi used after an imperative (Gardiner, Egyptian Grammar, § 250).
 - d: The imperative of rdi is written with plural strokes in column 8.

The Book Of The Dead, SAOC no. 37, Appendix I, 230, 232, 233. For additional versions of chapters 71, 106, and 124 one should consult (in addition to Naville, Todtenbuch) Ulrich Luft, 'Das Totenbuch des Ptahmose', ZÄS 104 (1977), 63.

- e: The use of the verb *ir* in the sense of 'to wear' an article of clothing is attested neither in Faulkner's *Dictionary* nor in *Wb*. The usage is, however, identical to that employed in the Eighteenth Dynasty papyrus of Imen-neb (Naville, *Todtenbuch*, II, 151, Ae).
- f: This and subsequent restorations are made on the basis of repetitions within the text itself and comparisons with published papyri.
- g: I have taken shtp as a participle continuing the nominal sentence begun with ink. Nsrt is frequently written with an initial n as phonetic complement (Wb. II, 320, 2). The papyrus of Neb-seny in the British museum clearly shows a $sdm \cdot n \cdot f$ form. In his translation of CT spell 691 Faulkner reads shtp as an ellipsis for $shtp \cdot i$.
- h: imi sw n mrrwtf. I can find no precise parallel to this phrasing, but a nameless papyrus in the British Museum (BM 9905), provisionally dated to the Eighteenth Dynasty, does show the preposition n after traces of the imperative imi (Naville, op. cit. 151, Ac).
- i: The enclitic particle mi with plural strokes would be hapax, and there is insufficient space for the collocation wh mi sw sfh sw. The scribe evidently wrote imi sw sfh sw. But the phrase is peculiar to this text and does not seem to occur in any of the parallels.
 - j: See note i above. The line duplicates column 8 and is probably a dittography.
- k: CT spell 691 shows rnw and not $\underline{t}nw$. $\underline{T}n\cdot w$ must have arisen through some corruption of the Hieratic for rnw. It would be pointless to boast of knowing the number of the keepers of the arms of the balance when, somewhat before, they are hailed as 'Ye seven counsellors' (Allen, *The Book of the Dead*, SAOC no. 37, 64).
- l: Several examples of the Book of the Dead show $r \cdot \underline{t} n \dots w i$, but the Coffin Text parallel consistently uses the preposition r plus suffix pronoun: $r \cdot \underline{t} n \dots r \cdot i$.
 - m: One would expect Hwt-k3-Pth, but the reading is very uncertain here.
- n: The r is unmistakable, and may have been part of the particle rf after the imperative (Gardiner, Egyptian Grammar, § 252).
- o: Chapter 106 probably ends at the finish of column 15. The usual continuation would be it·k wr sb m dpt, requiring an additional 17.5 cm. The length of column 15, as it survives, plus the restoration would give a minimum height of 68.5 cm. The length of column 3, once restored to be as long as column 15, would more than suffice for the introductory portions of chapter 71. There therefore seems little need to extend the height of the linen much beyond the top of column 4 as it is. The top of column 4 is 12.5 cm above the top of 15. Thus the linen was at least 81 cm in width but probably not much more than that. If there were vignettes as well, the estimate would of course have to be increased.
- p: Despite the final t I have read this as the more usual sihw. The alternative translation with sihwt as a participle, 'that which benefits the white crown', seems inferior.
 - q: This phrase belongs to another chapter but is too fragmentary for identification.

Efforts to locate either Seni or his parents in other sources such as name lists and genealogies have not been fruitful. The illegibility of Seni's title further hampers attempts to identify him. However, as far as the date of the linen is concerned, rather more may be said. The name of the deceased, as it is written here, is attested from the

early Twenty-sixth Dynasty⁷. While the syntactic parallels between the MFA linen fragment and papyri which have been dated to the Eighteenth Dynasty are striking,⁸ these cannot be used to argue an earlier date since it is possible for a Twenty-sixth Dynasty scribe to have used an Eighteenth Dynasty recension of the Book of the Dead as his model. But the palaeographic evidence,⁹ in particular the similarity of the hieratic forms to those employed on the winding sheet of Tuthmosis III, clearly suggests a mid-Eighteenth Dynasty date for the linen of Seni.

- ⁷ Ranke, Personennamen, I, 310, 11; Legrain, ASAE 7 (1906), 227.
- ⁸ See above notes e, h, and k, Note also that the sequence of chapter 71 followed by chapter 106 occurs not only here but in two British Museum papyri: BN 9900 and BM 9905.
- 9 Hieratic forms which match well with those occurring in other Eighteenth Dynasty papyri are to be found in columns 6, \mathbb{Q} ; 7, \mathbb{T} ; 10, \mathbb{T} ; 15, \mathbb{Q} ; and 23, \mathbb{T} .



Courtesy the Museum of Fine Arts, Boston

CHAPTERS OF THE BOOK OF THE DEAD

EGYPT, SAMOS, AND THE ARCHAIC STYLE IN GREEK SCULPTURE

By WHITNEY M. DAVIS

André Malraux has written eloquently of the difference between Greek sculpture and all sculpture, Egyptian and Mesopotamian, which precedes it: 'that stubborn questioning which was the very voice of Hellas', Greece's 'tireless cult of man'—these habits of mind were peculiarly Greek, and precious to the Greek way of life, distinguishing Greek art and thought from the art and thought of the Ancient East. 'Who could assimilate the Delphi charioteer, the figures in the Acropolis, or the "Boy of Kalivia" to an Egyptian or Mesopotamian statue?' One can only agree with Malraux, and yet we misconstrue the past if we insist that this distinction, although no less generally and poetically true, holds true archaeologically. As much scholarly effort has probably been expended on tracing the Oriental forerunners of Greek art and thought as on differentiating this art and thought from its predecessors. Indeed, one of the traditional preoccupations of scholarship in this field has been the attempt to derive a synthesis from the opposition: how, specifically, did Greece learn from the East, and from the past, and how, specifically, did she transcend and transform what she adopted? In this paper I shall tangentially address this wider problem by reopening one aspect of the frequently mooted possibility that Greek sculpture owes much to the sculptural tradition of Ancient Egypt.

A word of apology must preface any commentary. Although classical archaeologists hope for confirmation of their ideas in the Egyptian evidence, the relevant Egyptological citations have yet to be brought forward, and, although Egyptologists commonly write of the influence exerted by Egypt on Greece, a certain amount of relevant evidence from the Greek world is passed over. At the risk of repeating much that will be familiar to both Egyptologists and classical archaeologists, and despite the extent of the existing literature, there remains a need for a survey of the material in which generalizations are substantiated by archaeological and textual background. Partly in order to be comprehensive, I restrict this discussion to a narrowly conceived problem. Much of interest must, therefore, be taken as read, or cited only and not discussed, or passed over in

Apart from my debt to the scholarship of those listed in notes 2, 7, and 9, I thank the staffs of the Department of Greek and Roman Antiquities at the British Museum, the Fitzwilliam Museum, and the Department of Egyptology at University College, London, for assisting my work on Naucratis and for providing me with photographs. I thank Pamela Gaber for helpful remarks on the Mediterranean relations of Cypriote sculpture. I thank especially Professor William Kelly Simpson for constant encouragement and hospitality at the Boston Museum of Fine Arts, Professor G. M. A. Hanfmann of Harvard University for comments on this paper, Dr Alan B. Lloyd for his interest in the problem of Graeco-Egyptian relations and comments on this paper.

¹ A. Malraux, The Voices of Silence (London, 1954), 75, 81.

complete silence. I cannot claim expertise in all I have chosen to discuss in detail, and hope only to reflect accurately the more authoritative opinions.²

The important debt of Greek art to Egypt has never been doubted. Various specific procedures, for example, moulding types in architecture, can be traced to Egypt.³ Lion-headed waterspouts in Greece represent the wholesale adoption of an Egyptian prototype.⁴ The technology of Greek sculpture and architecture may be indebted to Egypt; to take one example, the point has 'no Greek antecedents', but was used early in Egypt.⁵ None of these cases adequately documents any sustained artistic contact between the two cultures. Individual motifs and procedures can be quickly learned on only the briefest inspection. Although the cases just cited do not follow this pattern, often an intermediary played a role in the diffusion of technology or of stylistic mannerisms.⁶ Close and sustained relations, however, are implied by some accounts of the sculpted male figure in Egyptian and Greek art.⁷ Levin's comprehensive survey documents the general feeling of scholars that the stance, certain hair- and wig-styles, the 'smile', and the proportional system are common to some Egyptian and Archaic Greek sculpture.

A critic of these results would say that actually very little of real interest has been revealed. Shared traits in sculpture should simply be added to the extensive catalogue of

- ² See note 7. B. V. Bothmer's Egyptian Sculpture of the Late Period (Brooklyn, 1960) stands as the fundamental source for Egyptian art contemporary with the early development of Greek sculpture. Erik Iversen, Canon and Proportions in Egyptian Art, 2nd edn. (Warminster, 1975), is the specific source for one aspect of my problem, but my general view has been much influenced by H. Schäfer (trans. J. R. Baines), Principles of Egyptian Art, 4th edn. (Oxford, 1974). On the Greek side I am indebted to B. S. Ridgway, The Archaic Style in Greek Sculpture (Princeton, 1977), which organizes the mass of material presented in G. A. M. Richter, Kouroi, 3rd edn. (London, 1970), and Korai (London, 1968). For the ancient literary authorities A. B. Lloyd's Herodotus Book II, 2 vols. (Leiden, 1975–6), is indispensable, and I have drawn on it heavily. Among the relevant catalogues of Greek and Egyptian sculpture and the excavation reports, A. Bernand's monumental Le Delta egyptien d'après les textes grecs, I, 3 (Cairo, 1970), is a thorough-going compilation of almost all known facts about ancient Naucratis. For the history and foreign relations of the Saïte Dynasty—a subject only tangentially relevant here—see, for example, R. Parker, MDAIK 15 (1957), 208–12; K. S. Freedy and D. B. Redford, \$AOS 90 (1970), 462–85; A. Spalinger, \$AOS 94 (1974), 316–28; \$ARCE 13 (1976), 133–47; Orientalia 47 (1978), 12–36.
 - 4 A. Badawy, History of Egyptian Architecture, I (Cairo, 1934), 188-9.
- ⁵ H. J. Étienne, The Chisel in Greek Sculpture (London, 1968), xiii, 15–16; for important further discussions see S. Adam, The Technique of Greek Sculpture (London, 1966), with references; the Egyptian evidence evaluated in A. Lucas, Ancient Egyptian Materials and Industries, 4th edn. by J. R. Harris (London, 1962), and A. Zuber, 'Techniques du travail des pierres dures dans l'ancienne Égypte', Techniques et civilisations 5 (1956), 161–80, 195–215.
- ⁶ See general discussion by J. R. Harris, 'Technology and materials', in J. R. Harris (ed.), *The Legacy of Egypt*, 2nd edn. (Oxford, 1971), 83-111.
- ⁷ Among the many studies see especially F. R. Grace, 'Observations on seventh century sculpture', AJA 46 (1942), 341-59; P. Gilbert, 'L'unité de la statue égyptienne et l'unité de la statue grecque de type athlétique', CdÉ 29 (1954), 195-209: Iversen, 'The Egyptian origin of the Archaic Greek canon', MDAIK 15 (1957), 137-47; R. Anthes, 'Affinity and difference between Egyptian and Greek sculpture and thought in the seventh and sixth centuries B.C.', PAPhS 107 (1963), 60-81; K. Levin, 'The male figure in Egyptian and Greek sculpture, AJA 68 (1964), 13-28; B. S. Ridgway, 'Greek kouroi and Egyptian methods', AJA 70 (1966), 68-70; R. M. Cook, 'Origins of Greek sculpture', JHS 87 (1967), 24-32; E. Iversen, 'The canonical tradition', in J. R. Harris (ed.), The Legacy of Egypt, 2nd edn. (Oxford, 1971), 55-82; G. M. A. Richter, 'Der Zusammenhang zwischen ägyptischer und griechischer Kunst', Das Altertum 19 (1973), 74-80; Whitney Davis, 'Plato and Egyptian art', JEA 65 (1979), 121-7.

other shared traits. If the advanced leg stance in sculpture was adopted by Greece from Egypt, the very remotest rumour of Egyptian practice could easily have stimulated Greek efforts to imitate. Although unlikely, spontaneous invention cannot be ruled out. Again, a wig-type could have been learned on the briefest inspection. For some reason it suited or appealed to a Greek observer; he may not have cared anything for the further subtleties of Egyptian sculpture, or even observed Egyptian sculpture at all closely. Parallels between Egyptian and Greek practice are never absolute. Variations perhaps suggest that what was learned was never learned very thoroughly: recall, for example, the case of the so-called 'archaic smile'. A small number of Egyptian Saïte portraits truly do seem to smile; a larger number exhibit an up-turned mouth. Yet in gravity and sombreness, many Late Period portraits contrast sharply with the youthful joyousness of the smiling Greek *kouroi*.8

The relevance of shared sculptural traits to an understanding of the real impact of Egyptian art upon Greek sculpture would remain obscure if a more rigorous analysis had not become available recently. Guralnick's statistical study of the proportions of Archaic kouroi, of Egyptian statuary supposedly made according to the Second (Late Period) Canon, and of living men, has revealed a number of definite equivalences between the three sets of measurements. More weight should be given to these parallels than to those established on the basis of visual comparison alone. Careful measurement of eleven or twelve proportional variables demonstrates that certain Archaic kouroi so closely follow the Egyptian canon that direct borrowing cannot be denied. Other kouroi, of course, are less similar, and others less similar still; evidently the Egyptian procedures were well known, but not every Greek sculptor chose to follow them in precise detail. In Guralnick's analysis, these distinctions can be drawn finely. Despite what our eyes may tell us, the proportional system seems to be common to Egypt and some Archaic kouroi.9

There are problems in interpreting this newly established fact. If we are to understand to what degree Egyptian art influenced Greek sculpture, we must determine to what degree the proportional canon contributes to the total effect and total meaning of both Egyptian and Greek sculpture. Could Greek sculpture have developed in the way we know that it did in the absence of the proportional system, that is, if borrowing had never taken place? To some extent a question of this kind is rhetorical: obviously, if one element was missing, sculpture would have looked different, perhaps very different. Yet a few remarks on the topic would not be out of place.

⁸ For example, Bothmer, Egyptian Sculpture, nos. 2, 8, 9, 19, 20, 21, 23, etc.

⁹ E. Guralnick, 'The proportions of kouroi', AJA 82 (1978), 461–72. On the canon see Iversen, Canon and Proportions; R. Hanke, ZÄS 84 (1959), 113–9; H. Senk, AfO 9 (1933–4), 301–25; Senk, ASAE 49 (1949), 175–83; Iversen, SAK 4 (1976), 135–48; H. Junker, 'Zu dem Idealbild des menschlichen Körpers in der Kunst des alten Reiches', Wien Anzeiger 84 (1957), 171–81; P. Munro, 'Untersuchungen zur altägyptischen Bildmetrik', Städel Jahrbuch 3 (1971), 7–42; H. W. Müller, 'Der Kanon in der ägyptischen Kunst', in Der 'vermessene' Mensch: Anthropometrie in Kunst und Wissenschaft (Munich, 1973), 9–31. For reviews of Iversen's formulation of the system see Hanke (above); J. R. Baines, JEA 64 (1978), 189–91; C. Vandersleyen, CdÉ 53 (1978), 84–90; E. Lorenzen, JAOS 97 (1977), 531–9 (although Lorenzen's alternative is historically improbable, the cautionary remarks about ancient metrology are apt). The Egyptian canon still poses historical, technical, and aesthetic problems.

There are several common misconceptions about the Egyptian canon of proportions, and I will consider two of them here in order to draw out two significant facts about the Egyptian canon—and about this canon as the Greeks probably had it explained to them; for there is no doubt that the canon must be taught since it involves a small but difficult number of precise measurements and calculations from these measurements.

Unfortunately too little is known about Egyptian sculptural workshops to determine exactly how the Egyptians taught their own apprentices. Surviving 'sculptors' models' and trial studies (and, for the graphic arts, the *ostraca figurés*) suggest that the Egyptian workshop was no different from Michelangelo's. Students were probably given increasingly difficult projects to copy and complete, and I doubt that much of the lore that they were expected to master was ever written down. ¹⁰ Possibly copy-books were used to teach certain standard scenes and motifs, but most learning was by doing. Saïte grid-lines have been found traced over much older scenes: these discoveries imply that occasionally an investigation of older models was conducted to determine what was the proper procedure. ¹¹

It is emphatically not the case that the canon was only a device by which a preparatory design could be transferred to the large surface of a wall, or from a small model to a large unworked block. This interpretation of the canon—held by many scholars until the metrological basis of the canon was determined, and still sometimes mooted12—does not do justice to the complexity of canonical formulations or to the basic purpose of such formulations. The canon was devised to fix the proportions of the parts of the human figure in a standard relation, and to ensure a uniformity of execution from representation to representation. Nevertheless, and this is perhaps what is confusing, and probably to the Greeks no less than ourselves, the canon made use of a grid which, like any other system of co-ordinates, could be used as a copying device. As samples from the Old Kingdom illustrate, the canon could be employed without including a full co-ordinate or grid-system. The construction of a figure in standard proportions remains unchanged whether one uses a full grid or simply a single vertical line intersected by horizontal markers. The intersected vertical fixes the ratio of the length of one part of the body to the length of another part of the body; the grid-system takes into account the ratios of breadth as well. Perhaps the most convincing evidence that the grid-system was not a copying device is that, if this were so, any grid drawn over a figure would have fufilled its function. But the canonical grid was not any grid; for, in

¹⁰ Egyptologists can only apologize to the art-historical community for their lack of attention to the theoretical issues at stake here; an offhand parallel between Egyptian and Renaissance workshops is the furthest we can go at the moment. See C. C. Edgar, 'Remarks on Egyptian "sculptors' models"', Rec. Trav. 27 (1905), 137–50, and Sculptors' Studies and Unfinished Works, CCG 31 (Cairo, 1906); G. Steindorff, Catalogue of the Egyptian Sculpture in the Walters Art Gallery (Baltimore, 1946), 8–10, 91–9; cf. K. Myśliwiec, "Towards a definition of the "sculptors" model in Egyptian art', Études et Travaux 6 (1972), 71–5. These models may be found as early as the Early Dynastic Period; other cases are problematic. Some examples from the 'Ptolemaic Period' may not be authentic, although a detailed study has yet to be made; others may be ex-votos. For the ostraca figurés, comprehensive bibliography in B. E. J. Peterson, Zeichnungen aus einer Totenstadt: Bildostraka aus Theben-West (Stockholm, 1973).

¹¹ H. G. Fischer, Metropolitan Museum Journal 9 (1974), 9.

¹² See bibliographical discussion in Iversen, Canon and Proportions, 20-6.

every canonical specimen, the individual co-ordinates of the grid bear the same precise relationship to individual points of reference on the figure as in all other surviving specimens. The canonical grid-system was based on the Egyptian measurement of the natural body-ratios by a metrology founded upon an organic standard. (For purposes of simplicity, I pass over the fact that many grids on Egyptian finished and unfinished pieces are not canonical grids but regulatory or guiding lines; throughout this paper I refer only to canonical material.)

A second and rather more dangerous misconception about the canon is that it was principally responsible for the 'frontal-profile' stance of Egyptian figures (in two dimensions), which seems so peculiar to the modern viewer. Here, too much is imputed to canon in explaining the formal qualities of the figure in Egyptian art. Although the canon was designed to proportion body-parts according to a natural standard, it did not require that the figure be presented in the frontal-profile fashion. The same canonical principles—proportioning parts and fixing them in a grid-system facilitating uniform execution throughout a series of representations—may be applied to any other view of the human figure with equal success. A figure viewed in 'correct' perspective, therefore, might receive canonical treatment if anyone desired to do it. We could determine the proportions of the body-parts as seen from this perspective viewpoint, and then develop a grid-system to superimpose over our representation (which would be an exact projection of the three-dimensonal view) so that its co-ordinates would correspond with points of reference on the figure. With this grid-system we could draw the figure, rendered according to the 'correct' perspective view, throughout a series of representations in a uniform fashion simply by reproducing the grid and 'connecting' the relevant co-ordinates. (In this sense, and only in this sense, is the canonical system in fact a duplicating as well as a proportional system.) Think, for example, of a square and a projection of a cube, both set in a grid-system, the co-ordinates of which both correspond to points of reference on the figure, such as the four corners of the square and the seven corners of the cube. One is an 'Egyptian' two-dimensional view, the other a perspective projection. But one could reproduce exactly the same view—that is, in one case the square, in the other the cube—time and time again in many different situations simply by reproducing the same grid and, most importantly, by knowing the 'key' by which each figure fits into the grid. The critical point, then, is that the view, whether 'frontal profile' or 'correct' perspective, is conceptually 'anterior' to the proportion grid which is, as pointed out earlier, designed to serve the view by proportioning it correctly according to the natural standards of metrology. Only after the view has been conceived and constructed are any grids superimposed.¹³

¹³ In the second edition of Canon and Proportions Iversen introduces a new discussion of the median line in the representation of the human figure (pp. 33-7), and claims to be able to derive the following law: 'in their two-dimensional projection, parts protruding from the three-dimensional plane must be seen in profile, and parts extending on the plane en face . . .' (p. 35). A similar (but more unclear) claim is made in The Legacy of Egypt, 2nd edn., 58-61. Iversen seems to fall into the trap against which his measurements should have shielded him. He offers a description of the Egyptian method of projection (how a view of a three-dimensional object is transferred to a two-dimensional surface) as an explanation of the canon. As our example of the square and the cube shows, canon has nothing whatsoever to do with projection, only with proportion. What confuses

To investigate the other elements of the representation of the figure in Egyptian art—the means of representing its various components and the means of constructing the total 'view'—would take me far beyond my scope here. Not in itself ultimately crucial to the final over-all appearance of a figure, which has much to do with the means by which components are handled and the means by which the total view is constructed, canon has a very specific effect, and it was for this effect that the Greeks took it up. Canon is crucial to the sculptural effect—to the finish, precision, and elegance of the completed work. It establishes a standard and imposes an aesthetic order: this order must have appealed to Greeks because it was an order of ratios and numbers. It forces the artist to measure, to design ahead. But that a sculpture 'looks Egyptian' is in the final analysis due to other factors in addition to the proportional system. In exactly the same way, Greek sculpture ultimately 'looks Greek' for reasons that go far beyond the use of any particular proportional system. Who can deny this for the Doryphoros? And earlier we find important and very 'Greek-looking' forerunners for Archaic sculpture long before any profound Egyptian influences could have been felt. Cook, and more recently Kranz, strongly argue for the evolution of the Archaic tradition from native forerunners, that is, from pre-Archaic Daedalic sculpture.¹⁴ We may accept that Greece has a strong sculptural tradition antedating the Archaic, even though there are difficulties with the specific proposals here.¹⁵ Yet, as Ridgway has made abundantly clear by considering Archaic sculpture as a style, marble sculpture of the late seventh and early sixth centuries represents something quite new. Influences other than the indigenous tradition may be called upon to help us determine exactly what is new. Well after their earlier experiments the Greeks adopted the Egyptian proportional system. What then took place seems visually obvious: Greek sculpture acquired finish, elegance, and precision; it took on a standard of order; it displayed a new and measured harmony. The way in which the Greeks adopted the Egyptian canon illustrates the way in which the canon was used by the Egyptians themselves: first and foremost, the canon provided, and only provided, some exact understanding of body proportions.

here is that, for canonical purposes, a median line can be drawn, and indeed sometimes stands in for a complete grid, proportioning parts of the body (single vertical line with intersecting horizontal indicators). In sculpture, the concept of a median axis is critical to an account of 'frontality'. For theory see J. Lange, Darstellung des Menschen in der älteren griechischen Kunst (Strassburg, 1899), where the concept is introduced, and E. Suys, 'Reflexions sur la loi de frontalité', Annuaire de l'Institut de Philologie et d'Histoire orientale 3 (1935), 545–62. The application of this concept of a projection technique to Egyptian art is used with different results by Schäfer, Principles, 310–34; A. Badawy, 'La loi de frontalité dans la statuaire égyptienne', ASAE 52 (1954), 275–307; and Iversen (to name three examples), but again has nothing whatsoever to do with the proportions of sculpture. Iversen's claim may be a good description of Egyptian projection as far as it goes: however, Baines points out possibly fatal inconsistencies (JEA 64 (1978), 190), and it may be that the median line in reality is only a proportional tool, even if theoretically one conceives of frontality by imagining a sculptor using a median axis.

¹⁴ R. M. Cook, 'Origins of Greek sculpture', JHS 87 (1967), 24–32; P. Kranz, 'Frühe griechische Sitzfiguren: zum Problem der Typenbildung und des orientalischen Einflußes in der frühen griechischen Rundplastik', AM 87 (1972), 1–55, with further citations.

¹⁵ On the Daedalic sculpture, in addition to Cook and Kranz, see R. J. H. Jenkins, *Dedalica* (Cambridge, 1936); P. Demargne, *Naissance de l'art grec* (Paris, 1964); Costis Davaras, *Die Statue aus Astritsi* (Bern, 1972). For the origins of the Archaic style see Ridgway, *Archaic Style*, 17–42; E. Homann-Wedeking, *Die Anfänge der griechischen Groβplastik* (Munich, 1950), with full references.

The ratios themselves were determined by measurement and careful observation. These ratios were more or less adopted without alteration by the Greeks; in other words, the Archaic Greeks did not attempt their own measurements of what they may have considered interesting, significant, harmonious, or necessary in the human body. This, of course, was an achievement of the age of Polycleitus, if not of Polycleitus himself.¹⁶ How, then, did the Egyptians assemble their measurements? For Schäfer, the Egyptians never examined large numbers of living bodies to work out the basis for the canon: proportions were taken from 'exemplary' works of art. 17 But exemplary works exhibit the most faithful attention to proportions. They are most finished and canonically most precise. Their proportions must have been derived from some model or study of models. If canonical proportions conform to the Egyptian measurement of the natural body ratios, a fact Schäfer did not know, we can only assume that the Egyptians conducted measurements on living bodies to establish the canon. This labour was carried out at the dawn of Egyptian sculptural history and, once codified, was handed down by tradition. 18 The Egyptians acted no differently from Greek or Renaissance sculptors; like their later counterparts, they inspected the human body closely in order to discover the natural relations, proportions, and harmonies of its parts.

These considerations imply, first of all, that the Greeks actually adopted two principal features of the Egyptian sculptural programme, the stance (one element of the 'view' by which figures are rendered in Egyptian art), and the proportional system. Theoretically neither feature depends necessarily upon the other: to wed proportions too closely to stance involves us in the fallacy of supposing that canon determines the view taken. In fact, a sculpture may have superficial qualities quite unlike an Egyptian sculpture and still employ the Egyptian canonical system. In practice, however, stance and proportional system were undoubtedly learned simultaneously, in one and the same workshop, or from one and the same teacher. Probably no thought was given to the possibility that the proportional system could be adopted without the adoption of the other feature, or vice versa: alternatively, both features were considered equally important.

The historical question now intrudes upon comparative study. When, and where, and by whom, were the Greeks taught the proportional system? Where did they observe enough Egyptian statuary to acquire a sense of its operation? And who were the Greeks involved?

Extensive Greek settlement in Egypt is generally attributed to the era commencing with the foundation of Naucratis. However, considerable Greek experience in Egypt antedates even the earliest date for the foundation of Naucratis, the date I accept here, that is, the last quarter of the seventh century.¹⁹ In the reign of Psammetichus I,

¹⁶ See D. Schulz, 'Zum Kanon Polyklets', *Hermes* 83 (1955), 200–20: T. Lorenz, *Polyklet* (Wiesbaden, 1972); H. von Steuben, *Der Kanon des Polyklet* (Tübingen, 1973), with full references. ¹⁷ Schäfer, *Principles*, 333. ¹⁸ K. H. Meyer, 'Kanon, Komposition, und ''Metrik'' der Narmer-Palette', *SÄK* I (1974), 247–65; Iversen, *Canon and Proportions*, 60–6.

¹⁹ For the date of the foundation of Naucratis see W. M. Davis, 'Ancient Naukratis and the Cypriotes in Egypt', *GM* 35 (1979), 19 n. 3. I argue this point more extensively in 'The Cypriotes at Naukratis', *GM* 40 (forthcoming, 1980).

Greek and Phoenician merchants entered Egypt, including perhaps the Milesian settlers of Naucratis and Greek settlers at Daphnae (Tell Defenneh);²⁰ Necho II employed Greek mercenaries in his Asian campaigns;²¹ Psammetichus II employed Carian and Greek mercenaries in his Nubian campaign.²² The extensive variety of archaeological and literary testimony to Greek military activities in Saïte Egypt stands in need of some reassessment, given numerous new finds, but it is clear that, until the reign of Amasis, Greek movement in Egypt was relatively unrestricted as Greek armies moved about, and, Amasis' efforts to confine Greek traffic notwithstanding, Greek centres other than the approved establishment at Naucratis seem to have existed, such as a Neapolis in Upper Egypt, where textiles and stone-working were the commercial activities.²³

What exactly the Greeks learned of Egyptian art as a result of these relations remains doubtful. A corps of mercenaries, although surely impressed by Egyptian architecture and sculpture, of which they would have seen a great deal in Upper Egypt, probably did not investigate the making of the monuments with any thoroughness. The corps were fairly self-contained, and although they may have married into the Egyptian population when settled, they had their own officer, responsible in his turn to an Egyptian commander, and when their duties were done, the king settled them in special mercenary camps. Austin suggests that the Carian and other mercenaries were 'granted rights of intermarriage with native Egyptian women',24 but Lloyd satisfactorily explodes this notion.²⁵ However, even if Greeks were not specifically granted a right of intermarriage, they did indeed leave children, as Lloyd points out, probably of native Egyptian women. Psammetichus II's mercenary captain Psammetichus, son of Theocles, may have been such a man, and Aristagoras apparently names others.²⁶ A painting from the tomb of Si-Amūn in the Siwa Oasis, dated by some to the second half of the sixth century, shows Si-Amūn, ethnically a Greek, dressed in Egyptian clothes, with a fully Egyptian wife; Si-Amūn's son seems to wear Greek dress.²⁷ Undoubtedly many such domestic arrangements were made by settled mercenaries. But again, were settled mercenaries sophisticated enough to be interested in an Egyptian sculptural workshop? A recent theory noted by Ridgway holds that Greeks learned of Egyptian sculpture

²⁰ See, for example, J. Boardman, *The Greek Overseas*, 2nd edn. (Harmondsworth, 1973), 129, for archaeological reflections of commercial activity; on the Milesians see references in Lloyd, *Herodotus Book II*, 1, 25–6; material from the reign of Psammetichus I at Tell Defenneh, W. M. F. Petrie, *Tanis*, 11 (London, 1888), 47 ff., and R. M. Cook, *CVA British Museum*, VIII (1954), 40 ff., 57 ff.

²¹ See the detailed study by Lloyd, "Triremes and the Saïte Navy", JEA 58 (1972), 268–79, and Herodotus Book II, 1, 34–7; further comments by M. M. Austin, Greece and Egypt in the Archaic Age (Cambridge, 1970) (Proceedings of the Cambridge Philological Society, Suppl. 2), 16, 53 n. 1.

²² See especially J. Yoyotte and S. Sauneron, 'La campagne nubienne de Psammétique II et sa signification historique', BIFAO 50 (1952), 157-207; O. Masson and J. Yoyotte, Objets pharaoniques à inscription carienne (Cairo, 1956); A. Bernand and O. Masson, 'Les inscriptions grecques d'Abou Simbel', Revue des Études grecques 70 (1957), 1-46.

²³ On Amasis' policy Lloyd, *Herodotus Book II*, 1, 26; Pierre Salmon, *La Politique égyptienne d'Athènes* (Brussels, 1965), 17–22; on Neapolis, Lloyd, JHS 89 (1969), 80, with references.

²⁴ Greece and Egypt in the Archaic Age, 18.

²⁵ Herodotus Book II, I, 17-20.

²⁶ Lloyd, op. cit. 1, 20 n. 73.

²⁷ S. Morenz, Die Begegnung Europas mit Ägypten (Berlin, 1968), 78, pl. 5(a).

by being apprenticed in Egyptian workshops.²⁸ A pensioned mercenary would hardly want to work in such a fashion; if he had a family, however, possibly he would have his children work. Unfortunately there is simply too little good evidence for us to establish the connection we seek on this possibility.

Mercenaries may have returned to Greece with tales of Egypt's wonders, but traders were better suited to sustained contact with the actual Egyptian means of production with Egyptian markets, workshops, gold-, gem-, and stone-workers—and we can be sure that they must have had to deal extensively with the relevant Egyptian officials. What such traders observed may have been heard with great interest by artisans and architects in the homeland. In a general sense, contact had been firmly made, and the ordinary Greek in Egypt knew what Egyptian art looked like, even if he was not fully aware of how it was made. In fact, some of the superficial characteristics of Egyptian sculpture adopted by Greece were probably adopted in this very manner: ordinary Greeks who were not trained sculptors or stoneworkers noted some feature of Egyptian statuary—advanced-leg stance, colossal size, features of costume—and described this feature to friends in the homeland. Only an artist, however, would have troubled to inquire into Egyptian sculptural methods to learn the canonical system; only a sophisticated observer would have understood the explanation. Greek artists in Egypt resided at Naucratis, whence a few of their works dispersed to relatively nearby Egyptian centres like Memphis (including Saqqâra) and Saïs.²⁹

Most aspects of Naucratis have been thoroughly studied and it is only necessary to make reference to the extensive literature at this point; even this would not be necessary if the site were not so poorly published and frequently misunderstood.³⁰ None the less, I wish to go further and address any evidence which associates Naucratis with the development of the Archaic style in Greece. In this connection the most fruitful line of inquiry concerns the participation of Samos in Naucratis. I should like, therefore, to substantiate L. H. Jeffery: 'Since Samos was among the leading states of the twelve which maintained the *emporion* at Naukratis, and has good marble, and did build a large and very early colonnaded temple, it is possible that she was the first intermediary.'³¹

²⁸ Archaic Style, 33.

²⁹ Edgar, Greek Sculpture, iii-vi, 1-4, pl. 1; excellent discussion with full citations by K. Parlasca, 'Zur archaisch-griechischen Kleinplastik aus Ägypten', in Wandlungen: Studien zur antiken und neueren Kunst Ernst Homann-Wedeking gewidmet (Waldsassen-Bayern, 1975), 57-61. Certain of the smaller pieces could have been carried into Egypt by travellers, traders, or mercenaries. The larger sculptures, such as a kore from Memphis or a kouros from Saïs (see below), must have been made at Naucratis.

³⁰ Excavations and surveys: W. M. F. Petrie, Naukratis, I (London, 1886); E. A. Gardner, Naukratis, II (London, 1888); D. G. Hogarth, BSA 5 (1898-9), 26-97; Hogarth, JHS 25 (1905), 105-36. See comprehensive treatment of material recovered from these excavations in Bernand, Le Delta égyptien, I, 3, 575-864; recent surveys indicate that the site which Petrie studied may now be under water: W. D. E. Coulsen and A. J. Leonard, Newsletter ARCE (1977-8), 13-26, and Journal of Field Archaeology 6 (1979), 151-68. The pottery is widely scattered. Historical studies: H. Kees, Pauly-Wissowa RE, xvI (1935), 1956-66; R. M. Cook, 'Amasis and the Greeks in Egypt', JHS 57 (1937), 227-37; F. W. von Bissing, 'Naukratis', Bull. de la soc. roy. d'arch. d' Alexandrie 39 (1951), 33-82; C. Roebuck, 'The organization of Naukratis', Classical Philology 46 (1951), 212-20; E. Gjerstad, 'Naukratis again', Acta Archaeologica 30 (1959), 147-65; Whitney Davis, 'Ancient Naukratis and the Cypriotes in Egypt', GM 35 (1979), 13-23, and 'The Cypriotes at Naukratis', GM 40 (forthcoming, 1980).

³¹ Archaic Greece (London, 1974), 30, and see a similar proposal by Ridgway, Archaic Style, 32. We must note that the first appearance of Greek sculpture in the 'Archaic' style may predate contact: the Cyclades may

Throughout this period, that is, 640–550 BC, Samos maintained an active commercial life; among other contacts, Herodotus mentions a Samian voyage to Egypt (IV. 152). Hecataeus claims that Samos maintained a trading centre in Egypt (FgrH I, F.310); his information may reflect what was true in the second half of the sixth century, after his birth in about 550, although he may mean to refer to what was the case somewhat earlier. In the fifth century, Herodotus observed that Samians inhabited the El Khargeh Oasis, a week's journey west of Thebes (III. 26). One of the most intriguing discoveries of significance in this regard is the massive mud-brick fortress of the Saïte Period east of Tell Defenneh; the Israeli excavations, reported by Oren at the Eleventh International Congress of Classical Archaeology and not yet published in detail, 'yielded Egyptian and Syro-Palestinian vessels of the sixth century B.C. as well as many Archaic east-Greek amphorae of Chian, Samian, Lesbian, and Corinthian types, closely parallel to material from Naukratis and Daphnae'.

Several decades ago, Pendlebury collected whatever instances of Egyptian objects in Samos had come to light and published them in *Aegyptiaca*.³² A few small artifacts were undoubtedly circulating in Asia Minor and East Greece, and made their way as curiosities, gifts, or luxuries to the east islands; direct relations need not necessarily be assumed, at least for the Archaic Period before the accession of Polycrates I of Samos. Indeed, I believe this to have been wholly the case at Delos in the Saïte Period. Small statuettes, scarabs, and amulets of the seventh and sixth centuries have been found on Delos;³³ Gallet de Santerre suggests that the finds reflect direct relations,³⁴ but from the Egyptian point of view they are too few, too small, and too poor to indicate immediate contact. Later, however, the Egyptians did make dedications directly at the Delian sanctuary. In contrast with Delos, however, the extensive German campaigns on Samos have produced so many and such fine Egyptian bronzes—to add to Pendlebury's catalogue—that direct relations must be assumed.³⁵

The Egyptian bronzes from Samos include hawks and cats, Bes-figures, Osirid statuettes, and so on, many of crude workmanship. In addition, however, some spectacular pieces have been found, although unhappily fragmentary. An extraordinarily fine statuette of an unnamed Egyptian Sem-

be the real birthplace of Archaic sculpture. But we are concerned here with the more subtle effect of Egyptian art upon a developing style.

- ³² Pendlebury, Aegyptiaca (London, 1930), 105. After this paper was prepared, a revision came to my attention: R. B. Brown A Provisional Catalogue of and Commentary on Egyptian and Egyptianizing Artifacts found on Greek Sites, Ph.D. dissertation, University of Minnesota, 1975.
- ³³ A. Plassart, Délos, XI (Athens, 1929), 63 n. 4; W. Déonna, Délos, XVIII (Paris, 1938), 257, 304-6; La Vie privée des Déliens (Paris, 1948), 181.
- ³⁴ H. Gallet de Santerre, Délos primitive et archaïque (Paris, 1958), 284-5.
- 35 U. Jantzen, Ägyptische und orientalische Bronzen aus dem Heraion von Samos, Samos, VIII (Bonn, 1972); see important comments by G. M. A. Hanfmann, Bib. Or. 30 (1973), 198; H. V. Hermann, Gnomon 47 (1975), 692; a study based on this material by J. Börker-Klähn, OLZ 70 (1975), 533-45. My suggestions here are tentative: Egyptological specialists could profitably study the bronzes. For Egyptian material found south of the Heraion see G. Kopcke, AM 83 (1968), pl. 125 (1-3). A number of Egyptian faience objects has turned up on Samos (for example, Vierneisel and Walter, AM 59 (1959), 39, pl. 82; Kopcke, AM 83 (1968), pl. 136 (1-2); H. W. Catling, Archaeological Reports for 1977-78 24 (1978), 57, fig. 100; Maffre and Salviat, BCH 102 (1978), 823, fig. 35 (a-b)), but I do not think that any can be specifically attributed to Naucratis (see Whitney Davis, GM 40 (forthcoming, 1980), on Egyptian faience from Archaic Cyprus).

priest, wearing the kilt and panther-skin, carrying a staff of office (now lost), can be pieced together from separate fragments found in different excavations (head: Jantzen, B 1600 + torso: Jantzen, B 1312 + arms: Jantzen, B 126, B 160 + leg, foot, and base-insert: Jantzen, B 1525). The figure stood about 67 cm high and was once gilded. It would grace even the best collection of Egyptian bronzework. Stylistically it must be placed in the first half of the Twenty-sixth Dynasty. This dating is confirmed by the discovery of a bronze mirror (Jantzen, B 432), assignable to Bénédite's Type IV; form, inscription, and the style of the engraving on the reverse place the specimen in the final third of the seventh century. Other sculptures similar to the nearly complete priest-figure were also deposited at the Heraion, as discoveries of miscellaneous arms, feet, and legs testify; again, some of such pieces were of excellent workmanship, and several are surprisingly large, as, for example, the sculpture now represented only by a left foot, ankle, and shin (Jantzen, B 843)—since the fragment is nearly 9 cm high, the original may have approached 60 cm in height.

The figurines of gods and goddesses from Samos—Bes, the child Ḥorus, the animal gods (particularly Apis), Osirids—include two divinities especially relevant to our inquiry. Jantzen's B 354 is a beautifully preserved and superbly worked statuette of Neith, 22.5 cm high, found in 1934 in a level at the Heraion pre-dating the activity of the architect Rhoecus, generally dated at the earliest to the beginning of the second quarter of the seventh century. Like the priest-figure, this bronze is of the highest quality among the Samian finds, and even among parallel Egyptian examples.³⁹ Neith wears the Red Crown of Lower Egypt, appearing, it seems, as Neith of Saïs, goddess of the temple at which Greek import/transaction taxes were deposited in the Twenty-sixth Dynasty, goddess served by the superintendents of Greek traffic in Egypt, and the most important Egyptian deity to be worshipped within close reach of Naucratis. Is it too much to believe that Neith was a special figure for some Samian visitor to Egypt?

Jantzen's B 1212 (+ B 1628), although of fairly ordinary workmanship, is, interestingly enough, an almost completely preserved statuette identified as the Syrian thundergod Resheph, 28 cm high.⁴⁰ Resheph usually appears in Egypt with a shield and spear in his left hand, lost in this fragment, but the White Crown of Upper Egypt, another common attribute, is preserved here. Fulco does not wish to accept any of the many bronze statuettes from the Mediterranean world outside Egypt as representing this god, but it is difficult to believe, as Horn says, that 'a god who was so widely honored should not have been depicted anywhere except in Egypt',⁴¹ and, at any rate, this bronze is clearly Egyptian and must have been obtained in Egypt. Resheph seems to have been worshipped at a centre in the Delta, and we might again propose that a Samian visitor to the Delta took a special interest in this deity.

³⁶ Compare K. Bosse, Die menschliche Figur in der Rundplastik der ägyptischen Spätzeit (Munich, 1936), nos. 80, 127, 182; G. Roeder, Ägyptische Bronzefiguren (Berlin, 1956), pl. 47.

³⁷ G. Bénédite, *Miroirs*, *CCG* 37 (Cairo, 1907), CCG 44076-80.

³⁸ See publication by P. Munro in Samos, VIII (1972), 33-4.

³⁹ Compare Roeder, Ägyptische Bronzewerke (Hildesheim, 1937), 28-39, 217 ff.

⁴⁰ See discussion by H. Walter and K. Vierneisel, AM 74 (1959), 35. Vierneisel and Walter publish a female goddess in bronze from Samos (pp. 36–9, pl. 77 (2)), and a similar specimen was discovered some years later (BCH 87 (1962), 882–4, fig. 12). Both of these bronzes seem to belong to the well-known series of 'divines adoratrices' (J. Leclant, Orientalia 33 (1964), 393).

⁴¹ William J. Fulco, The Canaanite God Resep (New Haven, 1976), ch. 1; S. Horn, JNES 38 (1979), 144.

A few bronze fittings for various pieces of Egyptian wooden furniture have been found in various levels at the Heraion. Together with the bronze figurines, the finds seem to represent what Samian sea-travellers brought back to the island from Egypt. This evidence alone is enough to associate Samos and Egypt directly as early as the last third of the seventh century, that is, during the first decades of the Twenty-sixth Dynasty. The available archaeological evidence suggests that Naucratis was founded in about 620; there is a good synchronism, therefore, between Egyptian finds in the Heraion and the Samian participation in Naucratis, and indeed the Egyptian finds perhaps imply Samian participation in Naucratis.

Herodotus, our earliest literary authority for Naucratis, tells us that, in addition to the nine states who founded the largest of the sanctuaries in the city, the Helleneion, Aegina built a temple to Zeus, Miletus a temple to Apollo, and Samos a temple to Hera (II. 178). On the basis of Strabo's remarks (XVII. 1. 18 (C801)) it is generally believed that the Milesians were first to arrive at Naucratis, although no archaeological evidence suggests that Miletus had prior rights. Herodotus presents garbled information about Egypt often enough, but he seems to be quite correct about the existence of a Samian temple to Hera at Naucratis. Unfortunately one must work hard with the incomplete excavation reports to discover the archaeological confirmation, and I cannot claim to have located all possible documents for my claim here. The temple can be tentatively identified on the basis of the few ceramic dedications to Hera, which are, of course, firm evidence for her cult, even if the identification of the structure itself is still questionable. As far as I am able to determine from the reports, these dedications are all incised on a fairly poor red ware with a black slip on the exterior only. Eight such fragments with inscriptions naming Hera were found in one building by Gardner during the second campaign at Naucratis;42 a further five fragments of exactly the same ware found in the third campaign have no provenance published, and Hera is not named;43 a fourteenth fragment which names Hera was picked up immediately south-west of the structure during the fourth campaign.44 This quite distinctive ware may well have Samian connections.⁴⁵ A great deal of East Greek pottery has been found at Naucratis, and most of it is specifically attributable to other East Greek sources;46 only a class of black-banded vases, dated vaguely as seventh-sixth century, is unattributed and includes Samos in its distribution.⁴⁷ None the less, the fourteen fragments recovered are so ordinary and poor that the possibility of a definite Samian attribution should not be stressed. At any rate, given Herodotus' testimony, the dedications are sufficient evidence for a Samian cult of Hera at Naucratis. The structure itself, a stone building 16.8 × 5.6 m, is poorly described in the original

⁴² Gardner, Naukratis, 11, 67, nos. 841-8 = F. Preisigke, Sammelbuch griechischer Urkunden aus Ägypten, 1 (Strassburg, 1915), nos. 2605-9 = Bernand, Le Delta égyptien, 1, 3, nos. 490-7.

⁴³ Hogarth, BSA 5 (1898–9), 54, no. 20 = F. Bilabel, Sammelbuch, III (Strassburg, 1926), no. 6054; Hogarth, BSA 5, nos. 21–4.

⁴⁴ Hogarth, JHS 25 (1905), 117, no. 7 = Preisigke, Sammelbuch, 1, no. 185 = Bernand, Le Delta égyptien, 1, 3, no. 650.

45 W. Technau, AM 54 (1929), 33, fig. 25, and pl. 18(2).

⁴⁶ Bernand, Le Delta égyptian, I, 3, 785-95.

⁴⁷ E. R. Price, Classification des ceramiques antiques 13 (1928), 3-6.

reports; one description of some cups found inside and naming the goddess does not seem to match the published fragments, and more material than was finally published must have been first observed.⁴⁸

If Samos had been active at Naucratis since c.620, we should not be surprised to find that half a century later a distinguished Samian artist and architect visited the town; the artist Rhoecus visited Naucratis about the end of the first quarter of the sixth century and returned then to Samos, where he modelled his altar for the Samian Heraion on the altar of the Temple of Aphrodite at Naucratis.⁴⁹ Rhoecus is not a common Greek name—held, in fact, only by three minor mythological characters and the Samian architect. It is seemingly not coincidental, then, that a double eye-bowl from Naucratis, apparently of the common type painted with animals in red on a white ground, datable to the first quarter of the sixth century, names Rhoecus as the dedicator.⁵⁰ The bowl was discovered at the Temple of Aphrodite, and was dedicated to the goddess. We lack good information about this structure. As many ceramic dedications are Chian, the sanctuary may have been a Chian foundation.⁵¹ However, the sculptural dedications include a good many Cypriote works, and the excavators' opinion that the sanctuary was Cypriote may be correct after all;52 I have argued elsewhere that the Cypriote presence at Naucratis, especially as reflected in the now widely dispersed and poorly published inventory of sculpture, was much greater than is often supposed. It would not be unusual to find a Samian making a dedication at a sanctuary which may have been chiefly maintained by another state; there is no doubt that the five chief sanctuaries of Naucratis were used by all of the Greeks.⁵³

Hoffmann has presented the detailed comparison which suggests that Rhoecus of Samos modelled his Samian altar on that at the Temple of Aphrodite in Naucratis.⁵⁴ He proposes that the altar at Naucratis is the earliest Greek stepped altar; in turn it was modelled upon the stepped altar-like elements in certain of the great Egyptian mortuary and public temples. The Temple of Aphrodite must be as old as the city as we have it revealed to us, that is, as old as c.620 (the Greek presence at Naucratis may

⁴⁸ Gardner, Naukratis, II, 60-1.

⁴⁹ For the activity and genealogy of Rhoecus see R. Ross Holloway, 'Architect and engineer in Archaic Greece', Havard Studies in Classical Philology 73 (1969), 283–7. For the ancient testimony see Herodotus, III. 60; Pausanias, II. 12. 10; VIII. 14. 8; x. 38. 6; Pliny, Nat. Hist. xxvI. 90; xxxvI. 95. Generally the earliest temple on Samos, 'the first dipteron', is considered to be the temple of Rhoecus, dated about 560–550, although an earlier date of 575 is possible: see AM 60 (1930), 50–1; H. Schlief, AM 63 (1933), 174; W. Dinsmoor, Architecture (1950), 75, 124; AM 72 (1957), 4. Stylistically the altar belongs with the earlier temple, and was probably constructed at the same time; the early date of figurines in the altar-fill confirms this probability: D. Ohly, AM 65 (1940), 66–7; AM 72 (1957), 49–50; Boardman, Antiquaries Journal 39 (1959), 203.

⁵⁰ British Museum Register 1888-6-1: 392 (A 1260) = Gardner, Naukratis, II, 65, no. 778 = Preisigke, Sammelbuch, I, no. 2250 = Bernand, Le Delta égyptien, I, 3, no. 429; noted in Perrot-Chipiez, VIII, 289; Prinz, Funde aus Naukratis, 98; P. Jacobsthal, AM 31 (1906), 420; H. Hoffmann, AJA 57 (1953), 194, pl. 59, fig. 14; L. H. Jeffery, Local Scripts of Archaic Greece (Oxford, 1961), 328.

⁵¹ Roebuck, Classical Philology 46 (1951), 217.

⁵² Gardner, Naukratis, 11, 57.

⁵³ Roebuck, Ionian Trade and Colonization (1959), 135; Austin, Greece and Egypt in the Archaic Age, 25, 65 n. 1.

⁵⁴ Herbert Hoffmann, 'Foreign influence and native invention in Archaic Greek altars', AJA 57 (1953), 189-95.

even be earlier, although the earliest structures preserved are of this date).⁵⁵ Rhoecus' dedication places him in Naucratis in the first quarter of the sixth century; the first dipteron on Samos, with the altar, could have been erected as early as 572 with the accession of Polycrates I, and was certainly complete in 560–50. Rhoecus was a young man when he visited Egypt; the Heraion is the product of his prime years. If he participated in the reconstruction of the building for Polycrates II, it was as an elderly artist of distinction.

With this historical background in mind, as well as offering a generalized statement about Greek knowledge of the Egyptian canon of proportions, Diodoros may be judged historically accurate in his references to artists, works, and localities:

Also of the ancient sculptors the most renowned sojourned among them (the Egyptians), namely, Telecles and Theodorus, the sons of Rhoecus, who executed for the people of Samos the wooden statue of the Pythian Apollo. For one half of the statue, as the account is given, was worked by Telecles in Samos, and the other half was finished by his brother Theodorus at Ephesus; and when the two parts were brought together they fitted so perfectly that the whole work had the appearance of having been done by one man. This method of working is practised nowhere among the Greeks, but is followed generally among the Egyptians. For with them the symmetrical proportions of the statues are not fixed in accordance with the appearance they present to the artist's eye, as is done among the Greeks, but as soon as they lay out the stones and, after apportioning them, are ready to work on them, at that stage they take the proportions, from the smallest parts to the largest; for, dividing the structure of the entire body into twenty-one parts and one-fourth in addition, they express in this way the complete figure in its symmetrical proportions. Consequently, so soon as the artisans agree as to the size of the statue, they separate and proceed to turn out the various sizes assigned to them, in such a way that they correspond, and they do it so accurately that the peculiarity of their system excites amazement. And the wooden statue in Samos, in conformity with the ingenious method of the Egyptians, was cut into two parts from the top of the head down to the private parts and the statue was divided in the middle, each part exactly matching the other at every point. And they say that this statue is for the most part rather similar to those of Egypt, as having the arms stretched stiffly down the sides and the legs separated in a stride.

(1. 98, trans. Oldfather)

Iversen shows that the lines referring to the division of the body into twenty-one and one-quarter parts are a more or less accurate description of the Egyptian Second (Late Period) canon.⁵⁶ The early New York *kouros* follows this proportional system exactly; in Guralnick's results, the New York, Tenea, Melos, and Athens 12 *kouroi* are remarkably close to this canon. Diodorus tells us that 'this method of working was never practised among the Greeks'. By one reading of this line Diodorus is thought to be unjustifiably comparing Hellenistic sculpture with Egyptian sculpture; by this spurious comparison, of course, Greek sculpture seems proportioned according to natural appearances.⁵⁷ I think, however, that Diodorus intends to say that the Greeks never

⁵⁵ For the age of the Temple of Aphrodite see F. W. von Bissing, Bull. soc. roy. d'arch. d'Alexandrie 39 (1951), 64; Austin, Greece and Egypt in the Archaic Age, 24.
56 'Diodorus' account of the Egyptian canon', JEA 54 (1968), 215-18; 'The Egyptian origins of the Archaic

⁵⁶ 'Diodorus' account of the Egyptian canon', JEA 54 (1968), 215–18; 'The Egyptian origins of the Archaic Greek canon', MDAIK 15 (1957), 134–47.

⁵⁷ See Ridgway's comments on Anthes (above, note 7).

practised sculpture by making statues in two halves. Although the Egyptians never followed this procedure either, Diodorus seems to be confused by whatever account of the Egyptian canon he relies upon. The canonical system indeed does employ a median line bisecting the figure. Diodorus understands this information too literally, and writes as if the use of a median line implies that the sculptures were actually made in two halves and later joined together. His talk about Egyptian artists separating and turning out 'the various pieces assigned to them', as Schäfer has noted, also reflects this erroneous notion that Egyptian sculpture was made in parts.⁵⁸ This peculiar procedure, he assumes, was duplicated by Theodorus and Telecles, and from the tenor of his remarks we might assume—although he does not explicitly say so—that Telecles and Theodorus undertook their project as a means of testing the Egyptian proportional system. Although the Egyptians did not make statues in two halves, theoretically it would have been possible to do so if the proportional system were sufficiently exact. Diodorus' tale may, therefore, be read in two ways. First of all, Telecles and Theodorus made a sculpture for the Samians according to the Egyptian Second Canon; there is no doubt about Diodorus' meaning here. Was the project suggested by Rhoecus? The ancient biographies assure us of close, and perhaps even familial, connections between the artists. Secondly, he may also intend to say that, as a means of testing or validating or showing off the canonical system, the sculptors carried out the obvious feat of making their statues in two halves. At any rate, Diodorus' story links the sculptors of Samos with innovative uses of the Egyptian canonical system.

The sculpture such a sophisticated and interested Samian could have seen at Naucratis was of three varieties. He could have seen the work of Greek sculptors of Aegean or mainland extraction (here, for convenience, called simply 'Greek'), he could have seen Cypriote sculpture, and he could, with I believe a minimum of effort, have studied the production of Egyptian sculpture.

A certain amount of the sculpture of the first category from Naucratis may be as early as the last quarter of the seventh century. Richter assigns three *kouroi* to her Sounion group (615–590).⁵⁹ A further three *kouroi* are stylistically similar to pieces from the first quarter of the sixth century.⁶⁰ However, the majority of the Greek pieces known date to the second quarter of the sixth century. This group includes probably the finest sculpture from Naucratis, the so-called Apollo Golenischeff, and examples in the British Museum and Boston Museum of Fine arts.⁶¹ Richter points out that a Samian work of this period, a *kouros* dedicated to Apollo by Leucius, is, in one respect, very similar to Greek Naucratite sculpture.⁶² A crude *kouros* found at Saïs can be assigned to this group; undoubtedly it was manufactured at Naucratis.⁶³ The

⁵⁸ Schäfer, Principles, 325 n. 34.

⁵⁹ Richter, Kouroi, nos. 28-30 = F. N. Pryce, Brit. Mus. Cat. Sculpt. 1, 1 (1928), nos. B 438, B 444, and British Museum 1934.3.-8.5.

⁶⁰ Pryce, Brit. Mus. Cat. Sculpt. 1, 1, nos. B 441-2; Edgar, Greek Sculpture (1903), no. 27426.

⁶¹ W. Déonna, Les 'Apollons archaiques' (Paris, 1907), no. 144 = JDAI 7 (1892), pl. 6; Pryce, Brit. Mus. Cat. Sculpt. 1, 1, nos. B. 439–40, B 443, B 446; L. D. Caskey, Cat. Gr. and Rom. Sculpt. MFA (Boston, 1925), nos. 1–2.

⁶³ Edgar, Greek Sculpture (1903), no. 27425 = Richter, Kouroi, no. 81; on Chian style see E. Langlotz, Frühgriechische Bildhauerschulen (1927), 137, no. 1.

sculpture from Naucratis is widely scattered, and published descriptions often fail to be useful, but probably the bulk of the other Greek work known to come from the city, or found by the excavators, should be assigned to this quarter of the century as well; examples include specimens in Cairo, the British Museum, and untraced works.⁶⁴ An alabaster *kouros* without provenance in the Cairo Museum is undoubtedly Naucratite.⁶⁵

Twenty-three of the limestone sculptures from Naucratis are Cypriote, as are half as as many of the terracottas; a substantial proportion of all the sculptural work, then, is Cypriote. This can be dated entirely to the sixth century.⁶⁶ Strangely enough, however, none of this work betrays Egyptian influence, although contemporary sculpture in Cyprus itself can be extremely Egyptianizing;⁶⁷ Naucratite material represents the importation of an entirely native style, even though the work was produced on the site. The same fact seems to hold for the Greek sculpture: few if any Greek works found at Naucratis betray any immediately apparent interest in, or influence from, Egyptian sculpture. It is the series of early large marble kouroi from the East Greek islands and from the mainland which are most Egyptianizing. At first reading these are odd facts. One would expect Greek or Cypriote work actually made in Egypt to be the most Egyptianizing of all known Greek and Cypriote work. Perhaps partly to account for this inconsistency, and perhaps partly because Naucratis has been denied sculptural workshops of its own, it is sometimes claimed that the sculptural finds of Naucratis are all imports. Although it would explain the inconsistency, the proposal is archaeologically untenable: for one thing, some of the work at Naucratis is unfinished, that is, in the process of being made at the site, and some of the work, both Greek and Cypriote, is of native Egyptian alabaster. Naucratis must have had sculptural workshops of its own and at least some of the sculpture found at the site was made there.

We should not make too much of the difficulty here. The level of sculptural work-manship at Naucratis is generally low, and many of the finds are fragmentary.⁶⁸ Visual comparisons alone are not sufficient evidence for relations; following Guralnick, we would need to measure the better works from Naucratis to determine whether they exhibit deeply Egyptian qualities. The adoption of superficials (wig- and hair-styles, details of costume, and so forth) is of little abiding art-historical significance, although archaeologically interesting; the adoption of a canon, which had to be carefully taught and carefully learned, would reflect a profound influence. Finally, most Naucratite sculpture postdates what I argue must be the years of profound Egyptian influence on Greek sculpture, that is, it postdates the establishment of Samian contact culminating with the visit of Rhoecus, and should be placed in the following quarter of the century (575–550). Although sculptural projects were probably initiated at Naucratis from its foundation—see those works assigned by Richter to her Sounion group—the

⁶⁴ Pryce, Brit. Mus. Cat. Sculpt. 1, 1, nos. B 453-4, B 460-1; Edgar, Greek Sculpture (1903), no. 27427; Naukratis, 1, pl. 1 (4, 5); BSA 5 (1898-9), pl. 14 (7).

⁶⁵ Edgar, Greek Sculpture (1903), no. 27428; P. Amandry, AM 77 (1962), 66.

⁶⁶ Whitney Davis, 'Ancient Naukratis and the Cypriotes in Egypt', GM 35, 13-26.

⁶⁷ For instance, J. L. Myres, *Handbook to the Cesnola Collection* (New York, 1912), nos. 1035, 1036-9, 1093, 1264, 1265, 1267, 1361, 1456, 1457.

⁶⁸ Compare Ridgway, Archaic Style, 32, on the 'minor arts' appearance of much Naucratite work.

floruit of sculptural activity at Naucratis dates to an era when Greece had already begun to transform and transcend the Egyptian techniques she had newly learned. A brief visual comparison of Egyptian and Greek sculpture from the second quarter of the sixth century supports this contention.

A substantial number of statues is known from the north of Egypt for the early Twenty-sixth Dynasty; it was material of this kind that the Greeks at Naucratis were most likely to have seen in situ, as at the Temple of Neith in Saïs. Analysis of what seems to be a characteristic 'northern' style in Saïte sculpture is still incomplete. For comparison with the Greek kouroi we must still make reference to two incomparable but southern renditions of the standing male from this era, Khonsu-ir-aa⁶⁹ and Djedkhonsu-iuf-ankh, 70 both from Karnak. There are significant contrasts between the two pieces. The former is highly polished and its expression authoritative, the latter more genial, with a 'velvety' stone surface. The differences do not disguise the single ideal. During the early Late Period the ideal male possessed an athletic physique with a powerful upper body. The width of the shoulders is significantly greater than the width of the hips; the pectorals are firmly outlined and even project; the musculature of the abdomen is abstractly represented as taut and firm, and is bisected by a deep median line or groove. As Russmann shows in discussing the kneeling figure of Amenemopeem-hēt in the Metropolitan Museum, there is evidence that attention to the representation of musculature was even more highly developed in sculpture from the north of Egypt. The median line of the torso is often strikingly indicated in such pieces. Pectorals, collarbones, and even calf-muscles are carefully and characteristically modelled.71

The athletic, taut, muscled ideal of early Twenty-sixth Dynasty Egyptian statuary actually contrasts strongly with the mid-sixth-century Samian style. Despite efforts to show that Egyptian and Greek statuary are stylistically similar, detailed study of the specific regional schools thought on historical grounds to be most closely involved in the diffusion contradicts the generalization. The sculptures attributable to the Samian workshops in this era are soft and full, occasionally even voluptuous; the faces of the kouroi are fleshy and sensuous, and the sculptors demonstrate great interest in the flowing or folding of the garments of the korai.72 Measurements would have to be carried out to determine the degree to which the Samian works of the mid sixth century follow the canonical programme of Egypt; for styles may be very different but canon identical. I am inclined, however, to doubt that Egyptian and Samian proportions would be at all close at this time. By the second quarter of the sixth century, despite the earlier and probably on-going close relationship with Egypt, Samos evolved a distinctive manner of its own. Again, however, it must be stressed that 'manner' and surface style are very different from canon and the 'deep structure' which it imposes. Toward the end of the century, the Athens 12 kouros is perhaps closest of all kouroi to the canon.⁷³

⁶⁹ Bothmer, Egyptian Sculpture, no. 9.

⁷⁰ Bothmer, Egyptian Sculpture, no. 27; and compare De Meulenaere, BIFAO 63 (1965), 19-32.

⁷¹ E. R. Russmann, Metropolitan Museum Journal 8 (1973), 33-46.

⁷² J. G. Pedley, Greek Sculpture in the Archaic Period, 46-57.

⁷³ Richter, Kouroi, no. 145; see discussion by Guralnick, AJA 82 (1978), 461-72.

Samian work of the first quarter of the century would be more likely to betray Egyptian influence, but unfortunately the amount of surviving work of this date is too small to enable us visually to support the powerful circumstantial evidence. The most intriguing of the Samian works is, of course, the Great *Kouros*, surviving only as fragments of the knee, left foot, and right hand.⁷⁴ We know nothing of the style or the structure of this colossus, although its size, three times lifesize, puts us in mind of Egypt. None of the Egyptian pieces from the early Twenty-sixth Dynasty reaches anything like this size, but naturally colossal statuary survived from other periods, possibly at sites like Ramesses' Delta city, and certainly at Saïs, Memphis, and Karnak, this last a centre through which Carians in the pay of Psammetichus II travelled to the southern front.

By the time the Great Kouros was made, the Samians had evidently begun to exploit their rich supply of native marble. Some writers have seen the kouros type as a type specially suited to marble; as Ridgway says, the type may have been 'born in marble'.75 The Egyptians rarely used this stone, as it was not regularly available, and one might argue that Samian technical procedures were entirely a product of indigenous Greek experimentation. To some extent Greek sculpture must have evolved naturally from study of, and work with, native Greek materials. None the less, the velvety but crystalline finish characteristic of some Late Period sculpture is very much like the finish of unpainted marble. And it is obvious that the canonical principles may be applied to any stone. Marble perhaps encourages a more active treatment of pose and of surface. The ancient writers attributed the 'liveliness' of Archaic statues—in contrast, apparently, to their column-like antecedents—to the invention of Daidalus.⁷⁶ Diodorus says that Daidalus' works had the same rhythmos as Egyptian sculpture (I. 97); Ridgway translates this to mean that Daidalus' work had the same 'motion stance', although the more usual rendering suggests that Diodorus simply means that Egyptian and Daidalus' sculpture exhibited the same general shape or pattern. Although Greek work in marble may be more active than Egyptian work in harder stone, deviation from the canon is not necessarily implied; marble encouraged livelier treatment, but the advanced-leg stance, as Diodorus implies, was none the less firmly reminiscent of Egypt. The very availability of marble in Samos might have impelled the Samians of the mid sixth century to a style which is extremely 'marble-izing', that is, exploiting the possibilities of marble's softness and brilliance of surface.

The Egyptians possibly maintained a quarter at Naucratis, and Naucratis may have been founded on an older Egyptian settlement. Since the city itself, as excavated by Petrie and his successors, is now under water, we must rely upon the earlier reports for this, as for so much else. In the first campaign Petrie noted a few small Egyptian remains in the south of the town. In the third campaign Hogarth apparently set out to investigate further.⁷⁷ In the extreme south of the excavated extent he discovered a

⁷⁴ Richter, Kouroi, no. 24/5 = Freyer-Schauenburg, Samos, XI, no. 29 (A-C).

⁷⁵ Ridgway, Archaic Style, 27; also N. Kontoleon, Aspects de la Grèce préclassique (Paris, 1970), 81 n. 2.

⁷⁶ H. Philipp, Dädalische Kunst (Mainz, 1970), 5-13; Ridgway, Archaic Style, 28-9.

⁷⁷ BSA 5 (1898-9), 41, sect. 2.

number of Egyptian bronzes, sistra, and inscriptions, one naming Psammetichus III. Hogarth felt that the southern encampment was a Saïte military camp, dating as early as Psammetichus I, or possibly a cult centre. On the west side of the 'great temenos' at Naucratis Petrie excavated some portions of a brick pylon faced with limestone.⁷⁸ A number of models of cult instruments and of construction tools was found in the foundation deposits (only two of the four were excavated by Petrie), as well as small elements of precious stone and other materials. A lapis-lazuli plaque with inscription dates the pylon to the reign of Ptolemy II Philadelphus.⁷⁹ The pylon apparently was attached to a (pre-existing?) temple; the remains of an obelisk were published by Edgar. 80 If the walls and cells recovered by the various excavators all form part of one structure, the entire complex was a vast enclosure, in plan quite similar to other temple enclosures in Delta centres, at Memphis, in the Egyptian Fayyûm, and so on. Bernand provides an excellent account of the problematic structures, and fully admits the difficulty of interpreting the excavations.81 If the Egyptians maintained some sort of presence at Naucratis, native sculpture workshops may also have been established there, but, since the evidence is so sketchy, I prefer other possibilities for the contact of Greeks with Egyptian workshops. Artists with an interest in the making of Egyptian sculpture probably saw work in progress at one of the two Egyptian centres which they were able to visit (or were required to visit), both a short journey from Naucratis, namely Saïs and Memphis.

In the early fifth century, the temple of 'Athene' (Neith) which Herodotus saw at Saïs, 25 km from Naucratis, was probably the temple existing in the early Twentysixth Dynasty. An avenue lined with trees led to the sanctuary, in front of which stood a small pyramid, the whole area studded with colossi and sphinxes.⁸² Herodotus was able to see the great sarcophagi of Apries and Amasis; Strabo saw the tomb of Psammetichus (I?) (XVII. I. 18 (C802)). Even though the temple structure is now almost completely destroyed, chance finds over a number of years have produced fine sculptures from Saïs. We can hardly doubt that the city was a major artistic centre with workshops of its own; study of a 'northern', and perhaps specifically Saïte, sculptural style only underscores this fact. Greeks visiting Saïs—for sightseeing, to trade, to report to their supervisory officials (for Saïs apparently administered the foreign quarters at Naucratis),83 or even to worship—saw all of the chief monuments, and could not have missed the large and busy sculptural workshops. Although romance should not be indulged too far, it is difficult not to think of how impressed Samian Rhoecus must have been, even though his compatriots may have been coming to Saïs for nearly half a century.

Naukratis, 1, 28.
 B. Porter-R. Moss, Topographical Bibliography, IV (Oxford, 1934), 50.
 ASAE 22 (1922), 1-6.
 Le Delta égyptien, 1, 3, 853-7.

⁸² P. Montet, Géographie de l'Égypte ancienne (Paris, 1957), 1, 80-3, fig. 14.

⁸³ Under Amasis, Nekhthorheb was 'superintendent of the gate to the foreign lands of the Great Green', depositing his portrait-statue at the Temple of Neith at Saïs (P. Tresson, Kêmi 4 (1931-2), 126-44; G. Posener, Revue de philologie, de littérature et d'histoire ancienne, 3rd ser. 21 (1947), 117-31). Under Psammetichus II, Eshor seems also to have held this post, likewise leaving a portrait-statue in Saïs (B. Turajeff, ZAS 48 (1910), 160-3).

Memphis has yielded a *kore* of East Greek workmanship, Greek pottery, Greek or Cypriote terracottas, and Carian graffiti; as the city seems not to have exerted administrative control over Naucratis and the West Delta, the Greeks must have travelled there for purely commercial purposes or, if they were mercenaries, *en route* to some camp or campaign.⁸⁴ In its later days, and possibly as early as the Twenty-sixth Dynasty, Memphis attracted foreigners as a religious centre, and it is not difficult to imagine the ever inquisitive Greeks setting out to investigate its temples, shrines, repositories, and workshops.

It makes sense to speak of profound Egyptian influence on the Archaic style without, of course, having to claim that the Archaic style was a foreign introduction, and without denying the deep philosophical and aesthetic differences between Egypt and Greece. An entirely different study of sculptural canons from the Archaic to Polycleitus would be required to assess the depth and importance of canonical procedures in Archaic and later Greek art. Guralnick's studies show that, throughout the sixth century, canonical procedures (that is, Egyptian canonical procedures) continued to be influential. Of nine Greek works which, as far as I can make out, Guralnick's results place as very close to the Egyptian canon, two fall into the group of earliest Archaic sculptures, one into the group dated from 540-520, with the remaining six dated to the middle half of the century. 85 As suggested above, it is likely that the Greeks used the canon as the Egyptians did. Proportioning parts according to a preconceived standard imposed order, and, since the standard was simple and natural, harmony. It facilitated duplication of an accepted ideal. Assuming that the Greeks never accepted any metaphysical presuppositions of the canon, perhaps above all else for the Greeks it imparted a finish, elegance, and precision to the completed work.86 There remains also the possibility that employing a canon conferred technical advantages, recognized by the Greeks, and exploited for what they were worth. Possibly any system which, through precise measurement, provided the sculptor with better control over his initial strokes, or provided the stonemason with better control over loosing, hewing, and shaping the block, would be preferred to more rough-and-ready techniques, when stone was expensive and its transport difficult. On the other hand, Egyptian artists did not design the canon for such practical purposes. It had, rather, an aesthetic origin, use, and meaning. The canonical system appears on the great early Palette of Narmer, a portable piece in which considerations of size and weight have not the relevance which they do in monumental sculpture.

⁸⁴ Kore: Edgar, Greek Sculpture, no. 27431 = Richter, Korai, no. 170, published C. Picard, ASAE 26 (1926), 113–18;—pottery; R. M. Cook, CVA British Museum, VIII (London, 1954), 60 n. 7;—terracottas: Petrie, Memphis, II (London, 1909), 16–18, pls. 28–30;—graffiti: Austin, Greece and Egypt in the Archaic Age, 20 n. 3. The investigations of the Egypt Exploration Society at North Saqqâra have suggested that in the sixth century there was a Carian burial-ground located somewhere near Nectanebo's temple (Emery, JEA 56 (1970), 6, 8); one date is provided by a grave-marker inscribed in Carian, attributable to c.550–30 (Ridgway, Archaic Style, 174).

⁸⁵ Earliest: Richter, Kouroi, nos. 1, 11; mid century: nos. 63, 70, 73, 86, 94, 95; latest: no. 145.

⁸⁶ Interestingly, however, as I have suggested elsewhere, there is a 'Platonic' quality in Egyptian art, and Plato himself deeply admired Egyptian art for metaphysical and moral reasons. The possibility of profound connections—more far-reaching than the archaeological or artistic—cannot be dismissed (Whitney Davis, 'Plato and Egyptian art', JEA 65 (1979), 121-7).

In fact, as noted earlier, any grid-system would solve the practical problem of 'loosing' a figure from, or 'finding' a figure in, a large unworked block. The Egyptian canon goes on to work out a specific aesthetic ideal; that the system facilitates duplication, or encourages a certain type of projection, are entirely secondary results. The longevity of the canon in Egypt must have much to do, of course, with the technically efficient manner in which it fulfils its aesthetic aim. The only major change in the canonical system only adjusts it to the modernized metrology of the Late Period. As we may infer from the archaeological and textual evidence, the island of Samos was the medium of the diffusion here. We are not committed to claiming that Samos was in any sense the 'birthplace' of the Archaic style—the Cyclades seem a more likely prospect—but for the moment need only suggest that one of the most important factors in the further development of this Archaic style was admitted to Greece through Samos and her long-standing close connection with northern Egypt in the Twenty-sixth Dynasty.

One speaks of Greek sculpture as an art of harmony. The harmony of Greek sculpture was as much an achievement of the sculptor's individual intuition as of any mathematical or technical procedures which he may have learned. It is, perhaps, an irony that the mathematical and technical procedures which, in Greek hands, did so much to liberate sculpture were first developed elsewhere in another sculptural tradition, and that this tradition never worked beyond its canon to a further vision of an almost fully naturalistic ideal founded upon a rational, even scientific, understanding of its human subject. An Egyptian sculptor could achieve the ideal; to the Greeks belongs the achievement of the ideal individual. As history shows, the one may be derived from the other, but it required the 'stubborn questioning' of Hellas, and her 'tireless cult of man', to carry the possibility through.

DJEDHOR THE SAVIOUR STATUE BASE OI 10589

By ELIZABETH J. SHERMAN

In alcove 5 of Chicago's Oriental Institute Museum sits a fine-grained, black statue-base from Athribis, OI 10589, dedicated by a certain Djedhor, son of Djedhor and Tasheritentaihet (see pls. XIII–XIV). The piece is a rectangular block whose long sides bear pictures of Djedhor followed by his wives and children interspersed with hieroglyphic texts. The top of the statue base is uninscribed and contains a rectangular depression for the insertion of a statue, now missing.

The hieroglyphs on the Chicago base are small but precise and detailed, showing white against the black polish of the stone. A traditional htp di nsw formula runs in a band around the top, forming a neat cap for the vertical columns of the rest of the inscription. The preservation of the piece is excellent. The only defects are the loss of the upper left-hand corner, which mars the inscription on that side; a few chips off the front corners, which do not interfere significantly with the inscription; and the loss of the lower, rear, left-hand corner, which was uninscribed. The base measures 562-7 mm in length, 330-40 mm in width, and 315-25 mm in height.

Oriental Institute records indicate that the base was purchased from a Cairene dealer in February 1920,² and it is listed as coming from the Temple of Horus in Athribis, modern Benha and Tel Atrib. A look at Engelbach's description of the site just four years after the base was purchased, however, shows that the location of the Horus Temple could not have been verified archaeologically.³ Objects were being extracted

I would like to thank the Oriental Institute Museum for their permission to publish statue base OI 10589 and to express my deep appreciation for their helpfulness and encouragement to my colleagues Dr Eric Doret and Mr John Bouda, and my teachers, Professors Klaus Baer, George Hughes, Janet H. Johnson, and Edward F. Wente. My especial thanks as well to Professor Arnaldo Momigliano.

Apart from the abbreviations usual in Egyptological literature (for which see W. Helck and E. Otto (eds.), Lexikon der Ägyptologie (Wiesbaden), 1972, I, vi-xxvii), the following are used in this article: Griffith, Rylands, III = F. Ll. Griffith, Catalogue of the Demotic Papyri in the John Rylands Library (Manchester, 1909), III; Janssen, Trad. Eg. Autobiografie = J. Janssen, De traditioneele egyptische Autobiografie vóór het Nieuwe Rijk (Leiden, 1946); Leclant, Montouemhat = J. Leclant, Montouemhat, Quatrième prophète d'Amon, Prince de la ville, BdÉ 35 (1961); Lefebvre, Petosiris = G. Lefebvre, Le Tombeau de Petosiris, 3 vols. (Cairo, 1923-4); Otto, BIS = E. Otto, Diebiographischen Inschriften der ägyptischen Spätzeit (Leiden, 1954); Reymond, Djedher = E. Jelínková-Reymond, Les Inscriptions de la statue guérisseuse de Djed-Her-le-Sauveur, BdÉ 23 (1956); Vernus, Athribis = P. Vernus, Athribis, textes et documents relatifs à la géographie, aux cultes, et à l'histoire d'une ville du delta égyptien à l'époque pharaonique, BdÉ 74 (1978).

- ¹ W. Barta, Aufbau und Bedeutung der altägyptischen Opferformel, ÄF 24 (Glückstadt, 1968).
- ² The accession card in the Oriental Institute Museum reads as follows:

10589 Statue base, Early Ptolemaic, about 315 B.C. Accession: 241

Provenience: Egypt. Benha (Athribis) Temple of Horus.

Collector, Date: purchased from E. A. Abemayor, Cairo, February 1920.

Photos: 8761-64/53832-33.

³ R. Engelbach, 'The treasures of Athribis (Benḥa)', ASAE 24 (1924), 178-9.

from the ancient tell whenever sebakh was removed, with no record of the finds or any coherent map of the area.

Two other monuments have come down to us from this Djedhor. Cairo 4/6/19/14 is the headless torso of a standing, naophorous statue, broken at the hips. Djedhor wears a long tunic with the 'Persian' knot. Cairo JE 463415 is Djedhor's famous 'statue guérisseuse'. Djedhor is represented as squatting with a 'Horus on the Crocodiles' stela resting on his shins. The entire statue is covered with inscriptions of magical intent—primarily safeguards against poisonous bites—and the base carries biographical information parallel to that on the Chicago base. The Cairo base is larger than its Chicago counterpart, and differs from it by including a depression inscribed with magical formulas, apparently designed to catch liquids poured over Djedhor's statue. These liquids were then collected, having absorbed the efficacy of the magical inscriptions. The carving on the bottom of Djedhor's basin has been worn smooth.

The texts of these three monuments throw some light on their relation to each other:

Chicago 10589: (B11) 'How much greater is that which I did than [that which] those who are in (B12) this necropolis [did], which was put in writing on this(?) statue in order to save every-[one] thereby from the poison of every male and female viper and all snakes!'

Cairo 46341: (C155) ink rdi she šd pn hne šd ntt m R3-St3w, 'It is I [Djedhor] who caused this saviour-statue to appear, along with the saviour-statue which is in the necropolis.'

(C173) ink rdi ssw r sd pn hne sd ntt m R3-st3w, 'It is I [Waḥibrēc] who inscribed this saviour-statue along with the saviour-statue which is in the necropolis.'

These statements seem to indicate that the Cairo statue was the second of two monuments erected in Djedhor's honour. Since the Chicago text omits any reference to Djedhor's dealings with the soldiers lodged in the wobt temple precinct or his construction of a paved court there, these events may have occurred after the piece was inscribed. Furthermore, Djedhor employs the 'good name' P; šd, 'Saviour', only on Cairo 46341.

- ⁴ Cairo 4/6/19/1 is Doc. 161 in Vernus, Athribis, 193-5 (cited wrongly there as Cairo 4/6/9/1). Vernus gives a copy of the hieroglyphic text from the back pillar, a translation, and commentary.
- ⁵ For the major publication of this statue's texts, both magical and biographic, see Reymond, *Djedher*. See her pp. xv-xix and Vernus, *Athribis*, Docs. 160 and 300 for complete bibliography.
- ⁶ For a general discussion of this type of statue see J. Vandier, Manuel d'archéologie égyptienne, III (Paris, 1958), 455–8 and 460–2. Vandier knows of only two stelophorous block-statues dating from the epochs preceding the Late Period. The child of the Horus stela has the fat face, protruberant breasts and belly, and frontal stance of a graecized figure. Compare this with one of the rare earlier 'Horus on the Crocodile' amulets dated by Seele to the era of the Ethiopian domination (K. C. Seele, JNES 6 (1947), pl. iiA and pp. 49–52). The earlier figure is only partially frontal and has more traditionally Egyptian, less rounded, contours. For a discussion of the bland expression and standardized smile of Djedhor's statue, and other features typical of this era, see B. v. Bothmer, Egyptian Sculpture of the Late Period, 700 B.C. to A.D. 100 (Arno Press, Inc., for the Brooklyn Museum, 1960, 1973), pl. 84, no. 89 and pp. 100–1, 112–13.
- ⁷ P. Lacau discusses the practice of pouring water over magical inscriptions on statues in 'Les Statues guérisseuses dans l'Égypte ancienne', Mon. Piot 25 (1922), 189–209. Seele agrees with Lacau as to the purpose of the basins which accompany magical statues, JNES 6 (1947), 43–52. For a list of known saviour statues (šdw) see Jelínková-Reymond, RdÉ 7 (1950), 48 n. 6. The most complete example of magical texts of the type which cover Djedhor's statue occurs on the Metternich Stela: see C. E. Sander-Hansen, Die Texte der Metternichstele, AnAe 7 (Copenhagen, 1956).

From his statement in C155 that he commissioned the statue it would appear that he was still alive when it was made, but that he had attained a higher degree of rank or fame since the time of the Chicago inscriptions.⁸

Djedhor and Wahibrē' inform us that the second statue, in all probability the one which accompanied the Chicago base, was located in the necropolis. The Chicago texts open by calling Djedhor 'imsh before Osiris, Lord of Ist Mst; praised by the gods of the Athribite necropolis'. Cairo 4/6/19/1 also addresses the gods of the Athribite necropolis, and by its size is a good candidate for the missing statue. Since Osiris of Ist Mst was, in fact, the embalmed sacred falcon which was stored in the temple of Ist Mst, the whole complex may have been located in the necropolis, and Ist Mst may be another writing of Ist Mst, the Osireion of Athribis. We know from Djedhor's inscriptions that the temple of Ist Mst had its own separate enclosure wall, and that the webt, or embalming house, was in the same precinct.

Where JE 46341 originally stood is more difficult to determine. The texts make a point of contrasting the two locations, so that we can certainly say that JE 46341 was not in the necropolis. Its texts open with:

(C1) im3h hr niwty ntrf ir hsw n p3 bik m hnw T3t M3t, 'im3h before his local god; who does what the Falcon of T3t M3t praises' . . .

The presence of the basin shows that this statue was designed for use by the living, and it must have graced a temple or other area in Athribis more likely to be frequented by the general public. Its worn inscriptions show that Djedhor's cures were popular indeed.

Both the Chicago and the Cairo bases picture Djedhor followed by his sons on the side which corresponds to the right hand of the statue. The Cairo base shows Djedhor, five of his sons, and their mother, Tayhesi, on the right face. On the side corresponding to the statue's left hand, the Cairo base shows Djedhor, two more sons, three daughters, and, again, Tayhesi. The Oriental Institute base shows all of these people and, in addition, a fourth daughter, Bastetyw, and her mother, Tayhor. The sculptor divided the family on the Chicago base to show Djedhor followed by his sons on the right, and by his female relatives on the left. All of the men have shaven heads, and wear long

⁸ H. De Meulenaere (Le Surnom égyptien à la Basse Époque (Istanbul, 1966), 26 and n. 12) suggests that the rn nfr was the deceased's preferred name, the one by which he wished to be remembered. In his discussion of basilophorous names he points out that certain names which included the name of a reigning king could not have been given at birth but were acquired to commemorate service under that king (29–30). The example of Pi-šd is instructive concerning the purpose and time of acquisition of the rn nfr, since the two monuments afford proof that Djedhor assumed the name late in his career, after everything recorded on the Chicago piece had been accomplished. The name commemorates the godlike powers which formed the basis for Djedhor's renown, and, were it not for his statement in C173 quoted above, would lead one to assume that JE 46341 was a posthumous work. Waḥibrēc's presence in the position usually devoted to the statue donor lends weight to this theory. Is it possible that Djedhor commissioned the work, but died and was deified before it was completed? Pi-šd is probably related to the hunter god or to the Pi-šd epithet popular with the people of the Theban necropolis in the New Kingdom, when the name was used with passive significance: see A. Zivie, La Tombe de Pached à Deir el-Médineh, MIFAO 99 (Cairo, 1979), 111 n. 5.

⁹ For a discussion of the Ist Mst and Ist Msi see Vernus, Athribis, 424, 450.

priests' robes. All of the women wear sheer, long dresses and carry two types of sistra, one in each raised hand.

The question remains as to who this other wife, Tayḥor, was and why she and her daughter were omitted from what appears to be the later work. The best explanation would seem to be that she was a first wife, either divorced or deceased. Her father had been Chief Doorkeeper of Ḥorus Khenty-Khety, and Djedḥor's rise could possibly be due to an advantageous marriage. Since his sons do not have titles, and are not the sons of Tayḥor, it is possible that Djedḥor was unable to pass on the office when she was no longer his wife. Such theories must remain in the realm of conjecture, however, until there is more information.

JE 46341 is unusual for the prominence of Waḥibrē, who claims no kinship with Djedḥor, but who inscribed his statue. The figure of this widty-priest of Ḥorus Khenty-Khety is as large as that of Djedḥor himself on the back panel of the Cairo base. Were this an ordinary funerary monument, we would expect to find an inscription of the subject's son, the donor of the statue, in this postion. Instead, we have Waḥibrē, a colleague of the Saviour, who thought his own part in the cures worthy of mention:

(C163) iw i rh·kwi (164) mry Ḥnty-Ḥty sơnh hrw nh ir n-i mitt nn m sốw hr šd pn [hnc] ntt [m] Rs-stsw, 'I was acquainted with the (164) Beloved of Khenty-Khety who saved everyone. By means of the writings upon this statue (Cairo 46341) [and] that [in] the Athribite Necropolis, I did likewise.'

On the basis of C173 and C155 quoted above, I have restored $[hnc] \dots [m]$, so that two statues are involved. Without the emendation we have the confusing situation of an opposing claim for the same statue, and the placing of Cairo 46341 in the necropolis: \dots the writing upon this statue (Cairo 46341) of the Athribite necropolis \dots .

It is possible to fix the actual date of manufacture of Djedhor's statues with some certainty. The Cairo base gives one empty cartouche, but supplies the 'Son of Rēc' name, *Plps*. Philip Arrhidaeus, Alexander's half-brother, ruled his empire from July 323 BC to some time in 317. Ptolemy supported Philip's claim in the wars among the generals which followed Alexander's death. It would have been his troops, very likely the ones camped in the temple precinct, who supplied Djedhor with the name of the legitimate ruler. It appears that Djedhor did not know a complete protocol for the king, a fact which suggests a date some time shortly after Alexander's death. The Chicago base, with most of the same information, cannot antedate it by many years. The two statues were made, then, c.325 and 323 BC, respectively.

10 E. Young ('A possible consanguinous marriage in the time of Philip Arrhidaeus', JARCE 4 (1965), 69) comes to the unlikely conclusion that Tayhor was Djedhor's daughter, though her mother's name is clearly stated as Renpetnofret, and that she and her daughter were omitted from the Cairo inscriptions for reasons of delicacy. Young bases his conclusions on the fact that Tayhor's father had the same name and title as the proprietor of the statue, although Djedhor was an extremely common name in the Late Period. Since father—daughter marriage is unheard of at any time among the populace of Egypt, and since this hypothesis necessitates the acceptance of a third wife for our Djedhor, there seems no reason to entertain Young's conclusions seriously. Young also suggests that OI 10589 is not the second statue mentioned in the Cairo inscriptions, but rather a third piece. Any number of statues dedicated by Djedhor is, of course, possible, but the present state of the evidence confirms the existence of only two.



Fig. 1. OI 10589, Front ($= F_{1-13}$)

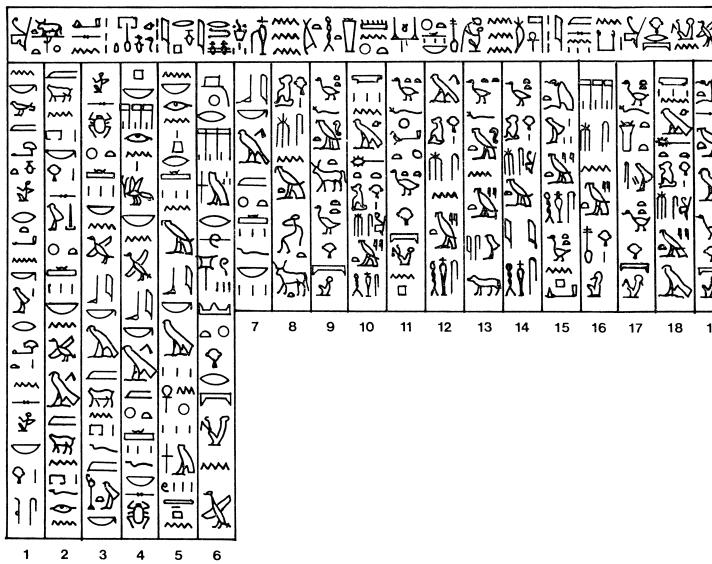


Fig. 2. OI 10589, left side (= L 1-20)

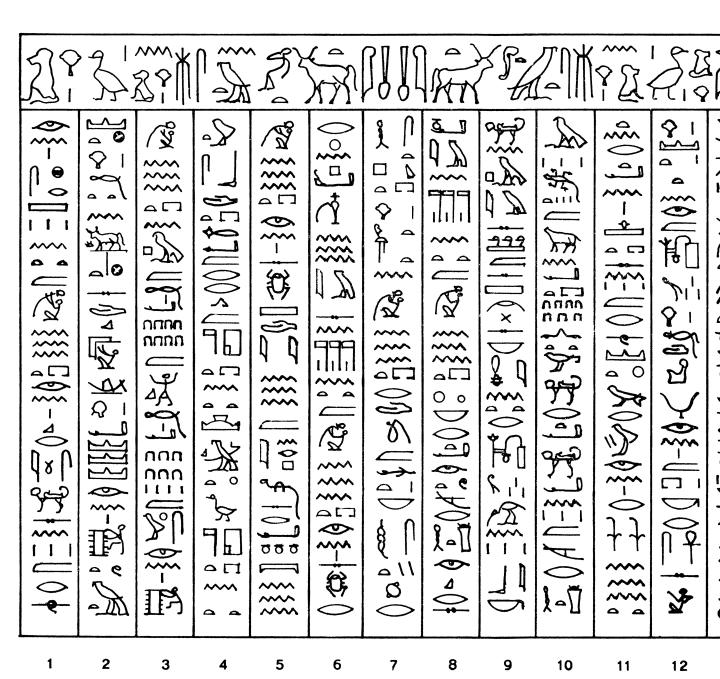
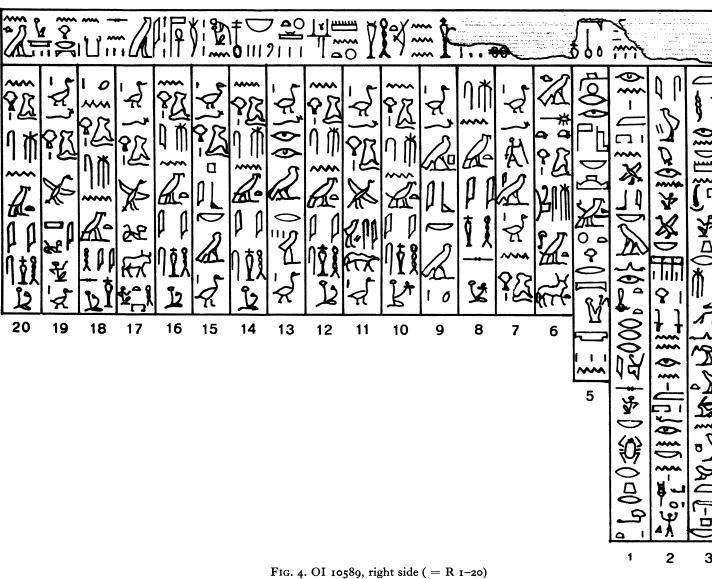


Fig. 3. OI 10589, back (= B I-13)



Translation

F¹Honoured (im²h) before Osiris, Lord of Iat Mat;^a praised before the gods who are in the Necropolis on the F²North of the Athribite Nome; happy-hearted; of fine character; excellent of counsels; amiable to his brethren; one who delighted F³the heart of everyone;^b who carried out rituals for those in his city^c in order to save them from F⁴the poison of every male and female viper and every kind of snake; who provided sustenance for those in the necropolis^d in order to F⁵make live those who were dead as a result and to save them from the poison of all snakes F⁶which bite;^e whose hands reached all men in making them live,^f and rejoice F³at the sight of him, even as (at the sight of)^g their god; all of whose words were heeded by the high officials that they might act according to F³all his words; who did not weary searching out benefactions for his god;^h the Chief Doorkeeper F³of Ḥorus Khenty-Khety and Chief Guardian of the Falconⁱ with all his goods, Djedḥor, son of Djedḥor F¹oborn to Tasherit(en)taiḥet.^j

He says: 'O my Lord, Khenty-Khety,^k Lord of the Athribite Nome, Chief of the Gods, F^{II}Lord of Truth on which he lives daily, who guides the heart(s) of gods and men. You guided my heart to F^{I2}take care of the Falcon in Iat Mat while^l I was F^{I3}in the service of the Falcon for many years. You found my heart (*ib*) upright, there being no dissimulation L^Iin my breast (*hity*).^m Before all (other) men you placed me when I served L²in your house and cared for all the goods of the Falcon in his house.ⁿ It was according to your command, L⁴O Lord of the Gods, that I caused L³all goods to accrue to the Falcon in his house. It was with all his goods (and) all that I had acquired L⁵that I performed every work (k³t)^o for the Falcon,^b and I made provisions (for) the living Falcons who were in this land.'

L6Honoured before the gods in the (Athribite) Necropolis, Chief Guardian of the L7Falcon and all his goods, L8Djedhor born to Tasherit(en)taihet.

^{L9}His daughter, ^q Tasherit(en)taiḥet, daughter of the Chief ^{L10}Doorkeeper of Ḥorus Khenty-Khety, Djedḥor, born to Tayḥesi.

LII His daughter, Khut, daughter of the Chief Guardian of the LI2 Falcon, Djedhor, born to Tayhesi.

L13His daughter, Tasheritentayisw, L14daughter of Djedhor, born to Tayhesi.

L15Their mother, Tayhesi, daughter of Padi-L16netjeru, born to Taynoferher.

L17His daughter, Bastetiyw, daughter of the Chief L18Doorkeeper of Ḥorus Khenty-Khety, Djedhor, born to Tayhor.

LI9Her mother, Tayḥor,^s daughter of the Chief L20Doorkeeper of Ḥorus Khenty-Khety, born to Renpetnofret.^s

B¹¹I was in charge of those who were in the embalming house.^t I prepared their burials in the B²necropolis on the North of the Athribite Nome, hidden there from (tp-r) foreigners.^u I had the B³embalming house of the Falcon built, it being 80 cubits in length and 64 cubits in width.^v I had a great girdle-wall built B⁴encircling^w the Temple of Iat Mat and the Temple of the B⁵embalming house. In order to pour libations^x from it to the gods who are in the embalming house, I had a well constructed in stone whose depth was as far^y as Nun. B⁶In order to B³emake offering therefrom daily to the gods who are in the embalming house, I had B³a garden made to the West² of the embalming house, planted with every kind of sweet-smelling tree. I caused mrht-oil to be prepared with which the B³embalming of the Falcon is done, ac complete in its every mystery according to what is written. bh Many B¹oFalcons had been foundco in the Chamber of 70 which had not (even) been embalmed (iwtt krs). I caused them to be embalmed with this B¹¹mrht-oil. (Then) I caused them to rest in the (Athribite) Necropolis.

'How much greater is that which I did than (that which) those who are B12 in this necropolis (did), which was put in writing on this(?)^{dd} statue in order to save every B13 one^{ee} thereby, from the poison of every male and female viper and all snakes! It is all this R1 that I have done ff in the house of the Falcon. The like thereof^{eg} had not (ever) been done by any man who came before.'

R2THE REWARD WHICH THE LORD OF THE GODS MADE FOR ME FOR THAT WHICH I ACCOMPLISHED IN HIS HOUSE

'You made for me a long life R3 in happiness. You caused my house to endure in the possession of (my) children, no fault (of mine) being found before the Lord of R4 the Gods for ever and ever. You allowed me to become old in my city, to be honoured in (my) nome in the favour of the gods who are in Iat Mat.'

R5Honoured before Osiris, Lord of Iat Mat, Chief Doorkeeper of R6Horus Khenty-Khety, Djedhor, born to Tasherit(en)taihet.

^{R7}His eldest son, ^{hh} Ḥori, son of Djedḥor, ^{R8}born to Tayḥesi.

R9His son, Horpabik, son of R10Djedhor, born to Tayhesi.

RIIHis son, Djedhorpaisw, son of RI2Djedhor, born to Tayhesi.

R13His son, Irtyhorraw, ii son of R14Djedhor, born to Tayhesi.

R15His son, Djedhorpabik, son of R16Djedhor, born to Tayhesi.

R17His son, Djedhorpanebkahet, jj R18son of Djedhor, born to Tayhesi.

R19His son, Djedhorpaisherw, son R20of Djedhor, born to Tayhesi.

Horizontal Inscription borders top of base starting left and right from front centre

Front centre (read left to right): A boon which the king gives to the gods who are in the Necropolis on the North (Left side) of the Arthribite Nome, that they may give invocation offerings of bread and beer, cattle and fowl, wine and milk, incense and libations, mrht-oil, linen and alabaster, every good, pure and sweet thing on which the gods live, for the ks of Chief Guardian of the Falcon (Back) Djedhor, son of Djedhor, born to Tasherit(en)taihet, justified (Back centre).

Front centre (read right to left): A boon which the king gives to Osiris, Lord of Iat Mat, and the gods and goddesses (Right side, broken 9 cm) that they may give invocation offerings (broken 10 cm), libations, mrht-oil, linen and alabaster and every good, pure and sweet thing on which the gods live, for the kr of Chief Doorkeeper of Horus Khenty-Khety, Djedhor, son of Djedhor, born to Tasherit-(en)taihet, justified (Back centre).

Textual Notes

- a. Ist Mst. For discussion of this place name see Reymond, Djedher, 87 n. 4, and Vernus, Athribis, 450.
- b. The series of epithets which follows the opening address stresses Djedhor's good character vis-à-vis his fellow men. For a similar set of active participles used in this way see the statue of General Hor, Louvre A88, published by J. Vercoutter, BIFAO 49 (1960) 85-114. Djedhor's epithets occur in the following order:
- hs(y) (or perhaps $hs(wt) \cdot i$) hr ntrw. This phrase does not occur in earlier contexts with the preposition hr, but is common with n (see Janssen, Trad. Eg. Autobiografie, 86, Bz (hssw and hsy)). It is

striking that, in the sixty-two examples of the word gathered from Old and Middle Egyptian sources by Janssen, none refers to favour from god, but rather describes the deceased's good relations with his fellow men—his king, his nome, his city, or his mother. It would seem that the kind of favour or reward intended by hsi during the Old and Middle Kingdoms was strictly an earthly one, but that the term had expanded to include the grace of god by the Late Period. The earliest occurrence known to me of hsi used in conjunction with a god is Urk. IV, 131, 5, where a certain Tuthmosis who lived under Tuthmosis I is called hs(y) n ntr·f. The preposition hr which occurs in our text is probably the shortened form of the well-known ny-hr, Wb. III, 158, 6 and 7, which is common in references to favours from the king: see Gardiner, Egyptian Grammar, § 158 and n. 4 for examples from the Middle Kingdom; Urk. IV, 151, 6; 1494, 15, and often for examples from the New Kingdom. General Hor's inscription uses hr with this meaning in what appears to be an attempt at archaizing (Vercoutter, BIFAO 49, 104). Alternatively, this could be the rarer use of hr to indicate the agent following a passive (see Gardiner, op. cit. § 39). Note that the formula imity hr N-god is extremely popular in Late Period texts. For another late example of hsw(i) with hr see Lefebvre, Petosiris, II, inscr. § 81, 87.

wdz-ib. Wb. 1, 400, 10. This epithet goes back to the Pyramid Texts (548, 581, 1197-9, 1444). For early examples see also Janssen, Trad. Eg. Autobiografie, 18 V 1-3.

nfr bist. Wb. 1, 144. First attested referring to human character or qualities in the Old Kingdom (P. Prisse, 15, 4). Both examples in Janssen, Trad. Eg. Autobiografie, 25 Af, 16 and 17, come from Middle Kingdom Hatnub. For later examples see Gardiner, Admonitions, 81; Urk. IV, 66, 14 and 1794, 16. J. J. Clère discusses the expression in RdÉ 6 (1950), 142, while H. De Meulenaere treats nfr ib, ikr bist, a combination popular in later texts, in OLP 4 (1973), 81 s. See M. Plantikow-Münster, ZÄS 95 (1969), 265, 5, and E. Otto, BIS, 66 on the meaning of bist.

iķr shrw. Wb. IV, 258, 14 appears in the Middle Kingdom in the singular, 'an excellent counsellor': see Janssen, Trad. Eg. Autobiografie, 3 G, 9 and 5 G, 53-6.

im3-ib n snw:f. Wb. 1, 79, 20, 21. Janssen, 2 L, 3 shows i3m with essentially the same meaning, but does not mention Old Kingdom occurrences of im3- or i3m-ib. For Middle Kingdom and New Kingdom examples see Faulkner, CDME, 20. H. De Meulenaere discusses this term in RdE 6 (1951), 141-2, H.

<u>hnm-ib n s nb. Wb.</u> III, 379, 17 knows this expression from Saïte to Greek times only. It occurs most prominently in the prenomen of Amasis, Khnum-ib-Rēc.

c. ir sšm n imyw niwt·f. Djedhor's position as a healer is that which divides him from ordinary men and this epithet stands out among his titles and traditional claims as something unique. He accomplished his cures by performing rituals during his life, and later passed on his magical powers by inscribing the spells he knew on statue JE 46341. It is extremely unusual to find mention of a private talent or function in Egyptian biographical texts, but this avocation seems to have been Djedhor's major claim to fame and the raison d'être for his statues (see ll. B11-13). Ir sšm appears frequently in Demotic contracts of this era with reference to religious rituals. For a discussion of the kind of services involved and the expected remuneration for the priests who performed them see F. Ll. Griffith, Rylands, III, 319. Sšm with the meaning of 'service to a god' is common in Late Period texts (see Wb. IV, 483, 21-2), and carries on into Coptic (see W. E. Crum, CD 568a).

d. R₃-st₃w. This is the first occurrence of this term in our text without the qualifying phrase 'on the north of the Athribite Nome'. [Pr]-R₃-st₃w was the name of the Athribite necropolis: see Vernus, Athribis, 359, and Wb. II, 399, I.

- e. See Reymond, *Djedher*, 13 n. 4, for an extensive discussion of spells involving snakes and other poisonous animals.
- f. spr cwy·f r s nb n ir cnh·sn. Note that the Cairo parallel to this statement reads: C160, cnh·sn m r-cwy (161)·f. There seems little reason to emend the reading of our line, however, to the more abstract 'action of his hands'. For a discussion of this expression see H. Junker ZÄS 77 (1941), 6-7. The use of n rather than m before the infinitive ir is common at this period: see Vercoutter, Textes Biographiques du Serapéum de Memphis (Paris, 1962), 74 n. k; H. Junker, Grammatik der Denderatexte (Leipzig, 1908), 20. For examples in a contemporary text see Lefebvre, Petosiris, 111, 33.
- g. here sn m m3 f mi. Alternatively, here sn can be analysed as a nominal sdm f which opens a new sentence, emphasizing Djedhor's likeness to a god in the esteem of the people. This sentence is an example of the common Egyptian practice of eliding the direct object in the second part of a comparison: see Gardiner, Egyptian Grammar, § 506, 4.
- h. tm wrd hr hh hw n ntr.f. 'Who did not weary seeking benefactions for his god', and variations, was an extremely common expression in Late Period biographies: see Otto, BIS, 27 n. 6 for numerous examples. Wb. III, 151, 16-18 lists its origin as Lit. M.R., but the expression did not become frequent until the New Kingdom. For Dynasty XVIII examples see Urk. IV, 26, 17; 57, 8; 401, 7-8; 1444, 30-1; 1480, 19. See also Reymond, Djedher, 90 n. 11 and J. Leclant, Montouemhat, 211, az.
- i. hry iryw-riw (F9) n Hr Hnty-Hty, hry siw n pi Bik. Djedhor's titles show that he served two closely related falcon gods: see Vernus, Athribis, for a discussion of the various falcon gods of Athribis. Pi bik m-hnw Tit Mit appears with a flail over his shoulder five times on the Chicago base and with no flail nine times. The bird is always preceded by the definite article in the singular and bik is spelled out alphabetically in all but four instances so that there is no possibility of confusion with the falcon Horus Khenty-Khety. It have capitalized 'falcon' where it refers to a god. Khenty-Khety is always written with the determinative falcon plus hnty-face over its shoulder, except in F10, a direct address, which has no determinative. It appears that Djedhor's duties as Chief of Doorkeepers under Khenty-Khety took precedence over his duties to the Falcon of Iat Mat. Whenever the titles occur together, that of Chief of Doorkeepers comes first. Djedhor uses his titles of Chief Guardian on the left-hand side of the base where his female relatives are pictured, and that of Chief of Doorkeepers to accompany the pictures of his sons.
- j. Ddhr ss n Ddhr (F10) ms n T3-šrt-(nt)-t3-tht. Djedhor gives no titles for his father, mother, or children and may have come from an obscure family, though this is not a necessary conclusion. For various writings of Tasheritentaihet and other theophorous names formed with the sacred cow see W. Spiegelberg, JEA 12 (1926), 35 n. 6. See also Reymond, Djedher, 6 n. 4 and Ranke, PN, 370.
- k. dd·f: i nb·i Hnty-Hty. This marks the end of the more or less traditional epithets, titles, and parentage which open Djedhor's inscription and the beginning of his direct address to the major god of the Athribite Nome. The passages which follow contain most of the biographical material of the text. Djedhor speaks to the god in the second person but drops this for first-person recital of his deeds in L2. The second-person address resumes in R3 when Djedhor tells of the rewards given to him by the Lord of the Gods, Khenty-Khety.
 - l. m-ht wnn i (F13) hr šms . . . gm·n·k. Note that m-ht has the meaning of 'when, while' rather
- ¹¹ See, most recently, Vernus, Athribis, 11a, pp. 367–463; A. Volten, 'Khenty-Khety', Lexikon der Ägyptologie, 1978; O. Koefoed-Petersen, 'Khenti-Kheti, dieu chthonien', RdÉ 27 (1975), 132–6; W. Barta, ZÄS 99 (1973), 76 ff.
- ¹² See E. Jelínková-Reymond, 'Recherches sur le rôle des "guardiens des portes" (*iry-ci*) dans l'administration générale des temples égyptiens', $Cd\hat{E}$ 55 (1953), 39–59, and *Djedher*, 5 n. 2.
 - 13 Reymond, Djedher, 5 n. 4, discusses the title iry sywty as it occurs in the Cairo texts.

than 'after' here, as it does in the Medinet Habu texts discussed by G. A. Gaballa and K. A. Kitchen, 'The Festival of Sokar', *Orientalia* 38 (1969), 2–3: see also Wb. 111, 346. See below for a discussion of these apparently Middle Egyptian verb forms.

m. (n)n snk (LI) m hiti. Note the falling together of the two ns of nn, a sign of the weakened value of this sound at this period. For further examples of this phenomenon see J. Leclant, Montouemhat, 15 (a) and 94 (a); J. J. Clère, GLECS II (1934-7), 66-8. Scribes of the Late Period commonly omitted the preposition n when it preceded a word beginning with the same letter, and often omitted the n of the sdm·n·f with a first person plural subject: see A. Erman, NG, § 601 and, for the phenomenon in Coptic, W. C. Till, Koptische Grammatik (Leipzig, 1970) §§ 35-6.

 $n. rdi \cdot n \cdot k wi r h \cdot t n s nb hr s ms (L2) n pr \cdot k hr s wd \cdot ht nb n p \cdot Bik m hnw pr \cdot f$. The presence of a t between the r and arm-with-loaf of rdi is a common feature of Late Period texts and probably indicates phonological change. It does not indicate the presence of an infinitive. For further discussion see below, n. 30.

Djedhor's address to Horus Khenty-Khety shows that he exercised his two priestly functions in different temples, one devoted to the 'Lord of the Gods', the other to 'the Falcon inside his house', i.e. the dead sacred birds of Iat Mat. C85 also mentions two temples and suggests that Iat Mat was under the aegis of Khenty-Khety, the 'you' being that god: ink rdi pr·sn r ir kit nb n pi Bik im·sn n(n) ir mitt nn in rmiw nb hpr hr hit, 'It was I who caused them to come forth in order to perform every work for the Falcon with them. Never had the like of that which I had done in your two houses been done by any man who came before.'

o. ir.n.i kit nb(t). The context of both the Cairo and Chicago inscriptions does not indicate what kind of services were included in kit, making the general term 'work' the most appropriate translation: see Reymond's discussion of kit, 'offering services', akin to the word iht, Djedher, 95 n. 7 and 85 n. 5. The word appears a third time on the Cairo base, p. 132, C162, where Reymond translates it as procédés. Considering Djedhor's relation to the word and his claims to have improved the method of embalming falcons, kit may well have the meaning 'embalming' which it has on a Serapeum stela of the Twenty-sixth Dynasty: see J. Vercoutter, Bio. Sérap., SIM 4113, Texte. B. H. W. Fairman, BIFAO 43 (1945), 128 does not know the origin of the reading 'kit' for the bee. For a discussion of late values for this sign see H. De Meulenaere, BIFAO 53 (1953), 107-11.

- q. For references to the names of Djedhor's children and his wife, Tayhesi, see Reymond, Djedher, 111 (sons one to five and Tayhesi), and 119 (sons six and seven, and three daughters).
- r. Two of Djedhor's children, Tasheritentayisw(y) and Djedhorpaisw(y), L13 and R11, have names composed with the animal 'iswy'. This quadruped is unknown to Wb. under this and related spellings. Neither is it included in D. Paton's Animals of Ancient Egypt (Princeton, 1925) or the domesticated animals portrayed in the tomb of Mereruka: see J. A. Wilson and T. G. Allen (eds.), The Mastaba of Mereruka (Chicago, O.I.P. 39), 11, pls. 152-3. It most resembles a wild boar, with its long snout and bristly, humped back (Paton's § 60, Animals, 17), but this animal is called šii or iph. Another possibility is the Sudanese earth hog, Orycteropus Aethiopicus, § 98, Animals, 28, ill. 39. It is possible that the iswy is the animal from which the joint of meat was taken which is used to write isw, 'reward'.

- s. Tayhor, her parents, and her daughter, Bastetiyw, are unique to the Chicago inscriptions. The name Tayhor does not appear in Ranke, PN, but is known in Demotic: see Griffith, 111, 463. Bastetiyw occurs in Hildesheim 2372: see Ranke, PN 1, 90, 4. It is interesting to note that Djedhor's mother-inlaw, Renpetnofret, bears the name of a relative of the deified physician Imhotep. 14
- t. The back of the Oriental Institute base is devoted entirely to those duties which Djedhor performed for the dead sacred falcons.
- u. ir $n \cdot i$ krs sn m Rs-st st w (B2) hr mhtt n Ks-kmt sdk(w) im tp-t hr swt(yw). The parallel text on the
- The writing of hiswt rather than hiswtyw to mean people of foreign lands (Wb. III, 234), and, in particular, Persian invaders, occurs consistently in documents written in the time of the Persian dominations or not long thereafter: see, for instance, the 'Demotic Chronicle', where hiswtyw is used to mean Persian in contrast with Winnw, Ionians (Col. II, 25). The 'Chronicle' goes so far as to define the term, saying: n3 h3swtyw nt iw n3 Mtiw n3w, 'the foreigners who are the Medes'.16 For references in Demotic documents see J. H. Johnson, 'The Demotic Chronicle as an historical source', Enchoria 4 (1974), 5 n. 20. For hieroglyphic sources, see G. Posener, La première domination perse, 11 (n), 45 (k), and pp. 167-8. Before the Persian invasions the term seems to have meant generally 'foreigners', and particularly 'Asiatics': see S. Sauneron and J. Yoyotte, BIFAO 50 (1952), 171, where texts from the time of Psammetichus II use the term for the foreign troops, both Greek and Asiatic; H. De Meulenaere, BIFAO 63 (1965), 27 R, where a text from the time of Psammetichus I uses it to designate Asiatic troops. For a discussion of hiswt(yw) in earlier contexts see C. Vandersleyen, Les Guerres d'Amosis, MRE 1 (Brussels, 1971), 92, 98, 107-8, 112-15; G. Godron, BIFAO 57 (1958), 154.
- v. The measurements of the building described on the Chicago base differ unaccountably from those on the Cairo base (Chicago: 80 cubits (41.6 m) in length × 64 cubits (33.28 m) in width; Cairo: 68 cubits (35.36 m) in length \times 64 cubits in width). Note that Djedhor uses the word k. with its usual Late Period meaning of 'length' rather than 'height': see Erichsen, DG 532 and Wb. v, 4, 9. Reymond, Djedher, 96-100, discusses Djedhor's building accomplishments and the disposition of the structures in the temple complex of Iat Mat.
- w. phr. Wb. 1, 544 cites this writing as common in Graeco-Roman times, and attested as early as the New Kingdom Book of the Dead. Fairman (BIFAO 43 (1945), 115) ascribes the writing to the influence of Hieratic where phr and r are virtually identical.
- x. A translation which emphasizes the purpose clauses is indicated over one that shows a series of circumstantial passive sdm·fs in view of the rs which precede hnp and hnk. General Hor makes the same claims as Djedhor (Vercoutter, BIFAO 49, 89, § 4). Vercoutter points out that hispt had the meaning 'vineyard' at this time, and that *hnk* referred specifically to wine offerings: see op. cit. 97 x and ab.
- y. r-c Nun. There is no need to restore the text as Reymond proposes for C30 (Djedher, 107 n. 3 $(\sum_{r=0}^{\infty} \langle -1 \rangle)$ if one takes (r) re-c to be the preposition 'up to, as far as', Wb. II, 395, 6, rather than the expression (m) r_3 - r_4 , 'in the act of, in progress', discussed by Junker in $Z\ddot{A}S$ 77 (1941), 6-7.
- 14 D. Wildung, Imhotep und Amenhotep, Gottwerdung im alten Ägypten, MÄS 36 (Berlin, 1977), 300 n. 1. The presence of this name and that of Imhotep's relative, Hrdw-(nh, in the Late Period indicates that the cult of the physician-god was widespread at that time.
- 15 My thanks to Dr James Allen for clarifying this reading for me by his personal inspection of the statue in Cairo. Reymond (Djedher, 65-6) admits to some confusion as to the correct reading.
 - ¹⁶ Spiegelberg, Dem. Chronik, § 332. See also § 120, h3swtjw.

z. imntt. The reading of the sign is clear on the Chicago base, but Cairo 46341, C32, shows isbt, 'East'. The Cairo text also places the well on the East side of the webt.

aa. . . . rdi(i) ir tw mrht ir krs n p(i) Bik im s. The expanded version of this claim inscribed by Djedhor on the Cairo base, C₃8-44, clearly states that he was responsible for developing a new method of embalming: (C38) rdi-n-i shpr t; krs(t) n p; Bik m mrht ntt c; wt-ntr nb (39) [mh m] sšt; s nb mi ntt r sšw . . . (40) . . . nfr wy sw r ir(rt) im hr hit m-ht wnn sn hr krs (41) p; Bik m end šw irp t; šdh nwd, 'It was in mrht-oil of every holy mineral that I caused the burial of the Falcon to be made (39) [complete in] all its mysteries according to what is in writing . . . (40) . . . How much better was it than that which was done before, when they used to bury (41) the Falcon in dry rnd-resin, hot wine, δdh -wine and nwd-oil.' It is most interesting that Djedhor claims to have introduced the use of mrht-oil, specifically mrht 'of every holy mineral', into the embalming process. J. R. Harris (Minerals, 174) discusses the conflicting evidence concerning the nature of mrh(t). The term occurs in the phrase mrh(t) hist, which would lead one to class it as a mineral, but it also appears in mrh(t) n(t) ht, suggesting that it was rather a type of wood tar. The ancestor of the Coptic sepace, mrht is apparently a more specific type of mnnn, an element of embalming oils, identified by both Copts and Arabs as bitumen or liquid asphalt. Several Greek authors state that Egyptian embalming was accomplished by means of bitumen, and the Persian word for the substance, mummia, carries this idea into Western languages, as, for instance, English 'mummy'. This identification, however, apparently rested on the fact that mummies looked black, as though covered with bitumen, rather than on any actual knowledge of the nature of the substances used. In fact, although mrh(t) and mnnn occur in earlier embalming texts as substances for coating coffins or spreading over the bandages of the mummy, bitumen does not occur (with a few late exceptions) as an embalming element until Graeco-Roman times. Harris concludes that mrh(t) was most probably wood tar or a coniferous oil or resin, and that mineral mrh(t), liquid asphalt, probably took its name because of their similar physical properties. Whatever its original meaning, it would appear that the mrht which appears in Djedhor's (auto)biography is, indeed, mineral, composed as it is of 'every holy mineral', and that it is probably bitumen, i.e. liquid asphalt. Gt ntr is unfortunately too general a term to be identified with our present information. Lucas (Materials, 173-4) points out, however, that bitumen was probably cheaper than ordinary embalming substances, and that it is more likely to appear in the burial of animals-particularly birds-than that of humans. The parallel between Harris's and Lucas's analysis of the physical evidence and Djedhor's description is most striking; for we appear to have here a record of the introduction of the use of bitumen into the embalming process. This use was to become the rule, even in human embalming, in the period immediately following Djedhor's lifetime.

bb. mh m sšt; nb mi ntt r sšw. The birds-in-the-pool sign (Gardiner, G49) has here its late reading of mh (Wb. 11, 116) with the sense of 'to complete'. The reading sšt; is certain from a parallel spelling in the title hry-sšt; C37.

cc. gm·n·w. Note the use of the Late Egyptian ·w for the passive. 17

dd. šd pn(?). The Cairo parallel for this sentence seems to indicate pn as the reading for \bigvee (C173: $\stackrel{\square}{\longrightarrow}$). This reading, however, is unknown to me elsewhere. It is possible that the use of wp results from confusion with Demotic ipn: see Spiegelberg, Dem. Gr. W1, 69 and p. 12, but this does not account for its use to indicate a demonstrative with final n. For the weakening of the n in Late Period texts, however, see above, note m.

ee. $r s c n h s (B 13) \cdot k$ (sic!). The Cairo parallel to this line shows that nb rather than k was intended: C161 r s c n h r m t n b i s w n b.

- ff. nn r-3w (RI) ir n·i. For nn r-3w with this sense see the examples in Wb. II, 273, Belegstellen.
- gg. irw. Note the late spelling of the adverb irw; see Wb. 1, 104, 9. The reading of irw is confirmed by the writing of the final w in the Nitocris Stela, 1. 8.
- hh. See Reymond, *Djedher*, 111, for references to the names of Djedhor's first five sons, and p. 119 for those concerning the last two sons. For a possible mention of Djedhorpabik elsewhere see Vernus, *Athribis*, Doc. 176, pp. 213–14.
- ii. Irty-Ḥr-rw. This name is broken in the Cairo text. It is an unusual variant of the common Irt-Ḥr-rw: see Ranke, PN 1, 42, 10.
- ij. Dd-Ḥr-p:-nb-k:-ḥt. This is a difficult name, read by Reymond as Djed-ḥer-pleḥ. I have chosen k: rather than iḥ because the scribe differentiated this animal from that used in the name of Djedhor's mother, Tasheritentaiḥet. This rendering leaves us with the less than satisfactory interpretation 'Djedhor, the Lord, Bull of the temple(?)'. Ranke knows no other examples.

The grammar of the Djedhor texts

If these inscriptions were written in Classical Egyptian as they appear to be at first glance, we would do best to look for the normal range of Middle Egyptian forms and functions. ¹⁸ It is reasonable to assume that the scribes of the Late Period were skilled in the ancient language, and we will attempt to analyse their work as Middle Egyptian until the evidence of the texts themselves fails to support the attempt.

Unfortunately for our study of these two texts, an investigation reveals that all cases of both the $s\underline{dm}\cdot n\cdot f$ and the $s\underline{dm}\cdot n\cdot f$ are accompanied by adverbial adjuncts. No conclusions can be made, therefore, about emphatic v. indicative moods based on the presence or absence of such an adjunct. To begin with, it is necessary to determine the type of form used by our scribe(s) to open narrative passages. The texts contain no examples of the classical form of the independent, past, indicative of transitive verbs, i.e. $iw \ s\underline{dm}\cdot n\cdot f.^{20}$ They do, however, contain two unusual forms in initial position:

- (C21) hr-tw rf ir-tw (w)sht (22) n inr hd-nfr n cnw mr n pr pn r mn r p; r-pr tpy m inb ntt m phr n wibt tn, 'Moreover, a court was constructed of fine white Tura limestone (extending) from the door of this chapel to the main door in the wall surrounding this embalming house.'
- (C41) hr·tw(42) rf gm·n·tw bikw cš;w iwtt krs·sn m hwt-ntr ntt I;t M;t m hnw ct (43) 70, 'Moreover, many falcons had been found without their even being embalmed in the temple of Iat Mat inside the Chamber of 70.'

We cannot view this hr as the preformative of the Demotic aorist, given the completed, one-time nature of both having built and having found something in the past,²¹ nor can it be the hr $sdm\cdot f/hr\cdot f$ of Classical Egyptian.²² It seems, rather, that we are dealing with the 'moreover' which

- ¹⁸ For a recent discussion of the grammar of the great Gebel Barkal inscription of Piye see T. J. Logan and J. G. Westenholz, 'Sdm·f and Sdm·n·f Forms in the Pey (Piankhy) Inscription', JARCE 9 (1972), 112. See below, n. 29, for a discussion of their arguments as they relate to the grammar of the Djedhor inscriptions.
- 19 H. J. Polotsky ('Egyptian Tenses', Proceedings of the Israel Academy of Sciences and Humanities 2 (2) (Jerusalem, 1965)) discusses the importance of the adverbial adjunct in determining the moods of various forms.
 - 20 On iw sdm·n·f see Polotsky, 'Egyptian Tenses', section V, pp. 16-19.
- ²¹ J. H. Johnson, The Demotic Verbal System, SAOC No. 38 (Chicago, 1976), 132. See also P. J. Frandsen, An Outline of the Late Egyptian Verbal System (Copenhagen, 1974), § 24.4, Conclusions.
- ²² Gardiner, Egyptian Grammar, §§ 239, 427, and F. Junge, 'Zur Funktion des sdm·hr·f', JEA 58 (1972), 133-9.

precedes so many initial forms in Late Egyptian and which serves to mark the beginning of a new passage.²³ This interpretation accords well with the presence of the particle rf, used in conjunction with $is\underline{t}$ in Middle Egyptian to serve much the same purpose as our construction, and giving much the same meaning.²⁴ As a non-enclitic particle, hr is capable of preceding any 'initial non-prepositional main clause(s)',²⁵ and its sole function is to be a 'direct indicator(s) of initiality'. We can discount it, therefore, as an element of the verb form itself. This leaves us with two initial forms with extraposed subjects, both apparently past tense, and leads us to conclude that the $s\underline{d}m\cdot rf$ was used to indicate simple past indicative in contrast to the emphatic $s\underline{d}m\cdot r\cdot f$.²⁶

That the initial sdm·n·f had maintained its historical character and was still emphatic can be seen in two indirect ways. Most importantly, the form which follows the non-enclitic particle in C42 is sdm·n·tw·f, the rare Middle Egyptian passive of the past emphatic. Secondly, the initial sdm·n·f alternates with nominal sentences in the two texts to convey different areas of emphasis:

- (C161) rdi·n·i ssw r snn pn ... (162) ... r scnh rmtw nb, isw nb im sn, r nhm·sn (163) m-cmtw, 'It was in order to succour all people (and) all animals thereby (and) to save them from poison ... that I put the inscriptions on this statue ...'.
- (C155) ink rdi she šd pn . . ., 'It was I who caused this saviour-statue to appear . . .'.
- (C173) ink rdi sšw r šd pn, 'It was I who put the inscriptions on this saviour-statue . . .'.

The first example stresses the purpose of the pious acts, the second two stress the actor. It seems clear from the evidence of our inscriptions that the initial $s\underline{d}m\cdot n\cdot f$ was still used as an emphatic, as it had been in classical Egyptian.

The $s\underline{dm} \cdot f$, on the other hand, has departed from its classical functions in C21 (see above), where it is clearly a past tense and apparently indicative as well. C21 describes the building of a court. Another passage of the Djedhor texts in which the $s\underline{dm} \cdot f$ fulfils the function of the past narrative, perhaps owing to the influence of the contemporary language, is Djedhor's description of his removal of troops' houses from the temple complex (C25-7). Demotic-style, narrative $s\underline{dm} \cdot f$ s also occur in descriptions of Djedhor's part in the embalming and burial of sacred falcons (C39-44, C76-7, OI B8-10).²⁷ Nothing in any of these passages compels the reader to understand the $s\underline{dm} \cdot f$ s as emphatic or as any other of its traditional functions. With the example of the contrast between $s\underline{dm} \cdot f$ (C21) v. $s\underline{dm} \cdot n \cdot f$ (C41) following $br \cdot tw \cdot rf$, and with the historical precedent of the narrative past $s\underline{dm} \cdot f$ in the Medinet Habu inscriptions and in contemporary Demotic, we certainly have here a past indicative $s\underline{dm} \cdot f$ form.

Having distinguished the initial forms used in the two texts, we find that they follow the traditional narrative pattern of initial form plus continuative $s\underline{dm}\cdot n\cdot fs$: see, for example, OI F11: $s\underline{s}\underline{m}\cdot k\cdot ib\cdot i$, an initial indicative, followed by a series of continuative $s\underline{dm}\cdot n\cdot fs$ in L5, B1, B2, B3, and B6; also C10: $s\underline{s}\underline{m}\cdot k\cdot ib\cdot i$ followed by $s\underline{dm}\cdot n\cdot fs$ in C11, C12, C14, and C76, where an initial $s\underline{dm}\cdot f$ is followed by continuatives in C77, C78, C79, C80, C82, C83.

²³ Frandsen, L.E. Verbal System, § 6, 1. See also S. Israelit-Groll, The Negative Verbal System of Late Egyptian (London, 1970), 75.

²⁴ Gardiner, op. cit. § 119, 2.

²⁵ J. Černý and S. Israelit-Groll, *A Late Egyptian Grammar*, Studia Pohl: Series Maior, 4 (Rome, 1975), 9.2.3.2.

²⁶ Polotsky noticed the tendency to employ the $sdm \cdot n \cdot f$ as the emphatic past and the $sdm \cdot f$ as the past narrative as early as the Kadesh Inscription of Ramses II. He points out that the classical distinction between $sdm \cdot f$ and $sdm \cdot n \cdot f$ is, in fact, a distinction between present and past, in 'Egyptian Tenses', § 49.

²⁷ The majority of sdm·f past narratives occurs in the Cairo text in passages which do not appear in the Chicago inscriptions. It is possible that a new scribe with a more colloquial style had been commissioned to write up Djedhor's later accomplishments.

Although the sdm·n·f appears to have maintained its character as an emphatic and a continuative form, it occurs in the Djedhor texts in three separate instances following the verb rdi (C43, C44, and C77), suggesting that it was viewed as a subjunctive. For another example of the same phenomenon see the Piye Inscription, l. 63.28 For a discussion of the sdm·n·f as the object of other verbs see Gardiner, Egyptian Grammar, § 185 and Edel, Altäg. Gramm. 1016b. Gardiner suggests that the sdm·n·f was used to indicate relative past time, but it is difficult to conclude anything given the paucity of examples.

As for the sdm·f in its historical functions, the Djedhor texts appear to contain examples of all but the indicative present. A geminated, nominal wnn follows the preposition m-ht in F12 and C11. The optative occurs in C130, 132, and 133 and the subjunctive in C3 and C5.

This brief survey of the $s\underline{dm}\cdot f$ and $s\underline{dm}\cdot n\cdot f$ forms in the Djedhor inscriptions tends to confirm Logan and Westenholz in their conclusion that there was a falling together of time distinction between the two in narrative texts of the Late Period. I could find no suggestion, however, that the $s\underline{dm}\cdot n\cdot f$ ever acted as a present tense.²⁹

One grammatical peculiarity of the Djedhor texts deserves mention. The scribe of the Chicago text sometimes uses ir rather than rdi as the causative verb. This occurs very occasionally in earlier contexts: see Edel, Altäg. Gramm. § 484, and CT vII, 464d, trans. by M. Gilula in JEA 56 (1970), 212. Although there is historical precedent, this phenomenon is so rare that it tempts us rather to read the -w which follows kd.t in B2 as filler after the t rather than as a part of the impersonal suffix: (B2) ir n·i kd. t(w) ti wobt n pi Bik, I made the building (of) the purification house for the Falcon.... The Cairo parallel, however, contains the traditional causative, where there is definitely a verb followed by the impersonal suffix: (C15) rdi·n·i kd·tw ti wobt n pi Bik, I caused that the purification house be built for the Falcon....

Conclusion

Djedhor's career, beginning in the Thirtieth Dynasty and ending under Philip Arrhidaeus or Ptolemy I, spans one of the most turbulent eras of Egyptian history.³¹

- ²⁸ See Logan and Westenholz, JARCE 9 (1972), 112 and 118.
- 29 Logan and Westenholz determined that the Piye scribe no longer distinguished four separate functions of the $sdm \cdot f$, nor did he use $sdm \cdot f$ and $sdm \cdot n \cdot f$ to indicate present and past tenses respectively. According to their conclusions the $sdm \cdot f$ acted as an indicative and the $sdm \cdot n \cdot f$ as an emphatic, regardless of tense. Since, as Polotsky has demonstrated, the initial $sdm \cdot n \cdot f$ was emphatic in Middle Egyptian in both transitive verbs and verbs of motion, this conclusion accords well with what would be expected. Present-tense meaning for $sdm \cdot n \cdot f$ constructions, however, is less clear. The examples chosen by the two authors to demonstrate this point could as well be translated with their traditional Middle Egyptian tenses, which translations are therefore preferable. See, for example, p. 114 of the Logan and Westendorf article: $in \cdot iw \cdot is \cdot hwi \cdot pt \cdot m \cdot ssn, \cdot f$ Does heaven rain arrows? and $ir \cdot niwt \cdot nbt \cdot di \cdot k \cdot hr \cdot k \cdot r \cdot s, n \cdot gm \cdot n \cdot k \cdot b \cdot k \cdot im \cdot r \cdot ph \cdot n \cdot i \cdot iww \cdot nwt \cdot W \cdot id \cdot w \cdot r \cdot f$. As for any city to which you direct your attention, you cannot find this humble servant (there), since (taking r for iw) I have (already) reached the islands of the Mediterranean.' For the translation 'until I reach', given by Logan and Westenholz, we would have expected $r \cdot sdm \cdot f$. Another possibility, 'until I will have reached', could use the $sdm \cdot n \cdot f$ following r as a relative past. In any case, there is enough doubt about the examples supplied by Logan and Westenholz on pp. 114-16 of their article to make them unsuitable as a basis on which to rest a theory.
- The scribe(s) of the Petosiris texts, active at approximately the same time as Djedhor, write(s) what appears to be rdi, i.e. \bigcirc , on several occasions where the verb ir is unquestionably intended: see, for example, Lefebvre, Petosiris, § 59, 5; § 61, 31, 32, 41; § 62, 9; § 81, 87. It would appear from this that \bigcirc was the normal spelling for di at this date, and that \bigcirc had the sound value ir, or with the loss of r, 'a'. In the Djedhor texts all examples of rdi include the t, leaving no doubt that the scribes intended rdi rather than ir.
- ³¹ If we assume that Djedhor was 20 years old at the birth of his first child, he must have been at least 31 when the first statue was carved c.325 BC and approximately 33 when the second was carved c.323 BC. This means that

It is in character with the period that his rather detailed account of his life and accomplishments includes so little information on the events of his time. Any information which can be gleaned from these texts is doubly valuable, however, in that it reflects the native view of a period of Egyptian history which is known to us almost exclusively from Greek sources.

The texts say nothing of the fall of Nakhthorheb, the last of the native dynasts, and the advent of the Second Persian Domination. A probable mention of the Persian invaders occurs in OI B9 and Cairo 46241 TM 131.32 Djedhor states that he carried out the burials of the sacred falcons in secret, 'hidden before the hiswtyw', or, in the Cairo version, that he 'made the (burials) of the Falcon there in order to hide them from the hiswtyw (who came from) afar'. This appears to be an instance of religious persecution on the part of the Persians in the administration of their empire. The texts do not include traditional lamentations about the disorder of the country, however, and only the presence of numerous unembalmed falcons in 'the chamber of 70'33 leads us to believe that the temples' routine was in any way affected by the repeated invasions and wars of the period.

An incident involving soldiers camped in the webt temple-precinct occurs in C24-9, but not in the Oriental Institute inscriptions. Djedhor tells how he bargained with the troops (mšr), and arranged for them to remove themselves to houses outside the holy grounds. He then razed their old houses, purified the temples, and planted gardens for the gods. These soldiers are never referred to as hiswtyw, and Djedhor does not speak of them with the rancour one might expect toward invaders. Since there were no indigenous armies in Egypt under Philip, the troops in Athribis were undoubtedly members of General Ptolemy's army. The displacement of even friendly troops must have been delicate, however, and Djedhor is remarkable for the degree of autonomy he exercised in his dealings. In a similar situation, two hundred years earlier, Udjahorresnet (Vatican 158) was obliged to petition Cambyses to remove troops from the Neith Temple of Saïs. 35

Djedḥor's inscriptions are poor in matter of historical import, but are a rich source of information concerning the religious climate of the times. From his address to Ḥorus Khenty-Khety, for instance, we learn that gods and men alike had hearts (*ib*) which could be instructed by the Lord of the Gods.³⁶ Late Period texts often seem to reflect

he was alive in at least the first year of Philip's reign, during the ten years of Alexander's reign, and the nine years of the Second Persian Domination. At the minimum, then, he would have been 13 years old at the fall of the Thirtieth Dynasty.

- ³² For the use of the term *hiswtyw* to mean 'Persians' see n. u above.
- ³³ Vernus (Athribis, 135-7) concludes that the Chamber of 70 was a kind of kiosk with columns and intercolumnary panels in which the mummified falcons rested for seventy days following their embalming. It was located inside the Tit Mit temple complex.
- 34 See J. Lesquier, Les Institutions militaires de l'Égypte sous les Lagides (Paris, 1911), 1-4, for a discussion of the composition of the army stationed in Egypt after the conquest of Alexander up to the time of Ptolemy I.
- 35 See G. Posener, La Première Domination perse en Égypte, BdÉ 11 (1963), 14-15, 11. 16 ff. A mention of the destruction of troops' houses which had been built inside a temple enclosure possibly occurs in the inscription of General Hor, Louvre A88, but the context is severely damaged: see Vercoutter, BIFAO 49, 88-9 and n. t.
- ³⁶ See A. Piankoff, Le 'Cœur' (Paris, 1930), 99, where Thoth, the personification of Wisdom and The Word, acts as the *ib* of Rē'; and p. 99, where Thoth inspires the hity(w) of the other gods with awe. For examples in

a master/slave relationship of god to man. Men serve the gods, and gods dictate human action. This attitude appears as early as the Sinuhe story, and there are instances throughout the succeeding centuries.³⁷ Fifteen hundred years is a long history for an idea, and clearly this attitude was not original to Late Period theologians. In the uncertain world of seventh- to fourth-century Egypt, however, the old idea must have taken hold in a new way to account for the marked increase of its occurrence.³⁸

In the same vein, writers of the Late Period often attribute all credit for right action to god. This could well be the accepted way for modestly applauding one's own good deeds, but the gods are credited with initiating wrong action as well. Did the Late Period Egyptians believe in predetermination, or were men responsible for their own acts? The Instructions of Onchsheshonqy, a compendium of wise sayings possibly dating back to the Twenty-fifth Dynasty but recorded in Ptolemaic times, seems to suggest that god, not man, was ultimately responsible.³⁹

- Col. 3 13. He said to Pharaoh: 'My great Lord! On the day of commanding, if P-Rēc was doing for me that which was good, he put good fortune
 - 14. for Pharaoh in my heart; on the day of commanding, if P-Rēc was doing for me that which was grievous, he put ill fortune
 - 15. for Pharaoh in my heart.'

This is Ḥarsiesi's only defence against a charge of conspiring to murder the king!

- Col. 18 17. Wealth is perfected in the service of god, the one who causes (it) to happen.
- Col. 22 25. Nothing happens except what god ordains.
- Col. 26 8. All have a portion of fate from god.
 - 11. God looks into the heart.

Djedhor's inscriptions do not dwell on his service to man, but rather stress his career in the service of god. Such an emphasis is to be expected if we consider that the

texts contemporary with those of Djedhor of hearts inspired by god see Vercoutter, BIFAO 49, 94 n. 1 and Tresson, BIFAO 30 (1930), 380, II, ll. 5-6. It is interesting to note that the hawks mentioned in the Archive of Hor, written in the third century BC, were the souls (biw) of Osiris, Isis, and Horus (J. D. Ray, The Archive of Hor (London, 1976), 92). The owner of the unnumbered Alexandria statue, who may or may not be the same General Hor as Louvre A88, also characterizes the sacred birds which he mummified as biw n ntr, 'souls of the gods' (Vercoutter, BIFAO 49, 103 and 105, n. e).

³⁷ Sinuhe makes it clear in several places in his tale that his wanderings and eventual salvation were all the works of god and not his own initiative: 43. 'I do not know what brought me to this land. It was like the plan of a god'; 147. 'God acts in such a way to be merciful to one whom he had blamed, one whom he causes to go astray to another land...'; 156. 'O god, whoever you are, who decreed this flight, may you be merciful and may you set me in the capital...'. The translations are those of W. K. Simpson in W. K. Simpson (ed.), The Literature of Ancient Egypt (New Haven, 1972). A certain Dhwty who lived under Tuthmosis I also credits god with the authorship of his actions (Urk. IV, 134, 14, mi rdit f hwt tn m ib·i, 'as he (my god) placed this mansion in my heart'). On the other hand, however, there is Nebnetjeru's statement that his own heart was the personal god which guided him, placing the responsibility for action squarely on the individual actor (CGC 42225, l. 11). See also Urk. IV, 974.

³⁸ See Otto, BIS 36-40, 66, 79 for a discussion of the change in religious orientation in the Late Period, documented with numerous examples. For a late instance of the idea that men were accountable to their own hearts see Otto, op. cit. § 58, ll. 21-2.

³⁹ S. R. K. Glanville, Catalogue of Demotic Papyri in the British Museum, 11. The Instructions of Conchsheshongy (British Museum Papyrus 10508) (London, 1955).

statues were probably designed for placement in a temple courtyard, and many of his claims are common clichés (see, for example, note h above). It is clear from the nature of his texts and that of statue JE 46341, however, that Djedhor's major importance in his community was as a healer with magical powers against poisonous venom. From that point on Djedhor's autobiography deals solely with his service to god.

In the Chicago text, Djedhor compares himself with a deity in a manner which was not uncommon in Late Period inscriptions (F6),⁴⁰ and, by the time the Cairo text was made, he had taken the name of 'Saviour' and become the 'beloved of Khenty-Khety who succours everyone' (C164). This flirtation with human divinity would seem to be in conflict with the idea of man's subservient relation to god discussed above. Divinity on earth, however, serves well as an explanation for exceptional powers in otherwise ordinary men, and accounts for the elevation of certain individuals above the common lot. It seems that it was no accident that, in those troubled times when Egyptians seemed 'slave to fate, chance, kings and desperate men', the cults of mengods such as Imhotep and Amenhotpe son of Ḥapu,⁴¹ and perhaps our own Djedhor, flourished as never before. The phenomenon was not confined to Egypt, but was also a fact in the Greek world of this time. Outside of royalty, physicians were the most likely humans to be deified. In addition to the physician-gods Imhotep and Asklepios, we find a fourth-century Syracusan, successful in the treatment of epilepsy, who called himself Zeus and entertained his own Olympian court.⁴²

By the time he made Cairo 46341, Djedhor may have obtained the status of god on earth, but his reference to his innocence before the Lord of the Gods (OI R2) indicates that he also believed in a final judgement before that lord after death, as did other Late Period authors: see Lefebvre, *Petosiris*, § 81, 16–22; § 116, 6 and P. Insinger 5, 7–8. It is clear that Djedhor did not rely on his magic powers alone to assure his rewards in another life. He was careful to record his good deeds to men, and especially to god, on his statues. In Cairo 123–33 he appeals to the living to read his magic spells and keep his name alive. The worn basin of his statue attests to the fame of those spells and of the statues which he donated to protect the populace of Athribis. We later generations must be grateful along with his supplicants that Djedhor has left us two monuments of such value for catching a glimpse of his times.

⁴⁰ See Otto, op. cit. 34–5 and 40–1 for numerous examples of such similes from the Late Period and a discussion of the deification of humans: see, also, D. Wildung, *Egyptian Saints: Deification in Pharaonic Egypt* (New York, 1977).

⁴¹ Wildung, *Imhotep und Amenhotep*: see, also, E. Otto, 'Gehalt und Bedeutung des ägyptischen Heroenglaubens', ZÄS 78 (1943), 28–40.

⁴² O. Weinreich, *Menekrates Zeus und Salmoneus* (Tübinger Beiträge zur Altertumswissenschaft 8) (Stuttgart, 1933).



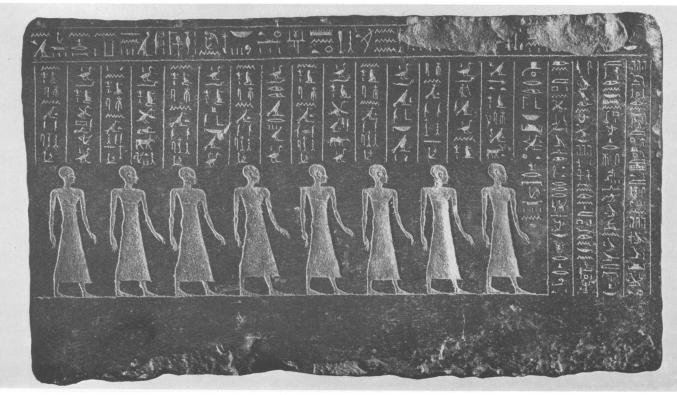
Courtesy the Oriental Institute, the University of Chicago
1. Statue base OIC 10589, front



2. Statue base OIC 10589, left DJEDḤOR THE SAVIOUR



1. Statue base OIC 10589, back



2. Statue base OIC 10589, right DJEDḤOR THE SAVIOUR

ANCIENT EGYPTIAN SILVER

By N. H. GALE and Z. A. STOS-GALE

Although there has been a long-standing interest in the question of the metallurgical nature and of the geographical and geological sources of the silver from which Ancient Egyptian artefacts were made, and of the metallurgy of the extraction of the silver from the ores, little is certainly known. Perhaps the most commonly accepted opinion (based on little evidence) is that Egypt itself had no indigenous silver ores and that all its silver came from elsewhere, either in the course of trade or later as tribute or booty from conquests in Syria, Palestine, etc. Whether Egypt did possess and utilize indigenous silver ores, and, if so, of what mineralogical nature, is our central theme. In particular we have made many new analyses of Ancient Egyptian silver artefacts which enable us to discuss the suggestion made with limited evidence many years ago by Lucas, that the earliest Egyptian silver was a natural alloy of silver and gold containing sufficient silver to have a white colour. A better understanding of these matters might add not only to our knowledge of cultural links and ancient metallurgy but might also assist in settling lexicographical questions about the correct interpretation of Egyptian terms for varieties of silver and gold.²

That local sources of silver in Egypt were not abundant is suggested by the fact that silver in Ancient Egypt was highly prized and was a relatively rare metal when contrasted with the more readily available gold. This is to be seen in ancient records where silver precedes gold in the listing of commodities until some time during the Middle Kingdom³ (after which the order was reversed), and in other textual evidence predating New Kingdom times which suggests that silver was then considered to be more valuable than gold.⁴ Even in later times silver was valued more highly in Egypt than, say, in the Aegean world. Černý⁵ has shown that during the New Kingdom the gold/silver ratio remained fairly constant at 2:1, and this was maintained even into the Persian Period as compared with a value of about 13:1 in other parts of the ancient world, whilst silver came into use in Egypt as the standard material of the unit of value.⁶

We are very grateful to Joan Crowfoot-Payne for her continual encouragement and stimulation of this work and for performing the time-consuming task of selecting and describing the artefacts which were analysed. We wish to thank those who have discussed our work with us, and made valuable suggestions, particularly Roger Moorey, Helen Whitehouse, and Sandra Nibbi; mistakes and errors of interpretation remain our own responsibility. We also thank E. T. Hall for allowing the use of facilities in the Research Laboratory for Archaeology, Oxford, and the Science Research Council for financial support of the work.

- ¹ A. Lucas, 'Silver in ancient times', JEA 14 (1928), 313-19.
- ² J. R. Harris, Lexicographical Studies in Ancient Egyptian Minerals (Berlin, 1961), 32-50.
- ³ For the evidence see J. R. Harris, op. cit. 32-3 and 41-2.

⁴ A Lucas (ed. J. R. Harris), Ancient Egyptian Materials and Industries, 4th edn. (London, 1962), 247. A depreciation in the value of silver in the period late Dynasty XIX to Dynasty XX is noted by J. Janssen in The Commodity Prices from the Ramessid Period (Leiden, 1975), 106 ff.

⁵ J. Černý, Cahiers d'histoire mondial, 1, 4 (1954), 903-21.

⁶ Lucas and Harris, op. cit. 247.

Although relatively rare, silver was used in Egypt as early as Predynastic times, and Prag⁷ lists about twenty-five silver artefacts which have been found in late Predynastic contexts. She has shown that this seems to be paralleled by a relatively widespread use of silver objects throughout the Levant in the second half of the fourth millennium, for example, more than 233 silver objects have been found at Byblos in the 'énéolithique' graves. In later times relatively few silver objects remain from the Old Kingdom in Egypt, rather more from the Middle Kingdom, whilst the largest fraction of Egyptian silver seems to come from New Kingdom times or later.

The ancient records throw no light on the source of silver until the Eighteenth Dynasty, when it is stated to be received from various countries in Asia, whilst in the Nineteenth Dynasty it is described as coming from Asiatic countries, from a country to the north of Egypt, and from Libya.⁸ The conquests of Tuthmosis III in Syria and Palestine brought in silver as booty and tribute in both ingots and artefacts.⁹ There seem, in the ancient records, to be no direct references to local sources of silver, though local sources of gold are frequently mentioned.¹⁰ Accepting that local silver sources probably do not exist, Petrie suggested that Predynastic silver came from mines in north Syria¹¹ for which, however, there seems to be no evidence. On the other hand, artefacts showing Syro-Palestinian¹² and Mesopotamian¹³ influence have certainly been found in Predynastic sites. North Syria may well not have been a direct source of some Egyptian Predynastic silver, but the intermediary for trade with a silver source in Asia Minor which may also be the source for the large amounts of silver found at Byblos.

Mineralogical sources of silver

It is probable that further progress in ascertaining the sources of Ancient Egyptian silver is more likely to come from the methods of science than from philological studies. In particular, one would expect that it would be helpful to consider the simple geology and geochemistry of the different possible types of silver deposits, the metallurgy of silver extraction, and the comparison of chemical and lead-isotope compositions of a representative selection of Ancient Egyptian silver artefacts with those of appropriate ores. The beginnings of such an approach were indeed pioneered by Lucas, ¹⁴ and have been followed more recently by Mishara and Meyers, ¹⁵ but insufficient analyses of Egyptian artefacts were available for firm conclusions to be drawn.

- ⁷ K. Prag, 'Silver in the Levant in the fourth millennium BC', in P. R. S. Moorey and P. J. Parr (eds.), Archaeology in the Levant (Warminster, 1978), 36-45.
- ⁸ Lucas and Harris, op. cit. 247. Nibbi has suggested that the Sinai inscriptions indicate a source of silver in the Sinai, *JARCE* 14 (1977), 59-65, although A. B. Lloyd doubts that they will bear this interpretation.
 - ⁹ J. H. Breasted, Ancient Records of Egypt, 11 (Chicago, 1906), 163-217.
 - 10 Lucas and Harris, op. cit. 227-8.
 - ¹¹ W. M. F. Petrie, Ancient Egypt, 1915, 16.
- ¹² H. Kantor in R. W. Ehrich (ed.), Chronologies in Old World Archaeology (Chicago, 1965), 6-10, 14-17; J. B. Hennessy, The Foreign Relations of Palestine during the Early Bronze Age (London, 1967).
 - ¹³ Kantor, op. cit. 10-17; C. Aldred, Egypt to the End of the Old Kingdom (London, 1965), 32-5.
 - 14 Lucas, op. cit. 318.
- ¹⁵ J. Mishara and P. Meyers, 'Ancient Egyptian silver: a review', in A. Bishay (ed.), *Science and Technology of Materials*, III (New York, 1974), 29-45.

In principle, the mineralogical sources of silver are of six types:

- 1. Native silver metal, largely secondary (supergene) in the oxidized zones of sulphide deposits, and derived from the decomposition of (and in association with) silver sulphide ores such as galena (PbS) and argentite [Ag₂S; silver glance], but also primary (hypogene) especially in the unique deposits associated with cobalt–nickel arsenides and sulphides such as Cobalt (Ontario), Kongsberg (Norway), the Erzgebirge (Saxony), Sarrabus (Sardinia), Bou-Azzer (Morocco).
- 2. The 'dry' silver ores such as argentite, cerargyrite [AgCl; horn silver], pyrargyrite [Ag₃SbS₃; dark-red silver ore], proustite [Ag₃AsS₃; light-red silver ore], stephanite [Ag₅SbS₄; brittle silver ore], tetrahedrite [(Cu, Zn, Ag, Fe)₃. (Sb, As)S₃₋₄; fahlerz].
 - 3. Argentiferous galena: argentiferous cerussite [PbCO₃].¹⁶
- 4. Complex ores associated with the gossan of deeper sulphide deposits, such as the jarositic ores worked in Rio Tinto, Spain, 17 or the lead-antimony-silver ores worked in Siphnos. 18
 - 5. Aurian silver, occurring rarely in native gold deposits.
- 6. Pyritiferous ores, such as iron pyrites [FeS₂], chalcopyrite [CuFeS₂], and arsenopyrite [FeAsS; mispickel] are sometimes both auriferous and argentiferous, though at present there seems to be no evidence that such ores were smelted for precious metals before Roman or perhaps Classical Greek times.¹⁹

We shall see that we can exclude pyrite ores as a source of silver to the Ancient Egyptians. If we consider first local sources, we find that neither native silver nor the dry silver ores have ever been found in Egypt (they are generally rare in the Middle

- The analyses of massive and euhedral cerussite given by Patterson (n. 33) show less than 3 ppm Ag, and are probably of cerussite from the leached zone in weathered edges of lead-silver ore veins. In the oxidized zone, lower down, one might find secondary cerargyrite and native silver mixed with cerussite and anglesite. In Laurion the old miners speak of cerussite rich in silver, and Conophagos (n. 26) records that Laurion galena and cerussite can contain 500-5000 ppm Ag; the cerussite here occurs in the oxidized zone.
- ¹⁷ See, for instance, N. H. Gale, W. Gentner, and G. A. Wagner, 'Mineralogical and geographical silver sources for Archaic Greek coinage', *Metallurgy in Numismatics*, I (Roy. Num. Soc. Special Publication 13), (1080).
- ¹⁸ N. H. Gale, 'Some aspects of lead and silver mining in the Aegean', *Miscellanea Graeca*, fasc. 2 (1979), 9–60; G. A. Wagner, W. Gentner, H. Gropengiesser, and N. H. Gale, 'The ancient workings on Siphnos', *Proc. 19th Int. Symp. on Archaeometry* (British Museum Occasional Publication 20), (1980), 63–86.
- The first comprehensive description of smelting pyrite ores for gold and silver seems to be that given by Agricola in De Re Metallica (1556) (see pp. 399-401 in the translation by H. C. and L. H. Hoover, Dover, New York, 1950). However, gold mines were described on the east coast of the island of Thasos by Herodotus (IV, 46-7); one of these mines (at Klisidi, between Aenyra and Kinyra) was entered by the present authors in 1979. The ore was found to be gold-bearing limonitic material containing pyrite, arsenopyrite, chalcopyrite, etc., but smelting would not have been necessary since the gold could have been panned out of the earthy material. Also in 1979 the authors visited the Pangeon region in Macedonia, and saw the slag at Pouliani (above Meserope village) and in the Nikisian valley described by O. Davis, 'Ancient mines in southern Macedonia,' J. Roy Anthropol. Inst. 62 (1932), 155-9. We also entered two ancient mines apparently containing largely pyrites and arsenopyrites at the head of the Nikisiani Gorge; analyses show these minerals to contain about 3 g/tonne of gold. Davis correctly observes the slag heaps at Pouliani and Nikisiani to be the remains of pyritiferous smelting, and the occurrence of much FeAs speiss at both places suggests that arsenopyrites was being smelted for gold. The Nikisiani slag heap dates certainly to Roman times and may be older; slag from it contains about 1g/tonne of gold and 3g/tonne of silver. At present it cannot be claimed that pyrites were smelted for precious metals before Roman or perhaps Classical Greek times.

East), nor are jarositic or other gossan-associated ores reported from Egypt. The occurrence of galena ores in the Eastern Desert of Egypt has recently been discussed by Stos-Gale and Gale,²⁰ who conclude that only the Miocene deposits could conceivably have been worked in ancient times. On the basis of very few analyses it has been widely stated that all galena ores in Egypt contain so little silver as to exclude Ancient Egyptian exploitation of this source.²¹ However, galena from Gebel Jasus contained 85 g silver/tonne,²² whilst ore from the 'Black Vein' east of Umm Samiuki is reported to contain up to 200 g silver/tonne.²³ Notwithstanding those reports, modern analyses²⁴ show that the silver content of galena from the Eastern Desert is indeed far too low to have been exploited in ancient times, and the few lead-isotope analyses that have been made of Ancient Egyptian silver artefacts do not support an origin from Egyptian galena deposits.²⁵

It remains possible that the Egyptians obtained silver which had its origin in argentiferous galena deriving from another country, so that it is important to consider the characteristics of such silver. In order to extract silver from argentiferous galena it is necessary first to smelt the galena to obtain argentiferous lead and then, in a separate operation, to oxidize the lead to litharge, leaving behind the silver, in the operation known as cupellation.²⁶ The process of cupellation frees the silver very efficiently from the impurities in the argentiferous lead²⁷ (chiefly copper, antimony, arsenic, tin, iron, zinc, less well from bismuth), but is thought not to alter the gold/silver ratio, which should reflect that in the galena ore. Remarkably few analyses of gold in galena exist in the modern geochemical literature.²⁸ However, old assays of silver from various ores led Percy²⁹ to declare that 'silver from pure lead ores contains the least gold, while that from pyritic ores, especially such as contain copper, antimony and arsenic, is frequently rich in gold'. Some modern galena analyses support this statement; for Laurion the Au/Ag is less than 10-3,30 whilst for galena ores from Thasos the Au/Ag ratio is less than 10⁻⁴;31 silver from any of these ores will contain less than 0.1 per cent of gold. In contrast silver produced from some of the jarositic ores from Río Tinto could contain from 0.3 to 16 per cent of gold.30 Though silver from pure galena will

- 21 For example Lucas, op. cit. 314.
- ²² C. J. Alford, Trans. Inst. Mining Metall. 10 (1901), 2-28.
- ²³ Z. Kovačik, Egyptian Geol. Survey Report 25/60 (1961).
- 24 Stos-Gale and Gale, op. cit. (n. 20).

- ²⁶ For a description of these processes see C. Conophagos, Le Laurium Antique (Athens, 1980), 274-354.
- ²⁷ H. McKerrell and R. B. K. Stevenson, Some Analyses of Anglo-Saxon and Associated Oriental Silver Coinage (Roy. Numis. Soc. Special Publication 8), (London, 1972), 195-204.
- ²⁸ M. Fleischer, 'Minor elements in some sulfide minerals', Econ. Geol., 50th Anniversary Volume (1955), 970–1024.
 - ²⁹ J. Percy, Metallurgy, Silver and Gold, I (London, 1880), 461.
 - ³⁰ N. H. Gale, W. Gentner, and G. A. Wagner, op. cit. 21-2 (Laurion), 6 (Siphnos, Río Tinto).
- ³¹ E. Pernicka, W. Gentner, G. A. Wagner, M. Vavelidis, and N. H. Gale, 'Ancient lead and silver production on Thasos', *Revue d'Archéométrie* 5 (1980).

²⁰ Z. A. Stos-Gale and N. H. Gale, 'Sources of galena, lead and silver in predynastic Egypt', *Revue d' Archéo-métrie* 6 (1980).

²⁵ Z. A. Stos-Fertner and N. H. Gale, 'Chemical and lead isotope analysis of Ancient Egyptian gold, silver and lead', *Archaeo-Physika* 10 (1979), 299–314; N. H. Gale and S. Stos-Fertner, 'Lead isotope composition of Egyptian artefacts', *Masca J.* 1 (1978), 19–21.

in all probability generally contain less than a few tenths of a per cent of a gold there is a possibility that somewhat higher gold contents could arise if richly auriferous pyrites were by chance included in the smelting charge. The other important characteristic of silver obtained by cupellation is that it will contain from 0.05 to 2.5 per cent of lead. Note that this characterizes silver obtained from cupellation of argentiferous lead, and does not necessarily prove that the silver derives from argentiferous galena. In ancient times lead (added to the smelting charge as lead ore, lead metal, litharge, or simply slag containing lead) had to be added to impure silver ores (even those containing native silver or the dry silver ores) to extract the silver into the lead metal whilst the gangue passed into the slag, the silver being finally separated from the lead by cupellation.³²

On present evidence silver derived from argentiferous galena will be characterized by gold contents from essentially zero up to about 0.5 per cent, lead contents between 0.05 per cent, and 2.5 per cent, copper contents less than 0.5 per cent, and bismuth contents generally between 0.01 and 1 per cent (rarely somewhat higher).33 Our knowledge of the composition of native silver rests at present largely on analyses by Patterson³⁴ which are heavily biased towards samples from America; if the analyses are representative, then native silver per se has gold and lead contents less than 0.01 per cent, bismuth contents less than 0.05 per cent, copper contents less than 0.5 per cent, and, significantly, mercury ranging from < 0.4 to 4 per cent with a mode of 0.5 per cent. Other analyses quoted by Boyle³⁵ of Canadian, Australian, and Mexican native silver are in general agreement with the conclusions drawn by Patterson for gold, lead, bismuth, and copper, but Boyle believes that mercury is present only in native silver from primary deposits of the cobalt type, and practically never in secondary deposits. This is not in accord with Patterson's analyses; clearly more work is necessary. The low lead and bismuth figures are likely to be reflected in analyses of an artefact only if it was made directly from a naturally occurring solid mass of native silver; native silver occurs more usually disseminated in a gangue requiring lead to be added in the extractive metallurgy (see n. 32) which will certainly increase the lead content and may well increase the bismuth content of the silver finally produced. A further complication is that native silver is often associated with cerargyrite (which is very easily reduced to silver metal) which, though it contains less than 0.01 per cent of copper, gold, mercury, and bismuth,³⁶ can contain up to 2.5 per cent of lead. Nevertheless Patterson's analyses suggest that silver derived from the native metal with or without admixture of cerargyrite should contain less than o.o1 per cent gold and should contain significant amounts of mercury. For

³² These operations are described by Agricola, op. cit. (n. 19), 379-92 and 400; Pliny, xxxIII. 31, also speaks of the necessity of using lead to smelt silver ores. It is unlikely that in more ancient times better could be achieved, and similar methods were still being used in the nineteenth century AD as is described by Percy, op. cit. (n. 29), 504-31.

³³ Gale, Gentner, and Wagner (op. cit. n. 17) have given analyses of 110 Archaic Greek silver coins, the great majority of which will have been produced from silver derived from argentiferous galena.

³⁴ C. C. Patterson, 'Native copper, silver and gold accessible to early metallurgists', *Amer. Antiquity* 36 (1971), 286–321.

³⁵ R. W. Boyle, 'The geochemistry of silver and its deposits', Geol. Survey Can. Bull. 160 (1968).

³⁶ Patterson, op. cit. 315.

studies of artefacts from the Levant, Egypt, Anatolia, and Greece it is clearly desirable to have analyses of native silver from possible sources in Anatolia, Persia, Iberia, etc., especially since an old analysis of a silver nugget from Chuquiaguillo, Brazil, gave a gold content of about 0.25 per cent.³⁷

Very little information about impurities in the dry silver ores has been found by the authors, beyond the fact that they can be auriferous, yielding perhaps up to 0.5 per cent of gold in the silver obtained from them.³⁸ Pyrite ores often contain more gold than silver; these will not have been an important source of silver until the salt cementation process of parting gold from silver was known, probably not before about 550 BC.³⁹ Although pyrite ores (especially chalcopyrite) can contain more silver than gold and at quite high concentrations,⁴⁰ there is at present no evidence that extraction of precious metals from pyrites was known at the earliest until Classical Greek (perhaps not until Roman) times (see n. 19); they are, therefore, not relevant to this study.

There is little information on the subject of aurian silver in modern geochemical accounts⁴¹ beyond the statement that in nature silver and gold form a continuous series of alloys, from silver through aurian silver to argentian gold (including electrum) and gold.⁴² Here we rather arbitrarily define aurian silver as silver containing gold in excess of about 5 per cent. Aurian silver occurs almost exclusively in gold deposits, and especially in gold-quartz veins, lodes, etc.41 Boyle states that alluvial gold and gold placers always have silver/gold ratios less than I (due to dissolution of the silver in weathering processes) and that gold-quartz veins in Precambrian, Palaeozoic, and Mesozoic rocks generally have silver/gold ratios between 0.08 and 0.73, averaging 0.28, whilst gold-quartz veins in rocks of Tertiary age have silver/gold ratios ranging from 3 to 200; though they generally do not contain aurian silver as the metal, but rather electrum, native silver, argentite, ruby silvers, tetrahedrite, etc., yet if metal were metallurgically extracted from the ore it would be argentian silver.⁴³ However, the gold-quartz deposits in the Eastern Desert of Egypt are in Precambrian rocks.⁴⁴ We might, therefore, expect the Egyptian ores always to exhibit silver/gold ratios less than I were it not that Boyle⁴⁵ notes that there are exceptions to the rules, and that within the same

- ³⁷ D. Forbes, *Phil. Mag.* 4 (1865), 143.
- 38 St. Clair Duport, De la production des métaux précieux au Mexique (Paris, 1843), 211 ff.
- ³⁹ G. M. Hanfmann and J. C. Waldbaum in *Near Eastern Archaeology in the Twentieth Century, Festschrift* for *Nelson Glueck* (Garden City N.Y., 1980) have summarized the evidence for parting gold from silver by salt cementation in Sardis, Lydia, in a level dating to 575-50 BC.
- 40 Boyle, op. cit. 33.
- 41 E. Vincent, Section 47-D on silver in K. H. Wedepohl (ed.), *Handbook of Geochemistry* (Springer, 1972), 11/3, 47-D-1 to 47-D-13.
- ⁴² Electrum was defined by Pliny (xxxIII. 23) as gold containing 20 per cent of silver, and recognized by him as occurring naturally in mined gold and also as a manufactured alloy (in Roman times). The division between gold and electrum is an artificial one; we choose to call electrum any gold/silver alloy containing between 20 per cent and 50 per cent of silver (having a colour verging from golden to quite pale gold) and up to 10 per cent of copper. Assays of modern Egyptian gold (see n. 45) show that natural electrum is to be found in Egypt in quantities probably sufficient to satisfy the ancient needs.
 - 43 Boyle, op. cit. 102 and 164-5.
- 44 See, for instance, M. S. Amin, 'Geological features of some mineral deposits in Egypt', Bull. de l'institut du désert d'Égypte 5 (1955), 209-39, who states that the gold is usually finely disseminated through the quartz veins in association with pyrites, arsenopyrites, and some galena.

 45 Boyle, op. cit. 105.

Precambrian mining regions it is sometimes possible to find some parts of the ore body with silver/gold less than 1, some parts with greater than 1. Thus it seems not impossible that aurian silver could indeed have been extracted from Egyptian gold mines; Lucas claims that it was extracted on the basis of the assay (by Claudet) of twenty-six samples of modern Egyptian gold from quartz given by Alford,⁴⁶ fifteen of which yielded silver/gold ratios greater than 1, the highest being 3.3 (about 23 per cent gold).

Further information about aurian silver occurs in the older mineralogical literature, and shows that it can also occur in primary silver deposits. The earliest analysis of a sample of aurian silver from the silver deposits at Kongsberg showed it to contain 28 per cent of gold.⁴⁷ Analyses reported by vom Rath⁴⁸ in 1869 of five different occurrences of aurian silver from Kongsberg showed gold contents varying from 27 to 50 per cent. Aurian silver is rare in Kongsberg, and the normal range of gold contents in Kongsberg silver seems to be 0.002 to 0.077 per cent, though in one part of the deposit up to 0.74 per cent of gold has been reported.⁴⁶ Natural aurian silver, therefore, seems to be a reality, though rare, and to occur both in primary gold and in primary silver deposits. Unfortunately there seem to be no modern analyses of natural aurian silver, and no complete old analyses, so that there is no guide as to the level of copper or lead content to be expected in natural aurian silver, nor of the range of gold content.

Analyses of Ancient Egyptian silver artefacts

Lucas was the first to discuss the nature of the silver used by the Ancient Egyptians. On the basis of nine analyses⁴⁹ of silver artefacts, later increased to eighteen,⁵⁰ he concluded that the earliest Egyptian silver (and probably much of the later silver) was probably a locally occurring natural alloy of silver and gold containing sufficient silver to have a white colour, and was not obtained from argentiferous galena or dry silver ores, though he admitted that the gold concentration of some silver artefacts was so much lower than had been found in local ores (see n. 46) that it was necessary to assume that such silver deposits had long been exhausted. Of the eighteen analyses at least eleven are of doubtful reliability, of the remainder only two have gold contents about 10 per cent, so that the evidence for use of natural locally occurring aurian silver was weak. Later work by Mishara and Meyers⁵¹ added fourteen further analyses of silver artefacts dating up to the end of the New Kingdom, but of these only one artefact had more than 3 per cent gold. Fig. 1 (a) gives the combined data of Lucas and Mishara

⁴⁶ C. J. Alford, Report on Ancient and Prospective Gold Mining in Egypt (London, 1900). Unfortunately the figures cannot be verified since this work seems no longer to be found in England, the Geological Society of London having lost their copy.

⁴⁷ G. Fordyce and S. Alchorne, 'An examination of various ores in the museum of Dr. William Hunter', *Phil. Trans.* 1779, 527-36.

⁴⁸ G. vom Rath, 'Aus Norwegen', *Neues Jahrbuch für Mineralogie*, *Geologie und Palaeontologie*, 1869, 385–444. He reports analyses by Sammelsen and Hiortdahl of five different aurian silver samples in the collection of Hjorth, late director of the mines, coming from various mines in the Kongsberg district and containing 26.9, 27.0, 45.50, and 53.1 per cent of gold. Further analyses of Kongsberg silver showed gold contents of 0.0019, 0.026, 0.077, and 0.74 per cent.

⁵⁰ Lucas and Harris, op. cit. 491.

⁵¹ Mishara and Meyers, op. cit. (n. 15).

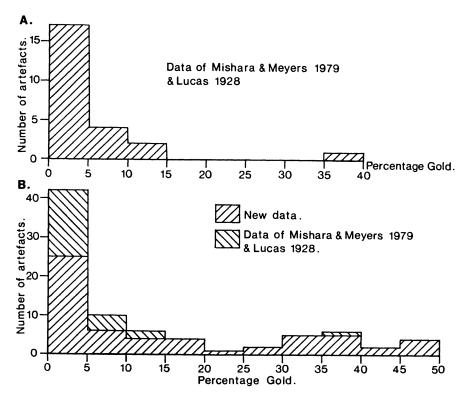


FIG. 1. Histograms of gold content of Egyptian silver artefacts: A, earlier data; B, combination of earlier data with the new data of this paper

and Meyers in a histogram showing that the evidence for the use of aurian silver was not strong; further it rested entirely on old analyses. We have, therefore, made energy-dispersive X-ray fluorescence (XRF) analyses, using the mutual standards method,⁵² of gold, copper, lead, and bismuth in fifty-six silver Egyptian objects dating from Predynastic to Late New Kingdom times, and of twelve silver artefacts from Nubia, all from the collections of the Ashmolean Museum. Limitations of the technique used caused the measurements of lead and bismuth to be insensitive if gold was present at greater than the 10–15 per cent level (dependent also on the copper concentration). However, even with this limitation we have been able to detect and measure lead in twenty-seven silver samples, and have confirmed the XRF analyses by mass spectrometric isotope dilution analyses in twelve samples. The results are given in Tables 1, 2, and 3.

⁵² E. P. Bertin, *Principles and Practice of X-ray Spectrometric Analysis*, 2nd edn. (Plenum Press, 1975), 592-4.

Table 1. Silver with low gold

No.	Period	Description	%Bi	%Ag	%Au	%Cu	%Pb
1895.987	Predynastic	Lid for stone jar, Naqâda 1257		83.5	1.0	15.0	0.4
1924.388	First Intermediate	Bead, Dyn. VII-VIII,	0.19	92.5	0.2	6.9	0.2
,		Hammamîya 2080					
E 1745	Middle Kingdom	Necklet, Dendera	0.18	91.0	1.8	6.8	0.2
E 1963	,, ,,	Ring, Dendera, Dyn. X		86.9	2.8	8.6	1.6
E 2652	,, ,,	Finger ring, Abydos		95.9	0.3	3.4	0.5
Fortnum R7	,, ,,	Scarab, silver mount, and hoop	0.19	93.1	0.2	6.5	0.2
E 2220	,, ,,	Sleeve on kohl-stick		92.5	0.2	6.9	0.2
1930.495(1)	Second Intermediate	Necklet, Mostagedda 3170		97.0	0.6	2.2	0.2
1930.495(2)	"	Necklet, Mostagedda 3170		88.8	0.4	10.7	0.2
1925.494	,, ,,	Bead, Badari 5478	0.19	96.8	n.d.	2.7	0.5
1925.496	,, ,,	Coiled ring, Badari 5478	0.19	96.5	0.3	2.9	0.2
1965.1746(2)	New Kingdom	Fragment of inlay, Dyn, XVIII		90.1	3.6	6.3	_
1890.763(1)	"	Ring, rect. bezel, Lahun, Tomb of Maket, Dyn. XVIII		74.6	3.2	18.6	3.2
1890.763(2)	"	Ring, rect. bezel, Lahun, Tomb of Maket, Dyn. XVIII		71.9	4.3	18.0	5.8
E 2580(1)	,, ,,	Ring, openwork bezel, Abydos		94.5	2.4	2.6	0.5
E 4300(1)	"	Ring, rect. bezel, Abydos E 178, Dyn. XVIII		96.5	1.1	2.2	0.1
E 4300(2)	,, ,,	Ring, rect. bezel, Abydos E 178, Dyn. XVIII		94.6	1.3	3.6	0.4
EE 614		Bead, Yahudîya 48		99.0	n.d.	1.0	
E 3373		Fragment of plaque, Thebes, Dyn. XIX		91.6	2.7	5.5	0.2
E 3408		Bosses, Abydos, Dyn. XX-XXI		96.0	1.3	2.7	0.1
1909.1091	Late Period	Ring, Memphis (Persian?), Dyn. XXVII	1.5	89.3	0.9	5.4	2.9
1887.2459A	"	Plaque, Nebesha, Dyn. XXVI		97.0	1.9	0.6	0.5

Table 2. Aurian silver

No.	Period	Description	%Ag	%Au	%Cu	%Pb
QC1123	Predynastic	SD. 36-64, mount of rim of stone vase	61.35	33.74	4.90	0.14
EE.89(1) EE.89(3) 1914.657 1930.520(1) 1935.170(4)	Old Kingdom ,, ,, ,, ,, ,, ,,	Bead, El-Kab 166, Dyn. III. ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	59.38 58.23 49.84 91.04 74.00	39.59 41.59 49.84 5.46 18.50	1.03 0.20 0.30 3.27 7.40	n.d. n.d. n.d. n.d. n.d.
1935.169	TS' of the state o	Bead, Armant 1310, Dyn. IV	68.00	25.90	5.40	n.d.
EE.692 EE.486	First Intermediate Middle Kingdom	Bead, Yahudîya 48 Bead, El-Kab 299, Dyn. XII	63.38 63.80	35.21 35.40	1.40 0.80	n.d. n.d.
?EE.633(1)? E.2210	"	Gold leaf, Abydos 416, Dyn. XII Disc, Abydos E284	78.70 70.50	6.30 28.20	15.00	n.d. n.d.
E.3294	" "	Necklet (fragment), Abydos 416, Dyn. XII	60.80	14.60	24.30	0.14
E. 2314	"	Ear-rings, Abydos E303, Dyn. XII-XIII	83.80	10.00	5.90	0.29
1913.406(2)	" "	Scarab, silver mount, and hoop, Abydos D166	74.90	18.00	7.10	n.d.

Table 2. Aurian silver (cont.)

		· · · · · · · · · · · · · · · · · · ·				
No.	Period	Description	%Ag	%Au	%Cu	%Pb
EE.627(1)	Middle Kingdom	Cap on bead, Abydos 416, Dyn. XII	61.70	30.90	7.40	n.d.
EE. 627(2)	,, ,,	Cap on bead, Abydos 416, Dyn. XII	72.50	18.10	9.40	n.d.
1913.407	,, ,,	Shell pendant, Abydos D166	58.30	36.40	5.30	n.d.
1925.438	"	Fragment on core, Fayûm, Qasr es-Sapha, Dyn. XI-XII	61.20	34.00	4.80	n.d.
1913.406(1)	"	Scarab, silver mount and hoop, Abydos D166, Grave 13.	62.00	11.50	26.40	0.10
E.3293 = 1966.1066	Middle Kingdom	Fragment of bracelet, Abydos 416, Dyn. XII	85.50	7.30	4.70	0.71
EE.633(1)	,, ,,	Gold leaf, Abydos 416, Dyn. XII	78.70	6.30	15.00	n.d.
E.1962	,, ,,	Fragment of bracelet, Dendera 543, Dyn. XII	84.80	8.50	6.80	0.12
1923.571	Second Intermediate	Ring on string of beads, Qau 1300.	58.00	37.70	4.30	n.d.
1965.174b(1)	New Kingdom	Fragment of inlay	56.40	43.40	0.15	n.d.
1890.762(1)	"	Ring. Lahun, Tomb of Maket, Dyn. XVIII	78.10	21.10	0.90	n.d.
1890.762(2)	"	Ring. Lahun, Tomb of Maket, Dyn. XVIII	78.80	19.70	1.70	n.d.
1890.762(3)	"	Ring. Lahun, Tomb of Maket, Dyn. XVIII	82.40	8.20	7.40	n.d.
EE.499(1)	"	Bead, Ehnasya 19B, Dyn. XVIII	49.30	49.30	1.30	n.d.
EE.520	",	Bead, Abydos E143, Dyn. XVIII	64.10	30.80	5.10	n.d.
E.2580(2)	,, ,,	Ring, Abydos E269	49.50	34.70	8.40	1.48
EE.570	,, ,,	Bead, Abydos E269, Dyn. XVIII	77.50	11.60	10.90	n.d.
1890.781	"	Cowroid, Lahun, Tomb of Maket, Dyn. XVIII	49.30	49.30	1.50	n.d.
Fortnum R9	Late Period	Ring	51.20	46.50	2.30	n.d.

Table 3. Analyses of silver artefacts from Nubia

Ashmolean	Description	%Ag	%Au	%Cu	%Pb
Museum No.	Ankh, Faras, (cemetery 2) 54, C group	75.5	10.6	4.0	n.d.
, ,		75.5	19.6	4.9	
1921.621	Amulet, Sanam 597, Napatan	94.4	n.d.	4.7	
1921.836	Ring, Sanam 1540, Napatan	94.4	1.8	3.8	
1921.550(1)	Ear-ring, Sanam 385, Napatan	89.0	0.3	10.7	
1936.275	Ram's disc and horns, Kawa, Temple T., Napatan	81.7	6.9	10.6	n.d.
1921.550(2)	Ear-ring, Sanam 385, Napatan	86.2	9.5	4.3	,,
1921.645	Pendant, Sanam 679, Napatan	73.1	24.9	2.0	,,
1921.647	Pendant, Sanam 679, Napatan	82.0	16.4	1.6	,,
1921.824(2)	Ear-ring, Sanam 1531, Napatan	77.1	20.8	2.I	,,
1921.824(3)	" " "	73.0	19.0	8.o	,,
1921.648	Ring, Sanam 679, Napatan	64.9	26.0	9.1	,,
1960.1064	Plaque, Sanam foundation deposit of temple, Napatan	88.5	6.2	5.3	,,

The immediate impression is that many Egyptian silver artefacts are indeed made of aurian silver, and this is brought out in the histogram of fig. 1(b). Combining our data

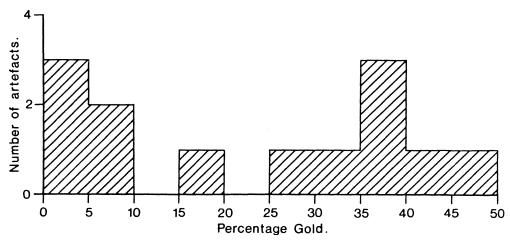


Fig. 2. A histogram of the gold content of silver artefacts dated from Predynastic times to the end of the First Intermediate Period

with reliable⁵³ analyses selected from the data of Lucas and of Mishara and Meyers (also plotted in fig. 1(b)) we find that, over the time span from Predynastic times to the end of the New Kingdom about 50 per cent of the artefacts are of aurian silver. Furthermore about 25 per cent of the artefacts contain over 25 per cent of gold, and these fit well within the range of analyses of naturally occurring Eastern Desert aurian silver reported by Alford.⁵⁴ In these analyses of artefacts we seem to have for the first time a considerable body of evidence suggesting that a large part of Egyptian silver was, in fact, natural aurian silver or, put another way, a natural silver-rich gold ore probably coming from the same mines that provided Egypt with the majority of its gold. If we consider a histogram of the gold content of silver artefacts down to the end of the First Intermediate Period, given in fig. 2, we see that over half of the objects are certainly of aurian silver (containing more than 20 per cent gold). This observation accords well with the lexicographical evidence that the earliest term for silver in Egypt, nbw hd, means 'white gold', and that the Egyptians at first regarded gold and silver as two forms of the same mineral, distinguished only by colour. 55 That they also regarded silver as rare accords both with the rarity of aurian silver and with the absence of other sources of silver within Egypt. The term hd ic, occurring in the Fifth Dynasty and meaning literally 'washed silver', has caused some difficulty since it has been taken to imply a process of washing powdered ore which has been thought improbable as early as that.⁵⁶ If by 'ore' is meant argentiferous galena or the like, then improbable it is, but the difficulty vanishes if 'washed white gold', i. e. washed aurian silver, is meant, since this would have occurred (like gold) in mineralized quartz veins from which it would have to be extracted by crushing and grinding the quartz and washing the silver out.57

Objects containing between 5 and 20 per cent gold may be made of naturally occurring

⁵³ Those analyses quoted by Lucas having a considerable percentage of undetermined elements were rejected.

⁵⁴ Alford (1900), op. cit. (n. 46). 55 Harris, op. cit. (n. 2). 56 Harris, op. cit. 42.

⁵⁷ See, for instance, E. S. Thomas, 'Notes on the mining industry of Egypt', Cairo Scientific Journal 3 (1909), 110-19.

local aurian silver of a type not represented in Alford's analyses (perhaps worked out even by 1900); here it is worrying that although it is widely stated that silver and gold naturally form a continuous series of alloys from pure silver to pure gold, there seem to exist no records of natural silver containing gold in the range 5 to 20 per cent. The existing analyses (see Tables 1 and 2) suggest that artefacts with this compostion only become relatively common from the Middle Kingdom onwards, coincident with the increase in number of silver artefacts with gold contents less than 5 per cent. It is possible that the artefacts with gold content between 5 and 20 per cent represent a mixture of local aurian silver with foreign silver of low gold content. A possibility for which there is no proof but which cannot altogether be ruled out at present is that, since gold was so much more plentiful, and silver was in earlier times more desirable, local gold was melted with foreign silver to produce a greater quantity of an alloy still having the appearance of silver. An argument against this for some objects is Lucas's observation that some silver objects are not of a uniform white colour, but have yellowish patches due to unequal distribution of the gold present.58 Further work using the scanning electron microscope and lead-isotope analyses might settle this question. Meanwhile, we note that most of the silver having less than 5 per cent gold contains a small quantity of lead, and that some of the silver containing 5 to 25 per cent of gold also contains lead, but this observation is not conclusive since the XRF analytical technique employed did not allow us to analyse most of the aurian silver proper for lead, though it was found present in a few cases. Modern analyses of white silver-gold alloys from the Egyptian and Sudanese gold deposits are clearly desirable.

Examination of Table 1 shows that about half of the objects with low gold have less than 0.4 per cent gold, and might well be of silver coming from foreign galena ores. Most of the artefacts in this table have lead contents suggestive of cupellation as a step in the silver production, but this does not necessarily imply derivation from galena, and such derivation is unlikely for artefacts containing over 0.5 per cent of gold.

The presence of rather high amounts of copper in most of the artefacts analysed was a surprise. It has been shown⁵⁹ that native gold (and, by extension, aurian silver) contains copper at or below the 1.5 per cent level, and chiefly at the 0.2 per cent level, though in rare cases the level can be as high as 6 per cent copper. Silver which has been processed by cupellation (that derived from galena or most silver ores) is unlikely to contain more than 1 per cent copper,⁶⁰ and native silver has never been reported to exceed 1 per cent copper. For the 37 per cent of analysed artefacts which exceed 6 per cent copper it can safely be assumed that copper has been intentionally added, probably to harden the silver to achieve better resistance to wear. This practice seems to have been followed, rather erratically, from the earliest times, there being one such Predynastic object and several from Old Kingdom times.

Our interest in fourth millennium Near Eastern silver having been excited by Kay

⁵⁸ In Lucas and Harris, op. cit. 248.

⁵⁹ Stos-Fertner and Gale, op. cit. (n. 25), 307.

⁶⁰ McKerrell and Stevenson, op. cit. (n. 27), but note that crude 'Blicksilber' has been reported by Percy, op. cit. 362, to contain as much as 2% copper.

Prag's article,⁶¹ we particularly examined those objects in the Ashmolean Museum falling into Prag's list of Predynastic silver, namely: (1) a silver lid from Naqâda, Grave 1257 (Ashmolean 1895–987); (2) a hollow 'silver' hawk model from Naqâda, Grave 721 (Ashmolean 1895.137). The silver lid (1895.987) was analysed for Baumgartel in the 1940s, and is described by her⁶² as nearly pure—98 per cent—silver. However, our XRF analysis on a deeply cleaned area of the lid gave 83.5% Ag, 15.0% Cu, 1.0% Au, 0.4% Pb. The surface of the lid is much corroded, and we can only suppose that the analysis made for Baumgartel sampled predominantly the silver-enriched surface layer of the uncleaned lid.

The same analyst reported that the hawk model (1895.137) was of fairly pure silver, and that was recorded by Baumgartel⁶² and again by Prag.⁶¹ Petrie⁶³ had originally described this hawk model as made of lead; our visual examination suggested that he was correct, and an XRF analysis showed it to be 99 per cent lead. We made a further examination by neutron activation analysis, giving the composition: 99.99 per cent Pb; 245 ppm Ag; 3.5 ppm Sb; 2.3 ppm As; 2.19 ppm Au; 257 ppm Cu. Records in the Ashmolean Museum show that the analyst was given fragments of four objects to analyse, including 1895.137 and 1895.987, but show only three analyses; we can only presume that a silver fragment of one of the other objects was mistaken for a fragment of the hawk model. It is important that this error should be corrected since the hawk model represents a rare and very early use of lead in Egypt, dating as it does from Naqada II times—about 3800 BC. It is doubly important in that very few early lead objects are known at all, being limited to one example from Catal Hüyük (seventh millennium), one from Arpachiyeh (fifth millennium), from Anau (Iran) and Hissar III,64 perhaps one lead strip from Byblos (fourth millennium),61 and now the important find of a sixth-millennium lead bracelet from Yarim Tepe (Iraq).65 The high silver content of the lead hawk model and its lead isotope composition²⁰ prove that the lead did not originate within Egypt.

We analysed also one further silver Predynastic object in the Ashmolean collection, the silver rim of a stone vase (QC1123). Its composition (see Table 2) shows it to be the earliest example of the use of native aurian silver yet found.

The analyses of Nubian silver artefacts (all from the Napatan Period, late eighth to fourth centuries BC) given in Table 3 show the use of silver low in gold, of aurian silver and of silver with intermediate gold content. The analyses suggest some use of the practice of deliberate addition of copper, and perhaps suggest that aurian silver occurred also in the Nubian gold mines.⁶⁶

⁶¹ Prag, op. cit. (n. 7).

⁶² E. J. Baumgartel, Cultures of Prehistoric Egypt, 11 (Oxford, 1960), 6-10.

⁶³ W. H. F. Petrie and J. E. Quibell, Nagada and Ballas, 46 and pl. lx.

⁶⁴ T. A. Wertime, 'The beginnings of metallurgy: a new look', Science 182 (1973), 875-87.

⁶⁵ N. I. Merpert, R. M. Munchaev, and N. O. Bader, 'The investigations of the Soviet expedition in Iraq, 1974', Sumer 33 (1977), 84 pl. xii, 2.

 $^{^{66}}$ The location of these mines is indicated in a map in J. M. Ogden, "The so-called "platinum" inclusions in Egyptian goldwork", $\mathcal{J}EA$ 62 (1976), 138–44.

QUELQUES ASPECTS DU MARIAGE DANS L'ÉGYPTE ANCIENNE*

Par S. ALLAM

Pour étudier l'institution du mariage dans l'Égypte ancienne il est nécessaire d'écarter toutes les conceptions modernes, car il existe des différences essentielles entre celles-ci et la conception égyptienne. Aujourd'hui, bien que le mariage relève principalement du droit privé, le droit canonique et également le droit public aspirent généralement à un règlement exhaustif. Celui-ci place sous surveillance assez rigoureuse les conditions, la formation et la dissolution du mariage, afin que le mariage, une fois contracté, se maintienne. La structure du mariage occidental révèle d'autre part une idée fondamentale, d'après laquelle les droits et les devoirs de chaque époux sont bien définis, soit l'un à l'égard de l'autre ou à l'égard d'autrui, en ce qui concerne non seulement les questions personnelles, mais aussi le patrimoine. La conception égyptienne était, en revanche, toute différente.

Selon la conception égyptienne, le mariage n'est certainement pas une situation juridique. Il n'est, semble-t-il, considéré que comme un acte social. Il en est de même dans plusieurs civilisations antiques, dans le monde hellénistique et même chez les Romains. Cet acte social consiste justement en la cohabitation d'un homme et d'une femme. Et, pour que cette union soit conjugale, elle doit s'établir sur la base d'un ménage conçu pour être perpétuel, dont le but essentiel est d'engendrer des descendants légitimes pour assurer le maintien de la famille. Ce sentiment conjugal doit se manifester aussi longtemps que le ménage existe et à travers toutes ses pratiques. On ne peut pas cerner ce sentiment dans un concept juridique, mais uniquement en s'aidant de catégories sociales. Une telle conception permet assurément aux coutumes de développer les principes réglant la formation, la dissolution et la protection du mariage.

La formation du mariage dans l'Égypte ancienne était d'ailleurs exempte aussi de tout caractère religieux, comme il l'est dans le monde islamique par exemple. En effet nous ne trouvons aucune trace d'un rôle assigné aux prêtres en matière de mariage.

Ainsi la nature séculaire et le caractère non-juridique du mariage nous expliquent-ils que les Égyptiens n'aient conçu pour le mariage, malgré son importance, aucun acte formel. Sans doute se sera-t-il développé un ensemble d'usages variés entremêlés de divers éléments sacramentaux et profanes en vue du mariage. C'est en ce sens qu'on prend un passage du conte de Chaemouase (de l'époque ptolémaïque, en écriture démotique) qui fait allusion à une cérémonie de mariage. I A signaler aussi le mariage

^{*} Texte intégral d'un exposé fait dans le cadre du groupe débattant le thème 'Loi et Coutume' au 2° Congrès International des Égyptologues (10–15 Septembre 1979 à Grenoble).

¹ Voir en dernier lieu E. Brunner-Traut, Altägyptische Märchen, no. 33; LdÄ 1, 899 sq. Pour la cérémonie des noces attestée dans les textes grecs voir C. Vatin, Recherches sur le mariage et la condition de la femme mariée

du roi Ramsès II avec une princesse de la famille royale hittite. A travers le texte on discerne une allusion aux noces.² Cependant, l'observance d'un tel usage n'est pas obligatoire. En effet, il n'est que le signe de l'établissement d'un lien conjugal, sans en être une condition nécessaire.

Sur le mariage égyptien nous sommes relativement bien informés grâce, entre autres choses, à de nombreux documents de l'époque tardive. Il s'agit en premier lieu d'arrangements matrimoniaux en écriture hiératique anormale et en démotique, qui furent rédigés depuis la XXIIème Dynastie, et plus précisément à partir du IXe siècle av. n. è. Puisqu'une institution telle que le mariage n'est pas soumise aux bouleversements politiques, maintes informations émanant de ces documents pourraient aussi bien être vraies pour les époques antérieure et postérieure, d'autant plus qu'un certain conservatisme se fait sentir dans la sphère familiale des Égyptiens. Au même titre nous allons recourir également aux sources en langues grecque et copte afin d'arrondir nos conclusions.

Vu l'espace qui m'est imparti, je ne peux pas aborder ici tous les critères du mariage chez les Égyptiens anciens ni toutes ses formes, pas plus que sa formation et les questions d'état civil. Pour cela on consultera les études qui sont actuellement à notre disposition.³ Je me bornerai donc à traiter particulièrement les régimes matrimoniaux et à exposer quelques généralités. Notre enquête doit commencer par présenter les renseignements qu'on peut tirer des documents en écriture égyptienne.

De récentes analyses ont démontré qu'une convention matrimoniale n'était pas exigée lors de la célébration d'un mariage. En effet, une telle convention pouvait être passée même quelques années après la conclusion du mariage. Il faut donc séparer de l'acte de mariage proprement dit la convention matrimoniale, même si les deux actes ont été passés en même temps. Cet état des choses se révèle encore dans l'Égypte de nos jours.

De toute façon, les documents de mariage se caractérisent par le fait qu'ils ne règlent que le régime matrimonial en vue d'un éventuel divorce, y compris quelques questions d'ordre successoral. C'est évidemment le réflexe d'une conception de mariage qui relève exclusivement de la sphère personnelle des époux. Par ailleurs, les documents de mariage ne s'expliquent pas par l'existence d'une loi quelconque, selon laquelle un tel document serait à établir lors de la célébration du mariage; nous n'en trouvons pas la moindre allusion dans notre documentation. Toutefois, le conte de Chaemouase nous apprend qu'une femme jouissant de prestige dans son milieu devait exiger de son conjoint l'établissement d'un régime matrimonial.⁵

à l'époque hellénistique, 1970, 207 sqq.; en outre Dunand-Schwartz in Museum Philol. Londiniense 2 (1977), 85 sqq.; et P. Oxy. 3313 (The Oxyrhynchus Papyri, 46 (1978)).

² Pour une traduction voir Pritchard, ANET³ (1969), 258; pour le texte égyptien voir maintenant K. Kitchen, Ramesside Inscriptions, 11 (5), 254.

³ Voir en dernier lieu LdÄ I, s.v. Ehe (avec la littérature précédente); II, s.v. Geschwisterehe.

⁴ P. W. Pestman, Marriage and Matrimonial Property in Ancient Egypt (1961), 25 sqq. et 52; Tanner, Klio 49 (1967), 15 sq. Contre cette opinion sont E. Lüddeckens, Ägyptische Eheverträge (1960), 352 et E. Seidl, Ägyptische Rechtsgeschichte der Saiten- und Perserzeit² (1968), 72 sqq.

⁵ Grunert, 'Zum Eherecht im ptolemäischen Ägypten', Das Altertum 21 (1975), 91.

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En regardant de près les documents de mariage, on constate qu'ils ne se présentent pas selon un schéma unique. En effet, leur teneur est subdivisée en clauses dont la composition et la suite peuvent varier d'un document à l'autre.⁶ Cette variation est due d'une part à différentes pratiques des notariats locaux; d'autre part, elle est aussi la conséquence d'une pluralité de règles émanant du droit matrimonial.⁷ La diversité de diplomatiques nous amène aussi à conclure qu'un choix de modèles se trouvait à la disposition des mariés. Ceux-ci avaient donc la liberté d'opter pour le régime qui leur convenait le mieux.

En examinant les régimes matrimoniaux contractés, il faudrait à mon avis prendre comme point de départ une séparation de biens,⁸ vu l'égalité de fait, on le sait bien, dont jouissait la femme dans l'Égypte ancienne.⁹ Quant aux biens qui entrent en ligne de compte, ils sont regroupés dans les textes à plusieurs titres. Dans la plupart des cas cependant, les époux n'en apportaient que quelques-uns. Or, les masses de biens mentionnées dans notre documentation sont classifiées dans le tableau suivant:

- 1. La donation-pour-la-femme (šp-n-shmt; appelée aussi šp-rnwt-shmt? = donation-pour-la-vierge¹⁰). C'est une donation apportée par l'époux et perçue par la mariée. Il s'agit d'un don pécuniaire, parfois avec une certaine quantité de céréales. La valeur en semble correspondre au prix d'un esclave à l'époque pharaonique, mais elle était modeste (souvent une fraction d'un deben d'argent) à l'époque postérieure. Avec le temps cette donation devint fictive dans certains cas, de façon que la femme ne devait la recevoir (complètement ou en partie) qu'en cas de divorce; il s'agissait donc d'une sorte d'assistance pour l'épouse divorcée. Au demeurant, cette donation n'est attestée que dans certains types de documents.¹¹
- 2. L'argent-pour-devenir-épouse (hd-n-ir-hmt). Cet argent se rencontre dans certains documents, dont le plus vieux date de l'an 517 av. n. è. Il s'agit d'un virement, en argent ou en nature, que la femme fait en faveur de son époux à l'occasion du mariage. Comparé avec la donation-pour-la-femme (šp), la valeur de ce virement semble être plus importante (allant jusqu'à 3 deben d'argent). Toutefois, on doute de la réalité de ce virement dans quelques cas, puisqu'il pouvait être effectué en partie seulement lors de la conclusion du mariage.
- 3. Les biens-personnels-de-femme (nktw-n-sḥmt). Depuis 364 av. n. è. est attestée cette masse de biens qui est assez considérable. Il s'agit en général, comme l'indique déjà la désignation, de mobilier et ustensiles de ménage (lit, récipients, miroir, four etc.); à quoi s'ajoutent des bijoux et des vêtements pour la femme (dont le plus important est l'objet nommé in-šn 'voile?', 13 lequel ne fait guère
 - ⁶ Voyez le tableau de clauses dressé par Lüddeckens, Eheverträge, 254 sqq.
 - ⁷ Pour les détails voir Lüddeckens, op. cit. 346 sqq.
- ⁸ Cette separatio bonorum ressort clairement du testament de Naunakhte (de l'époque ramesside): Allam, Hieratische Ostraka und Papyri aus der Ramessidenzeit (1973), 268 sqq.
- 9 Voir les articles intitulés 'Zur Stellung der Frau im alten Ägypten (in der Zeit des Neuen Reiches, 16.–10. Jh. v. u. Z.)', BiOr 26 (1969), 155 sqq., et Das Altertum 16 (1970), 67 sqq.
- ¹⁰ Pour cette appellation voyez Malinine, *OLZ* 58 (1963), 561. La qualité de vierge est soulignée d'ailleurs dans un document copte du vie/viie siècle (publié par L. MacCoull, *infra* n. 96), également dans les contrats arabes (*infra* n. 99).
- ¹¹ Type A et rarement type B d'après Pestman, Marriage, 13 sqq., 21 sqq., 108 sqq., 189.
- ¹² Le virement en est reconnu par le mari dans le type B des documents de mariage: Pestman, *Marriage*, 32 sqq., 102 sqq.
- Pour la traduction de cet objet voyez en dernier lieu F. de Cenival, Les Associations religieuses en Égypte d'après les documents démotiques (1972), 127 (avec la littérature précédente).

défaut dans les listes et dont le prix est assez élevé¹⁴); quelquefois on trouve en plus un instrument de musique ainsi que de l'argent (et plus rarement un âne). Ce sont visiblement des objets qu'une mariée apporte généralement dans le ménage; ils sont plus ou moins destinés à l'usage de la femme, qui en détient la propriété durant la communauté de vie. A remarquer que dans les listes le prix de tout objet est indiqué, et en fin de liste se trouve le prix global. ¹⁵ Il est singulier que cette modalité soit maintenue encore de nos jours en Égypte; il s'agit d'une coutume qui remonte apparemment à l'époque pharaonique.

- 4. Le capital senh, appelé dans la littérature 'alimentation'. 16 Conformément à cette appellation la femme est qualifiée de 'femme d'alimentation', et le document est désigné comme 'document d'alimentation' (sh-n-scnh). 17 Le capital en question est attesté depuis 365 av. n. è. par bon nombre de documents. Il était remis par la femme ou par son père à l'époux. Peut-être était-il, complètement ou partiellement, fictif de manière qu'il revienne à l'épouse en cas de divorce. La valeur de cette rétribution est de toute évidence considérable; en effet, elle varie et peut aller jusqu'à 100 deben d'argent. A son tour l'époux s'engageait pour un cetain entretien (de l'argent ainsi que des avantages en nature) en faveur de sa femme. Cet entretien est périphrasé par la construction cq-hbs (= aliments et vêtements); il devait échoir à la femme tous les ans durant la communauté de vie.18 Dans le document l'époux donne en outre une promesse de garantie suivant laquelle tout son avoir présent et futur est mis en gage ou remis à titre de sûreté. A côté de cela, il avait dans quelques situations à dresser un autre document, à savoir un écrit-de-paiement (sh-n-db;-hd), dans lequel il rend tout son avoir au profit de sa femme à titre fiduciaire; par ailleurs, un tel transfert n'est pas dangereux sur le plan économique du mari, tant qu'il ne divorce pas. Il est évident que dans ce régime rigoureux la position de la femme est particulièrement favorable. C'est probablement la raison pour laquelle il est apparu superflu que l'époux accusât reception des biens-personnels-de-femme (nktw-n-shmt) dans le même document.19
- 5. Les acquêts communs. Les documents de mariage en parlent dans la mesure où la dissolution du mariage et ses conséquences sont envisagées. Selon les textes un tiers d'acquêts au moins revient à l'épouse en cas de divorce. Ce règlement remonte, autant que nous le sachions, au Nouvel Empire.²⁰
- 6. Les biens-de-père-et-de-mère (*iḥt-it-mwt*). Cette masse de biens ne se rencontre pas fréquemment dans notre documentation. Toutefois, l'appellation semble bien indiquer soit l'avoir de l'époux apporté dans le ménage, soit les biens héréditaires qui lui sont échus pendant le mariage.²¹ De l'autre
 - ¹⁴ Un tableau en fut dressé par Pestman, Marriage, 95.
- ¹⁵ Une liste de ces objets peut se trouver dans n'importe quel type de documents: Pestman, Marriage, 91. Une pareille liste est attestée dans les documents araméens provenant d'Éléphantine (datant du v^e siècle av. n. è.): R. Yaron, Introduction to the Law of the Aramaic Papyri (1961), 50.
- 16 L'appellation 'dotation' fut récemment réfutée; voir Grunert, 'Zum Eherecht im ptolemäischen Ägypten nach den demotischen Papyri', ZÄS 105 (1978), 118 n. 22.
 - ¹⁷ Il s'agit du type C de documents de mariage: Pestman, Marriage, 37 sqq. et 104 sqq.
- 18 Pour une récente discussion voyez T. Handoussa, 'Remarks on 'q-hbs', GM 36 (1979), 29 sq. Une réminiscence de ce capital se trouve dans les arrangements en arabe; voir A. Grohmann, Arabic Papyri in the Egyptian Library, 11 (Cairo, 1936), nos. 139-41; Grohmann, Der Islam 22 (1935), nos. 13/14. Selon un de ces arrangements, l'époux devait le montant de 80 dinars; il en a payé 10 et un acompte de 7 dinars échoirait chaque année (durant dix ans). Cf. en outre le document copte publié par Thompson, PSBA 34 (1912), 173 sqq.
 - 19 Grunert, loc. cit. 119.
- ²⁰ Allam, HOPR 325; Pestman, Marriage, 139, 153, 157; Seidl, Ägyptische Rechtsgeschichte der Saiten- und Perserzeit² (1968), 75; id., Ptolemäische Rechtsgeschichte² (1962), 177. Dans P. Turin 2021 (du Nouvel Empire) est mentionnée une masse de biens appelée sfr pour la femme; voir Allam, HOPR, 324 n. 28.
 - ²¹ Cf. la maison-de-père-et-de-mère mentionnée dans P. Turin 2021: Allam, HOPR, 321 n. 26.

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côté, une pareille masse n'est pas mentionnée explicitement dans les documents pour la femme. Cependant, nous savons bien qu'elle pouvait avoir des biens personnels (telle que propriété foncière) par dévolution héréditaire ou comme suite à des premières noces.²² Cette masse de biens ne fut certainement pas affectée du mariage comme tel.

Quant aux biens apportés par la femme en mariage, il semble bien que l'époux pouvait les administrer et les utiliser. Sans doute cet avoir conjugal contribuait-il avant toute chose à la fondation ou à l'amélioration du foyer conjugal. Outre cela, il avait aussi la fonction d'une assistance économique pour la femme en cas de dissolution du mariage.

Pour assurer les intérêts patrimoniaux de sa femme, l'époux devait prendre différentes mesures. Il pouvait en être tenu à concurrence de sa fortune personnelle présente et future. En effet, sa fortune était souvent remise en qualité de sûreté eu égard à la subsistance de sa femme. Et sur le plan successoral il pouvait prendre des dispositions en faveur de ses descendants. En outre, l'épouse pouvait entrer en ligne de compte en qualité d'héritière intermédiaire; en ce cas les descendants ne pouvaient hériter qu'à travers sa femme.²³ Dans ces circonstances l'époux ne pouvait plus disposer de l'avoir conjugal au profit d'autrui sans l'accord de sa femme et de ses descendants. Par-dessus le marché, c'étaient ses proches (son père ou sa mère par exemple) qui venaient quelquefois se porter garants.²⁴

Il va sans dire que la subsistance de l'épouse durant le mariage incombait en principe à l'époux; celui-ci devait laisser sa femme participer à son train de vie.²⁵ Cet état des choses est perceptible dans les documents au point que maint document de mariage est désigné par la formule 'l'écrit-d'aliments-et-vêtements-pour-l'épouse' (sħ-hmt cq-hbs).²⁶Soit dit en passage, la subsistance convenue dans un document-d'alimentation (sħ-n-scnħ) était souvent plus élevée que celle de tout autre régime matrimonial.

Cependant, l'un des documents de mariage (conservé au Musée du Louvre)²⁷ soulève la question d'un mariage à l'épreuve. Dans ce texte l'époux déclare nul et non avenu un document établi pour l'épouse sept ans avant; ce dernier document serait remplacé par le présent. Évidemment le lien conjugal comme tel n'est pas touché par le nouveau document; on peut dire avec certitude que la femme en question était toujours la même. Il se peut donc qu'à l'expiration de sept ans l'époux ait été tenu d'établir définitivement les droits matrimoniaux de son épouse aussi bien que la succession de ses enfants. Il est intéressant de noter que ce délai de sept ans se rencontre dans deux textes

Marriage, 145.

²² Allam, HOPR, 272 (testament de Naunakhte); Pestman, Marriage, 143 sqq.

²³ Pestman, Marriage, 117 sqq.; Tanner, Klio 49 (1967), 30 sqq. Il convient de signaler aussi les contrats d'entretien viager. Dans un tel document l'époux transmet (parfois testamentairement) tout son avoir à sa femme qui, à son tour, s'engage à prendre soin de lui aussi après son décès: W. Spiegelberg, Ägyptische Verpfründungsverträge mit Vermögensabtretungen (1923); Pestman, Marriage, 122 sq.

²⁴ Allam, 'Les obligations et la famille dans la société égyptienne ancienne', *Oriens Antiquus* 16 (1977), 92 sq. ²⁵ La subsistance de l'épouse peut être évoquée dans n'importe quel type de documents de mariage: Pestman,

²⁶ Lüddeckens, Eheverträge, 49 (P. Mainz).

²⁷ Ibid. 14 sqq.; Pestman, Marriage, 27 (P. Louvre 7846 de l'an 548/46 av. n. è).

datant du Nouvel Empire:²⁸ dans l'un un beau-père allouait à son gendre une certaine quantité de blé pendant sept ans; dans l'autre texte une femme mariée assumait sans domestique les travaux du ménage durant sept ans. Il s'ensuit qu'une période d'essai est dans le domaine du possible. Le délai expiré, l'époux avait alors à former définitivement son régime matrimonial. A remarquer du reste que ces trois textes sont de provenance thébaine; peut-être avons-nous ici affaire à une coutume locale.

Passons maintenant à la dissolution du mariage. Le mariage peut être dissous soit par la mort, soit par le divorce. Il va de soi que le conjoint, homme ou femme, le lien conjugal rompu, pouvait contracter un nouveau mariage. Ce qui nous intéresse ici cependant, c'est la dissolution du mariage par divorce.

En cette matière on constatera tout d'abord l'absence totale d'un organisme de surveillance. En fait, ni les ecclésiastiques ni l'État ne s'occupaient de cet acte; ils ne s'intéressaient pas à toute la matière de mariage, nous l'avons déjà souligné. Nous ne serions donc pas dans l'erreur en affirmant que le divorce était un acte privé aussi bien que la formation du mariage. Et il semble bien que seule l'annulation de l'union conjugale ait été suffisante pour dissoudre le mariage; la séparation de fait entre les conjoints créait donc la présomption de divorce. Or, la séparation des conjoints pouvait se réaliser par consentement mutuel. Cependant, selon le droit matrimonial de jadis, la séparation pouvait se faire aussi bien par la répudiation, c'est-à-dire unilatéralement et sans considération pour la volonté de l'autre conjoint.²⁹ Non seulement l'époux, mais aussi l'épouse pouvait annuler le mariage.³⁰ En effet, les clauses attestées dans les documents de mariage et concernant le divorce prévoient les deux cas en même temps, mais bien sûr avec des conséquences différentes.

Quant aux motifs de divorce, quelques-uns transparaissent dans la documentation: par exemple une antipathie naissante, un amour éprouvé envers une tierce personne, un adultère commis par la femme,³¹ son infertilité etc. Bref, la dissolution du mariage s'en remet à l'appréciation des conjoints, les motifs en pouvant être justifiés ou non. Apparemment la liberté de divorce était de règle. Néanmoins, le lien conjugal était conçu en principe comme perpétuel, malgré l'absence de toute intervention religieuse ou juridique destinée à assurer sa permanence. Cet état des choses témoigne par ailleurs d'un haut niveau de la moralité des ménages. Sans doute les mœurs austères assuraient-elles la stabilité des ménages non moins que les commandements religieux et juridiques dans une autre société.

²⁸ Allam, HOPR, 28 (O. Berlin 10629); Gardiner, JEA 21 (1935), 143 n. 3 (P. Cairo 65739).

²⁹ Pour la terminologie voyez Pestman, *Marriage*, 60; Tanner, *Klio* 49 (1967), 20; Théodoridès, *BSFE* 47 (1966), 15. Ajoutez-y le vocable $n\underline{t}^{c}$; Allam, HOPR, 41 n. 3.

³⁰ Cette capacité est attestée dans les documents à partir de l'époque perse. Sans doute remonte-elle plus haut dans le temps. Quant à la capacité de divorcer attestée pour la femme juive à Éléphantine, elle est vraisemblablement due à l'influence du milieu égyptien: Yaron, *Introduction to the Law of the Aramaic Papyri*, 53 sq.

³¹ Dans l'antiquité, ainsi que d'après les religions, seule la femme, en commettant un adultère, puisse compromettre son ménage. Cela paraît conforme à une conception de mariage dont le but essentiel est d'engendrer des enfants légitimes. Encore le Code de Napoléon ne considère pas un rapport extra-conjugal du mari comme violation de devoirs conjugaux de celui-ci. Pour l'adultère dans l'Égypte ancienne voir les éléments réunis s.v. Ehebruch in LdÄ 1, 1174 sq.

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Une fois le mariage dissous, l'époux pouvait remettre à sa femme un document-dedivorce.³² Un tel document se caractérise par le fait que le mari renonce à son droit à l'union conjugale, en même temps il affirme le droit de sa femme à se remarier. Cette clause de remariage semble impliquer sans équivoque la validité de divorce. Rappelons à ce propos qu'un document de divorce est purement de nature déclaratoire; sa fonction était de prouver que la séparation a déjà eu lieu. Selon toute apparence un tel document n'avait aucun caractère constitutif; et vu le peu de documents qui nous sont parvenus en cette matière,³³ il paraît que le divorce ne nécessitait même pas la création d'un document quelconque.³⁴

Il est certain qu'un divorce à la légère fait naître, outre la réprobation morale, une injustice grave envers le conjoint répudié. C'est pourquoi on cherchait à compenser cette injustice par des mesures d'ordre économique. Vu la liberté de divorce, il apparaissait sans doute équitable d'envisager ses conséquences patrimoniales au moment même où le régime matrimonial fut contracté; il est justifié de restreindre la liberté de divorce en le sanctionnant dans le domaine du patrimoine pour que les ménages se maintiennent de façon durable. Dans ces circonstances la liberté de divorce ne paraît être que de nature théorique, car dans la pratique le divorce était considérablement réduit par ses effets patrimoniaux. Autrement on ne saurait guère concevoir le caractère durable des ménages dans l'Égypte ancienne.

Il convient maintenant de considérer les effets de divorce. Étant donnée la non-existence de dispositions légales, le divorce comme le mariage relevaient essentiellement du droit coutumier. En effet, ses conséquences patrimoniales dépendaient dans une large mesure du régime dotal stipulé auparavant. D'après les documents du mariage matrilocal³⁵ l'époux répudié par sa femme devrait recevoir la moitié de la donation-pour-la-femme (šp). De même, les acquêts communs seraient à partager: dans un cas l'époux en retiendrait un tiers; dans un autre cas il aurait, en plus, le droit à tous les acquêts communs.³⁶ Toutefois, ces deux documents ne prévoient pas un divorce provoqué par le mari.

Quant aux documents du mariage patrilocal, ils mettent en évidence une abondance variée de mesures. Selon le régime contracté la femme répudiée, sans l'avoir mérité, aurait le droit à quelques biens des masses suivantes (bien entendu à part son patrimoine personnel): ce sont la donation-pour-la-femme (šp), peu importe qu'elle soit fictive ou qu'elle ait été en réalité donnée par le mari (dans un cas la femme en recevrait le

³² Ce genre de documents est attesté depuis le VI^e siècle av. n. è. Voir W. Spiegelberg, *Demotische Scheide-briefe* (1923); Pestman, *Marriage*, 71 sqq.

³³ Ils sont au nombre de 10 (datant de l'espace 542–100 av. n. è. environ), dont la provenance est la région thébaine (Thèbes-Gebelein). La teneur du texte est presque la même dans tout document. Voir Pestman, *Marriage*, 205.

³⁴ Pestman, *Marriage*, 73 sq.

³⁵ Cette forme d'union conjugale est attestée dans deux documents de mariage de l'époque perse. D'autres textes nous font penser qu'elle fut pratiquée aussi à l'époque antérieure, notamment au Nouvel Empire. A remarquer que tous les textes en question sont de provenance thébaine; voir 'Eheformen' in LdÄ 1, 1167 sq. Cette forme existait également chez les Assyriens et chez les Hittites (Reallexikon der Assyriologie, 11, s.v. Ehe); en outre l'Ancien Testament en fait mention (Genesis 29; Exodus 2).

³⁶ Lüddeckens, *Eheverträge*, 23 (P. Libbey) et 19 (P. Berlin 3078). A corriger le schéma esquissé par Pestman, *Marriage*, 190.

double, mais elle la retiendrait seulement à moitié si elle répudie son mari); viennent ensuite l'argent-pour-devenir-épouse (hd-n-ir-hmt), les biens-personnels-de-femme (nktw-n-shmt) ou leur valeur, le montant-d'alimentation (scnh), une part du patrimoine personnel de l'époux (iht-it-mwt = biens-de-père-et-de-mère) (sinon la totalité de cette masse reviendrait aux enfants issus du mariage), une part (un tiers au moins) des acquêts communs — le cas échéant tous les acquêts (attesté depuis le Nouvel Empire), 37 et éventuellement une pénalité de divorce (le double au cas où l'époux envisageait de se remarier). 38 Naturellement ce schéma varie suivant la situation, et surtout dans le cas où le divorce était provoqué par la femme. 39 Si le mari était incapable de s'acquitter, il était tenu à passer un document-d'éloignement (sh-n-wi, ἀποστάσιον) au profit de sa femme, dans lequel il approuvait la cession définitive de son patrimoine. 40 Quant au domicile conjugal, la femme divorcée continuait à y demeurer dans certains cas. 41

A part cela, la femme pouvait avoir au même titre une créance alimentaire vis-à-vis de son ex-époux. Au cas où celui-ci aurait reçu l'argent-pour-devenir-épouse (hd-n-ir-hmt), il serait tenu à lui assurer la subsistance convenue jusqu'à ce qu'il le lui rende. Au cas où il aurait accueilli le montant-d'alimentation (srnh), il aurait à subvenir aux besoins de sa femme jusqu'à ce qu'elle demande la restitution de ce montant et le reçoive. 42

Ainsi un ménage était-il dans la pratique, sinon en théorie, quasi inséparable, parce que du patrimoine de l'époux il ne lui resterait presque rien. En effet, ses engagements pesaient si lourd sur sa situation économique que la stabilité du ménage était normalement assurée. C'est de cette manière que le droit coutumier cherchait à établir un équilibre pour compenser la rigueur et l'iniquité résultant d'un divorce abusif. Dans ces circonstances un mariage polygame paraît peu probable, du fait de la multiplicité des engagements qui en résulteraient. Cela pourrait nous expliquer la généralisation du mariage monogame dans l'Égypte ancienne.⁴³

Pourtant, le divorce fut pratiqué parfois.⁴⁴ Par là maint époux fut quasi ruiné sur le plan économique.⁴⁵ En revanche, la situation économique de la femme était relativement

³⁷ Vide supra, n. 20; pour un cas où une femme renonce à sa part voir U. Kaplony-Heckel in Forschungen und Berichte 10 (1968), 171.

³⁸ Pestman, *Marriage*, 109 et 155 sqq. La pénalité dans les documents de type A est en moyenne le double du montant de la donation-pour-la-femme (§p), elle peut aller jusqu'à 50 fois autant; voir Pestman, *Marriage*, 156 n. 5. D'autre part, une pénalité est prévue dans certains cas à la charge de la femme provoquant le divorce: elle perdrait une partie (la moitié) de sa donation-pour-la-femme (§p).

³⁹ Elle obtiendrait, à part son patrimoine personnel, quelques-unes des masses suivantes: une part ou bien la totalité de la donation-pour-la-femme (šp), l'argent-pour-devenir-épouse (hd), les biens-personnels-de-femme (nktw), le montant d'alimentation (s'nh), éventuellement aussi une part (un tiers en moyenne) des acquêts communs: Pestman, Marriage, 160.

⁴⁰ Lüddeckens, Eheverträge, 349.

⁴¹ Pestman, Marriage, 157 sq.

⁴² Ibid. 70 et 146.

⁴³ Sur la monogamie et la polygamie voyez 'Eheformen' in $Ld\ddot{A}$ 1, 1166 sq.; en plus Kanawati, 'Polygamy in OK?', SAK 4 (1976), 149 sqq.; Vachala, 'Polygamie für das AR?', $Z\ddot{A}S$ 106 (1979), 87 sq; Simpson, 'Polygamy in MK', $\mathcal{J}EA$ 60 (1974), 100 sqq.; Schulman, 'Diplomatic Marriage in NK', $\mathcal{J}NES$ 38 (1979), 177 sqq.; R. Taubenschlag, The Law of Greco-Roman Egypt in the Light of the Papyri (332 B.C.-640 A.D.) (1955), 102 sqq. Dans l'ensemble le mariage est monogame, tant dans l'ordre égyptien que dans l'ordre grec.

⁴⁴ Tanner, Klio 49 (1967), 21 se demande si le martelage des noms et figures de femmes dans les tombeaux n'était pas en conséquence de la répudiation de la femme en question.

⁴⁵ Seidl, Aegyptus 49 (1969), 54 en révèle un exemple concret.

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favorable, semble-t-il. A côté de ces considérations bien pessimistes, nous prenons connaissance de cas heureux où l'époux lègue son patrimoine à sa femme (et éventuellement à ses enfants). Ce faisant, il lui assure des moyens d'existence en cas de veuvage.

Ce sont les effets juridiques du mariage, un mariage qui était laissé à la libre initiative de l'individu sans aucune intervention des autorités publiques ou ecclésiastiques. Passons maintenant aux documents grecs en matière de mariage.

A travers l'abondance des papyri qui nous sont parvenus, nous sommes suffisamment instruits sur plusieurs aspects du mariage en Égypte pendant l'époque grécoromaine. Il va de soi que nous n'en rechercherons, dans le cadre de ce bref exposé, que quelques détails. Il convient tout d'abord d'évoquer la nature de cette documentation. Or, celle-ci n'émane pas exclusivement des ressortissants grecs, qui vinrent s'installer aux bords du Nil à la suite de la conquête macédonienne. En effet, elle pouvait, en partie du moins, provenir d'un milieu social où prévalait la civilisation hellénistique. Dans un tel milieu les autochtones se servaient volontiers, entre autres choses, du droit privé appliqué par la population grecque, mais après l'avoir adapté à leurs propres besoins. Le droit d'un tel milieu, hellénisé ou hellénisant, pourrait donc révéler bien des caractéristiques propres aux conceptions et pratiques grecques, il pourrait d'autre part dissimuler pas mal d'éléments du droit égyptien proprement dit. De même, on s'attendrait à ce qu'il y ait quelques rapports entre les deux systèmes juridiques. De plus, des influences accrues et réciproques pourraient se manifester dans la documentation de ce milieu, les deux côtés étant sans doute pénétrables aux influences externes. A ce propos, il faut se défendre d'adopter l'opinion suivant laquelle les deux systèmes fusionnaient de telle manière que le droit de cette époque-là n'était qu'un droit mixte. Certes, un fait indéniable est que des influences se dessinaient de part et d'autre. Mais de telles influences ne semblent pas avoir abouti à une fusion totale, dont les caractéristiques du droit, tel qu'il transparaît à travers les papyri de l'époque gréco-romaine, seraient les produits.46 Ceci dit, notre analyse se fera avant tout dans le but de dégager tantôt les éléments semblables, tantôt l'empreinte égyptienne qu'a reçue le droit matrimonial des ressortissants grecs.

Il convient d'effleurer d'abord la formation du mariage à Athènes, ce qui semble avoir été à peu près la même dans tout le monde grec. Or, au temps des orateurs la formation du mariage consistait en la conclusion d'un acte correspondant $(\epsilon \gamma \gamma \psi \eta / \epsilon \gamma \gamma \psi \eta \sigma \iota s)$ suivie de la cohabitation $(\gamma \dot{\alpha} \mu o s / \epsilon \kappa \delta o \sigma \iota s)$ du couple en question. Par là la formation en était l'affaire des curateurs des deux époux $(\kappa \psi \rho \iota \iota \iota)$ de deux $o \dot{\iota} \kappa \iota \iota$) ou bien du futur époux avec le curateur de la femme, celle-ci n'étant que l'objet du contrat. Cette formation solennelle par l'acte de l'engyé était la seule forme approuvée par les lois,

⁴⁶ Cette conclusion est également valable pour l'époque romaine, les droits des grecs et des autochtones étant tolérés par les Romains, à condition de ne pas contredire les principes considérés par les Romains comme impératifs pour des raisons morales ou politiques. Voyez à ce sujet Modrzejewski, 'La règle de droit dans l'Égypte ptolémaïque', Essays in Honor of C. B. Welles (1966), 125 sqq.; id., 'La règle de droit dans l'Égypte romaine', Proceedings of the 12th International Congress of Papyrology (1970), 317 sqq.; Cl. Préaux, 'Sur l'étanchéité des droits dans l'Égypte hellénistique', Le droit égyptien ancien — Colloque 1974, 183 sqq.; id., Le monde hellénistique, 11 (1978), 598 sq.

⁴⁷ A. R. W. Harrison, The Law of Athens, 1 (1968), 3 sqq.

tandis qu'une union dépourvue de formes tombait en concubinage de quelque sorte. A l'époque hellénistique cependant les conditions sociales se transformèrent de manière que seule la cohabitation perpétuelle et sans forme fut reconnue en tant que mariage légal.⁴⁸ C'est ce qui transparaît à travers notre documentation grecque. En effet, les textes grecs (dès le début du II^e siècle av. n. è.) nous montrent bel et bien que l'acte de mariage ($\tilde{\epsilon}\kappa\delta\sigma\sigma\iota s$ = remise en mariage) se faisait en vérité par la mariée même à l'égard de son époux, c'est-à-dire par consentement mutuel (à l'exclusion d'autrui), comme la puissance ($\kappa\nu\rho\iota\epsilon\iota a$) du curateur ($\kappa\nu\rho\iota\epsilon s$) de la mariée tomba déjà en simple curatelle de sexe.⁴⁹ Cet état de choses correspond à ce qui était de règle en Égypte depuis longtemps. En effet, depuis le règne du roi Amasis les documents de mariage en langue égyptienne attestent que les conjoints, égaux en droits, contractaient, selon toute probabilité, eux-mêmes leur mariage.

Portons notre attention maintenant sur les contrats de mariage en langue grecque.⁵⁰ Or, un fait certain est que le mariage était de fait dans bien des cas avant même qu'un contrat quelconque eût été passé.51 Dans ces circonstances un contrat n'avait pas de valeur constitutive; sa conclusion n'était certainement pas conditio sine qua non pour former le mariage, d'autant moins que seule la cohabitation perpétuelle du couple était considérée à cette époque comme le trait caractéristique du mariage, à tel point qu'un mariage de fait dit non-écrit ($\partial \gamma \rho \dot{\alpha} \phi \omega_S \sigma v \nu \epsilon \hat{v} v a \hat{v}$) n'en existait pas moins. 52 En effet, les contrats de mariage de tradition grecque datant de l'époque hellénistique ne portent que sur des arrangements patrimoniaux, au même titre que ceux en langue égyptienne; à noter en passant qu'un contrat de mariage sans règlement patrimonial n'est pas attesté jusqu'à présent. Par ailleurs, les documents ne font pas la moindre allusion à des dispositions législatives ayant trait au mariage, ce qui est conforme aux données fournies par les textes égyptiens. Une loi exclusive n'existant pas, cette matière ressortissait forcément du droit coutumier. Dans de telles circonstances les époux désirant établir leur régime matrimonial avaient recours aux usages locaux; et le contenu du contrat pouvait être fixé en général suivant leur volonté.

A l'époque hellénistique 53 se rencontre dans les contrats un terme technique, qui est pour ainsi dire le cœur du régime dotal : c'est la *pherné* $(\phi \epsilon \rho \nu \hat{\eta})$. 54 Par ce terme sont désignés les biens dotaux apportés

- 48 H. J. Wolff, Beiträge zur Rechtsgeschichte Altgriechenlands und des hellenistisch-römischen Ägypten (1961), 191 sqq.; C. Vatin, Recherches sur le mariage et la condition de la femme mariée à l'époque hellénistique (1970), 170 sqq.
- ⁴⁹ Cf. le contrat de mariage publié par Kiessling in *Proceedings of the 12th Intern. Congr. of Papyrology* (1970), 243 sqq., ainsi que P. Ien. 904 publié par Uebel, *Archiv für Papyrusforschung* 22–3 (1974), 89 sqq. Le concours du κύριος, quand il était question d'une femme passant un acte juridique, est devenu de plus en plus une simple formalité; peut-être était-il facultatif. A l'époque byzantine cette mesure tomba complètement en désuétude: Vatin, loc. cit.
- ⁵⁰ On trouvera une liste des contrats de mariage et des actes de divorce apud O. Montevecchi, Aegyptus 16 (1936), 3 sqq. Cette liste fut complétée par R. Taubenschlag, The Law of Greco-Roman Egypt in the Light of the Papyri (332 B.C.-640 A.D.), 2^e édition (1955), 101 sqq.
- ⁵¹ G. Häge, Ehegüterrechtliche Verhältnisse in den griechischen Papyri Ägyptens bis Diokletian (1968), 233 et 284; Vatin, op. cit. 176 sq.
- 52 H. J. Wolff, Written and Unwritten Marriages in Hellenistic and Postclassical Roman Law (1939), 48 sqq.
- 53 Les règlements des biens dotaux restent en principe les mêmes pendant les premiers siècles de la domination romaine.
 - 54 A partir du 1er siècle de n. è. s'emploie de plus en plus le terme προίξ en tant que synonyme à tel point

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par la mariée. Dans ce système particulier cet apport est destiné au foyer conjugal pour contribuer à la subsistance familiale qui en principe incombe au mari. Ces biens ($\phi \epsilon \rho \nu a i$) représentent un trousseau se composant de: bijoux, vêtements, mobilier, ustensiles et parfois bétail. Dans les listes ces biens sont spécifiés chacun soit par son prix, soit par son poids (du métal précieux). La disposition de ces biens, se trouvant dans le foyer conjugal, fut d'abord accordée au mari. Mais son pouvoir fut restreint dès le II siècle av. n. è., vraisemblablement sous l'influence de l'ambiance égyptienne.

Dans leurs clauses bien des contrats dévoilent quelques mesures de sûreté prises par l'époux en vue d'une éventuelle restitution de la pherné en faveur de la femme, telles que cautionnement et convention de garantie moyennant un droit réel par lequel des biens fonciers voire tout l'avoir de l'époux sont en gage. Dans la plupart des cas, cependant, suffisaient largement les déclarations de garantie données par un tiers (par exemple les parents), qui sont ainsi des garants solidaires avec le mari. En outre, nous apercevons dans quelques contrats des dispositions prises par le mari sur le plan successoral. A l'époque romaine nous trouvons le cas où un mari met en gage tous ses biens présents et futurs, et établit en faveur de sa femme un document-de-paiement (πρόπρασις); s'il ne s'acquitte pas en cas de divorce, il devra dresser un document-d'éloignement (συγγραφὴ ἀποστασίου), par lequel ses biens alors passeront définitivement à la femme. ⁵⁸ Toutes ces mesures sont sans doute dues à l'influence du milieu égyptien où l'époux parfois mettait sommairement tout son avoir en gage.

Au même titre une somme d'argent, souvent en tant que pherné (ou une partie de celle-ci), est apportée par la mariée. Et dans certains \cos^{59} il est convenu que l'époux reçoit ce capital pour la durée du mariage, en contrepartie il doit à sa femme (qualifiée dans ce cas de $\gamma \nu \nu \dot{\eta} \tau \rho o \phi \hat{\iota} \tau \iota s$) un certain entretien. Dans ce cas et la somme et l'entretien sont garantis par lui moyennant un droit réel. Selon toute vraisemblance ce capital⁶⁰ présente des caractères identiques à ceux du capital-d'alimentation (senh) attesté dans les documents démotiques. Il est certain qu'il y a tant dans les contrats grecs que dans les documents égyptiens un rapport d'ordre économique entre le capital et la subsistance

que dès le début du IV^e s. le terme $\phi \epsilon \rho \nu \eta'$ s'efface entièrement dans les contrats; Häge, op. cit. 209 sq. Étant donnée la provenance quasi exclusivement égyptienne, on ne peut pas ne pas se demander s'il ne s'agissait pas là d'un système particulier, lequel était l'aboutissement d'un développement de l'individualisme. Ce développement était dû, d'une part, à la dissolution des structures familiales grecques anciennes (à la base desquelles se trouvait l'oikos) et hâté, d'autre part, par l'exemple de l'ambiance égyptienne. Cf. Modrzejewski, Zeitschrift der Savigny-Stiftung für Rechtsgeschichte (romanistische Abt.) 87 (1970), 70 sqq.; Vatin, Recherches sur le mariage, 200.

Par ailleurs, le terme $\phi \epsilon \rho \nu \dot{\eta}$ était en usage en dehors de l'Égypte au v° s. av. n. è. Suivant les auteurs classiques, il s'employait dans les milieux non-grecs. Les grecs mêmes, à Athènes et ailleurs, employaient le terme $\pi \rho o \dot{\ell} \dot{\xi}$ pour désigner une masse de biens apportée par la mariée à l'occasion de son mariage. Cette masse, dont seul le mari pouvait disposer à son gré, comprenait des biens fonciers, esclaves ainsi que de l'argent. Toutefois, cette masse n'était pas relative aux biens dotaux; elle devait échoir en cas de restitution aux fils de la femme ou à sa famille d'origine (son oikos paternel). Voyez Häge, op. cit. 19 sqq. et passim.

Le terme $\phi \epsilon \rho \nu \eta'$ (et aussi $\pi a \rho \dot{a} \phi \epsilon \rho \nu a$) se rencontre également dans le droit de l'Empire romain. Il pouvait désigner l'ensemble des res extra dotem ou seulement quelques-uns de ces biens, quand ils sont administrés par le mari ou mis en quelque sorte à sa disposition. D'autres termes existaient aussi: $\tilde{\epsilon} \delta \nu a$ (donation pour la mariée, attestée dès le début du IVe s. de n. è.), $\delta \omega \rho \dot{\nu} \phi \iota \nu \nu$ et $\dot{\eta} \pi \rho \dot{\nu} \gamma \dot{a} \mu \nu \nu \nu$ $\delta \omega \rho \epsilon \dot{a}$ (donatio ante nuptias) qui sont identiques; en plus $i \sigma \dot{\alpha} \eta \rho \iota \nu \nu \nu$ Voyez Häge, op. cit. 17 n. 48. Quant à la $\pi \rho \dot{\alpha} \dot{\alpha} \dot{\alpha} \rho \iota \nu$ ce terme veut dire que la pherné en question a été ultérieurement majorée; elle était due peut-être à l'influence égyptienne; Häge, op. cit. 250 sqq. et 282 sqq.

- 55 Même si quelques parents sont les vrais donateurs.
- ⁵⁶ La procédure d'évaluer les biens matrimoniaux est attestée aussi à Athènes; Harrison, op. cit. 46 sqq.
- ⁵⁷ Häge, op. cit. 71.
- 58 Ibid. 184.
- ⁵⁹ Pour ces cas voyez Häge, op. cit. 113 sqq. et 184.
- 60 Häge, op. cit. 104 sqq. Ce capital pouvait être appelé προίξ à l'époque ptolémaïque; ibid. 46 et 123.

contractée pour la femme. Cependant les contrats grecs ne laissent pas entrevoir ce rapport comme le font les textes égyptiens. En fait, ces derniers sont plus orientés sur les éléments patrimonaiux et sur les mesures de sécurité en faveur de la femme.

Une question cruciale est maintenant de savoir si la pherné était remise au mari à titre de propriété. Vu les mesures de sûreté prises par l'époux et la restriction de son pouvoir de disposition, et pour d'autres raisons, il semble bien que le mari jouissait seulement de la faculté d'utiliser et d'administrer cette masse de biens avec la femme (Verwaltungsgemeinschaft), comme il le faisait d'ailleurs suivant les arrangements en langue égyptienne. Rappelons à ce propos que dans bien des cas le mari, à l'époque gréco-romaine, n'était autorisé à disposer de la pherné qu'avec l'accord de sa femme (Verfügungsgemeinschaft); en effet celle-ci avait un droit d'opposition, lequel a pour conséquence l'embrouillement (Verfangenschaft) de l'avoir du mari, ce qui ressemble à une sûreté. Notre opinion est corroborée également du fait que l'époux (à l'époque ptolémaïque) ne pouvait disposer de l'hyparchonta (ὑπάρχοντα = avoir de l'époux, y inclus l'apport dotal de sa femme) au détriment de celle-ci. Il convient de signaler en outre qu'en cas de restitution, la pherné est à recueillir par la femme. De plus, la pherné, ne constituant aucune part de la succession du mari, revient en cas de sa mort à sa femme et, le cas échéant, aux héritiers de celle-ci (descendants consanguins). 63

En dehors de cela, il y a une masse, attestée rarement d'ailleurs, qui comporte exclusivement les biens fonciers aussi bien que les esclaves, s'il en est question. Cette masse s'insère parfois dans le régime matrimonial et s'appelle à l'époque romaine prosphora (προσφορά). 64 Toutefois, c'est la femme qui en reste propriétaire. De l'autre côté, les documents démotiques ne parlent pas d'une masse de ce genre, quoique la femme égyptienne puisse avoir des biens fonciers à titre personnel. On a songé cependant que cette masse a pu faire l'objet d'un document-d'alimentation (sḥ-n-sơnḥ), dans lequel un certain capital est remis à l'époux. 65 Cette opinion ne paraît pas acceptable, étant donné qu'un tel capital et la prosphora sont énumérés en même temps dans les contrats. Pour ma part, il

⁶¹ C'est dans ce sens qu'il faudrait interpréter le statut de créancière privilégiée (privilegium exigendi, πρωτοπραξία) (sur celle-ci voir Kupiszewski, Studien zur Papyrologie und antiken Wirtschaftsgeschichte, Festschrift F. Oertel (1964), 68 sqq.) dans l'édit du préfet Tiberius Julius Alexander de l'an 68 (G. Chalon, L'édit de Tiberius Julius Alexander — Étude historique et exégétique (1964); cf. SDHI 41 (1975), 587 sq.). Dans cet édit le préfet confirme le droit de la femme égyptienne sur les biens dotaux, même en concurrence avec le fisc au cas où celui-ci procède à une exécution sur ces biens, tacitement aussi contre tout autre créancier (comme il en était à l'époque ultérieure; cf. Häge, op. cit. 169 sq.), vu sa qualité de propriétaire, semble-t-il (Cl. Préaux, 'Le statut de la femme à l'époque hellénistique principalement en Egypte', Recueils de la société Jean Bodin 11. La femme, 1ère partie (1959), 156 sq.). Pour la littérature voyez Häge, op. cit. 62; en outre BGU 2070; Maehler, 'Neue Dokumente zum Drusilla-Prozeß', Proceedings of the 12th Intern. Congr. of Papyrology, 270 sq. L'opinion selon laquelle seuls les profits économiques des biens dotaux reviennent à la femme sans qu'elle en soit propriétaire ne paraît pas convaincante. Et, pourquoi suggérer un malentendu du préfet sur ce point, quand il vise d'une manière implicite le droit du mari aux usages et administration des biens dotaux? En outre, le fait qu'au cours du IVe siècle de n. è. προίξ et dos étaient des termes identiques n'est pas forcément dû à la qualité de la pherné en tant que propriété du mari. Pourquoi, finalement, rapprocher la pherné hellénistique de la προίξ en Grèce de l'époque classique pour aboutir au titre de l'époux propriétaire de celle-là? Au demeurant ce titre de l'époux propriétaire de la προίξ à Athènes fut réfuté; Harrison, The Law of Athens, I (1968), 52 sqq.

⁶² Pour la κατοχή de la femme égyptienne voyez Pestman, Marriage, 140.

⁶³ Voir Häge, op. cit. 90 sqq. Certes la succession, y comprise la *pherné*, pouvait être réglée de façon arbitraire, mais elle devait se conformer à cette règle quand même.

⁶⁴ Attestée dans l'espace 42–190 de n. è.; Häge, op. cit. 250 sqq. Cf. le texte (de l'an 116 av. n. è.) publié par Pestman, JEA 55 (1969), 129 sqq. (en particulier p. 153) et commenté par Kränzlein, ZPE 9 (1972), 289 sqq.; en outre la requête (de l'an 169 de n. è.) publiée par K. Worp, Einige Wiener Papyri (1972), 45. Dans P. Merton II 59 (de l'an 154/143 av. n. è.) il est question d'une esclave dans l'apport de la femme. Ça peut être la raison pour laquelle l'apport est qualifié de προίξ, en s'attachant à la notion de ce vocable à Athènes; voir Häge, op. cit. 40 sqq. et 209.

⁶⁵ Seidl, Ptolemäische Rechtsgeschichte², 176.

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semble que cette masse de biens ne tombait pas dans un régime matrimonial à l'égyptienne. Les documents égyptiens étant muets sur ce point, la femme égyptienne administrait-elle sans doute indépendamment ces biens.⁶⁶ C'est évidemment un cas d'étanchéité du droit grec, impénétrable sur ce point à l'influence égyptienne.⁶⁷

Dès le début du 1^{er} siècle de notre ère apparaît dans les contrats une nouvelle désignation: ce sont les parapherna (παράφερνα).⁶⁸ Par là sont désignés quelques objets susceptibles de servir à l'usage personnel de la femme: articles de toilette, vêtements, bijoux, mobilier et ustensiles, statuette d'Aphrodite etc. Ils sont énumérés avec ou sans indication de prix. Cette masse correspond indubitablement aux biens-personnels-de-femme (nktw-n-shmt) attestés dans les documents démotiques.⁶⁹ Il s'agit évidemment d'une coutume indigène adoptée dans les contrats de langue grecque. Or, l'appellation parapherna s'est répandue rapidement au point qu'elle s'employait souvent avec la pherné dans le même contrat, les parapherna étant cependant énumérées toujours à la suite de la pherné. A une exception près, l'époux n'était pas le maître (κύριος) de cette masse, bien qu'il ait été celui de la pherné. C'est pourquoi il n'était question ni de sûreté ni de gage à sa charge.⁷⁰ Avec le temps les parapherna devenaient de plus en plus prédominantes dans les contrats, de sorte que la pherné fut inévitablement évidée de sens et perdit de son importance.

Comme la dissolution du mariage fait partie du droit matrimonial, nous allons prêter notre attention sur ce sujet. Comme toujours, le mariage pouvait être dissous par la mort d'un conjoint. En ce cas, c'est le droit d'hérédité qui était à appliquer, un régime légal de la succession entre époux n'existant pas en général.⁷¹ Dans ces circonstances la femme recueillait ses biens en vertu de son titre de propriété. Quand elle mourait, ses biens constituaient son héritage au profit de ses descendants ou, en cas d'un couple sans enfants, de sa famille d'origine. Ce règlement s'accorde avec ce que nous entrevoyons à travers les documents égyptiens.⁷² Cependant, c'est par le divorce que la situation pouvait être rendue difficile en vue des effets juridiques et autres. En fait les clauses concernant le divorce jouaient déjà dans les documents égyptiens les plus anciens un rôle si important qu'on ne peut s'empêcher d'avoir l'impression qu'un document de mariage n'a en définitive comme but que de protéger la femme en premier lieu contre le divorce. La portée de ces clauses est soulignée en outre par le fait qu'un serment de l'époux y est inséré pour les confirmer davantage.⁷³

En Grèce le divorce par la femme $(a\pi\delta\lambda\epsilon\psi\iota\varsigma)$ était, contrairement à celui par l'époux

⁶⁶ Voyez l'état des questions apud Häge, op. cit. 286 sqq. qui plaide l'origine égyptienne de la προσφορά.
67 A ce propos il est surprenant que les contrats grecs ne mentionnent pas de donations faites par l'époux en faveur de la mariée. En revanche, les textes de l'époque byzantine le font fréquemment; A. Merklein, Das Ehescheidungsrecht nach den Papyri der byzantinischen Zeit (Diss. Erlangen-Nürnberg, 1967), 28 sqq. et 96 sq. De l'autre côté, une donation (ξp) est attestée dans le régime matrimonial de tradition égyptienne, suivant les documents de mariage indigènes. Il en résulte qu'à l'époque gréco-romaine de telles donations ne venaient pas en ligne de compte, contrairement à la prosphora.

⁶⁸ Attestée en Égypte dès 11/19 jusqu'à 230 de n. è., également dans quelques documents provenant de Nassana en Sud-Palestine (datant du vi° s. de n. è.): Häge, op. cit. 15, 211 sqq. et 223.

⁶⁹ E. Gerner, Beiträge zum Recht der Parapherna (1954), 35 sqq.

⁷⁰ Voyez Häge, op. cit. 230 et 245.

⁷¹ Cl. Préaux, 'Le statut de la femme', Recueils de la société J. Bodin 11 (1959), 167 et 169; Häge, op. cit. 92.
72 Cf. P. W. Pestman, 'The Law of Succession in Ancient Egypt', Essays on Oriental Laws of Succession

<sup>(1969).

73</sup> Lüddeckens, *Eheverträge*, 268, 286 et 352. A signaler aussi O. Bodleian dont les éléments portent à notre avis sur un éventuel divorce; Allam, *HOPR*, 40 sqq.

(ἀπόπεμψις), lié à certaines formalités.⁷⁴ Il était ainsi rendu assez difficile (ultima ratio). En Égypte, en revanche, les conjoints pouvaient dissoudre leur mariage soit d'un commun accord, soit, grâce à un ordre social plus individualiste, par une déclaration unilatérale sans forme et ne tenant pas compte de la volonté de l'autre conjoint.⁷⁵ En fait, les documents égyptiens prévoient, entre autres, la répudiation⁷⁶ du côté masculin autant que du côté féminin.⁷⁷ De même, les documents grecs nous apprennent que la répudiation pouvait être provoquée aussi bien par la femme que par son époux, en raison de la non-observance des clauses morales du mariage.⁷⁸ Cette influence grandissante de la femme est sans doute à attribuer au milieu indigène égyptien où sa position était supérieure.⁷⁹

Quant aux motifs du divorce, les documents n'en mentionnent en général aucun.⁸⁰ Dès l'époque byzantine pourtant, les textes en nomment quelques-uns, dont le plus significatif est le malicieux démon.⁸¹ On passait ainsi sous silence et avec élégance toute la préhistoire du divorce, en se référant à la métaphysique. En somme, la liberté du divorce exista en principe jusqu'à la fin de l'époque byzantine au moins. Même le christianisme et le droit romain appliqués dans plusieurs secteurs ne lui portèrent guère atteinte, paraît-il.

Au sujet du divorce quelques documents nous sont parvenus du côté grec de même que du côté indigène.⁸² Il est vrai que le document égyptien le plus récent date du début du I^{er} siècle av. n. è., tandis que les documents grecs vont jusqu'à la période

- 74 Pour les détails voyez Harrison, The Law of Athens, 1, 39 sqq.
- 75 Dans le droit romain le divorce unilatéral était reconnu, peu importe qu'il soit provoqué par l'époux ou par son épouse. Cependant, le divorce par la femme fut quasi interdit ultérieurement par l'Empereur Constantin (ou par un de ses successeurs), puis permis par Julien.
- 76 Par ce vocable on entend précisément la volonté d'un conjoint de rompre avec le ménage, tandis que le 'divorce' est le terme le plus général. Le premier (ῥεπούδιον) se rencontre souvent dans les documents byzantins, mais il semble y être employé sans précision.
- 77 Pour les deux clauses concernant le divorce voyez Lüddeckens, *Eheverträge*, 268. A remarquer que le verbe he signifie la répudiation par le mari, tandis que šm veut dire que la femme quitte le domicile conjugal à son gré.
- 78 Pour l'époque hellénistique voyez Erdmann, 'Die Ehescheidung im Rechte der graeco-aegyptischen Papyri', Zeitschrift der Savigny-Stiftung für Rechtsgeschichte (romanistische Abt.) 61 (1941), 44 sqq.; Cl. Préaux, op cit. 161 sqq. Pour le divorce émanant de la volonté d'un parent ayant la puissance sur un conjoint voir ibid. 163 sq. et Merklein, Das Ehescheidungsrecht nach den Papyri der byzantinischen Zeit, 48a. Il s'agit là d'une dérogation à la règle, semble-t-il.
- Merklein, op. cit. 45 sq. Cependant, Cl. Préaux, loc. cit. 163, ne supposait pas d'influence du droit égyptien sur le droit grec hellénistique dans ce domaine.
- 80 Les contrats de mariage mentionnent quelques fautes graves, lesquelles pouvaient entraîner divorce; voir à ce sujet les devoirs réciproques des époux apud Vatin, Recherches sur le mariage, 200 sqq.; en plus Merklein, op. cit. 30 sq.
- ⁸¹ Le motif du malicieux démon ne manque dans aucun document de divorce datant du Ive jusqu'au vie siècle, peu importe son provenance; cf. l'acte de divorce publié par Sijpesteijn, *Talanta* 6 (1975), 37 sq. Voyez Merklein, op. cit. 73 sqq. pour d'autres motifs de divorce.
- 82 Un document grec de divorce s'appelle quelquefois διάλυσις (= compris, arrangement). Cependant tous les documents de divorce appartiennent au genre de 'déclarations écrites' (χειρόγραφα = Handscheine) dont le style est celui d'une lettre. Dans la littérature ils se disent 'homologies', les déclarations des parties étant introduites par le vocable ὁμολογεῖν (= concorder, avouer, reconnaître, stipuler; d'où ὁμολογία = accord, convention). Dans le document se trouvent tantôt les déclarations de deux ex-conjoints, tantôt ceux d'un seul; Merklein, op. cit. 33 sq., 47 et 64. Les documents grecs sont bien détaillés en comparaison avec les documents démotiques. Ceux-ci ne contiennent que la déclaration de l'ex-conjoint adressée à son épouse; voyez le tableau de Pestman, Marriage, diagramme Z.

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byzantine. Toutefois, on constatera entre les deux groupes quelques similitudes frappantes qui font ressortir les aspects du divorce tel qu'il fut conçu et pratiqué dans l'Égypte ancienne.

Prenons en considération d'abord la situation dans laquelle un document de divorce fut dressé. Or, nous n'y trouvons aucun service public compétent. Et s'il y a des témoins, leur concours était certainement facultatif; leur présence servait simplement à augmenter la valeur probatoire du document à dresser. Certes, au temps de Tertullien la célébration religieuse du mariage aura été introduite; mais elle n'était pas une nécessité pour valider le mariage. Aussi le concours de l'Église ne fut-il point exigé au sujet du divorce; en effet, on ne le constate pas dans notre documentation. Il semble donc qu'un document de divorce n'ait qu'une valeur déclaratoire; il ne représente qu'un complément pour prouver la séparation de fait des conjoints. Bref, le divorce était une affaire émanant de l'autonomie individuelle des conjoints, autant que la séparation de fait était le signe caractéristique d'un mariage dissous sans aucune contrainte légale. Et s'il y a des témoins, autant que la séparation de fait était le signe caractéristique d'un mariage dissous sans aucune contrainte légale.

Une des parties constituantes des documents de divorce, en grec et en démotique (à une exception près),⁸⁵ est celle portant sur le remariage avec un tiers. Or, ce point s'entend de soi-même: on ne peut pas se figurer un véritable divorce sans la possibilité de remariage; celle-ci existait sans doute dans chaque cas de divorce, même s'il n'en avait pas été convenu dans l'un ou l'autre document. La raison d'être en est plutôt de rendre le plus clair possible que le divorce est valable et définitif.⁸⁶ Un autre élément des documents grecs est la clause dont la teneur représente une décharge générale.⁸⁷ Par là, les ex-conjoints renoncent à tout droit de l'un sur l'autre. A cela s'ajoute, entre autres, un arrangement sur le plan patrimonial. Tout cela correspond grosso modo au contenu des documents démotiques.

Il convient d'aborder maintenant les effets du divorce en ce qui concerne le patrimoine. Or, étant donnée l'absence totale de règles législatives en cette matière, les conséquences découleront des accords qui ont été stipulés dans les contrats de mariage. Ces accords étaient, on l'a vu plus haut, subordonnés à la disposition des conjoints lorsqu'ils contractaient leur régime matrimonial; c'est pourquoi ils sont variés d'un contrat à l'autre. De toute façon, la restitution de la *pherné* était au gré des circonstances, à savoir si la femme fut répudiée injustement ou non. 88 Dans le cas où l'ex-époux fut coupable d'une atteinte au lien conjugal $(ano \pi o \mu \pi \eta)$, il devait dans la plupart des cas restituer la *pherné* ou sa valeur avec une majoration, qui s'élève tantôt à la moitié $(\eta \mu \iota o \lambda (a / \eta \mu \iota o \lambda \iota o \nu))$, tantôt à la totalité. 89 La *pherné* devait être restituée généralement dans

⁸³ La publicité n'en était exigée par aucun moyen; Merklein, op. cit. 53 sqq. Par ailleurs, aucune civilisation antique ne semble avoir exigé le concours d'un tribunal en matière de mariage.

⁸⁴ Merklein, op. cit. 56 sqq. et 64.

⁸⁵ C'est le document démotique le plus ancien (de l'an 542 av. n. è.).

⁸⁶ Merklein, op. cit. 85. Le droit de se remarier est parfois lié à une peine conventionnelle, laquelle apparaît dans un document copte; vide infra, n. 109.

⁸⁷ Merklein, op. cit. 39 sq. et 63; en outre P. Oxy. 3139 (= The Oxyrhynchus Papyri 43 (1975)).

⁸⁸ Merklein, op. cit. 92 sqq.

⁸⁹ Au début du 11e siècle de n. è. la majoration est prévue seulement au cas où la restitution de la *pherné* serait en demeure. Ce développement est sans doute dû au droit romain dans lequel la majoration est considérée contra bonos mores. A sa place apparaîtra cependant une amende fixe: Merklein, op. cit. 31 et 92 sqq.

l'immédiat, comme les autres biens dotaux, ou dans un délai d'un mois. 90 Dans le cas où le divorce fut demandé par la femme sans infraction à ses devoirs $(a\pi a\lambda\lambda a\gamma \eta)$, l'ex-époux pouvait avoir un délai pour s'acquitter (10-60 jours); mais les parapherna étaient, comme dans les autres cas, à restituer immédiatement. Dans de telles circonstances la femme (comme la femme athénienne) n'était pas déchue de sa pherné. Mais si le divorce était causé par sa faute, elle pouvait en être, dans certains cas, privée. En dehors de cela seuls les documents datant de l'époque byzantine mentionnent parmi les biens dotaux, contrairement aux documents de l'époque antérieure, les donations faites en faveur de la femme à l'occasion de son mariage. Ces donations devaient échoir tantôt à la femme, tantôt à l'ex-époux selon le cas.

Les contrats de mariage en grec, à une exception près, contiennent entre autres une clause d'exécution parée ($\pi\rho\hat{a}\xi\iota s$, aboutissant à l'exécution forcée sans exposer le créancier au danger d'un échec du fait que son action n'est plus possible); à la base de cette clause est la fiction d'un procès régulier ou d'un jugement donnant lieu à l'exécution forcée. Cette clause pourrait donc fournir dans un cas de divorce le fondement de la demande de restituer la *pherné* en faveur de la femme. Selon une autre opinion cependant — il s'agit du système 'disposition à finalité' ($Zweckverf\ddot{u}gung$) — le droit à faire restituer la *pherné* existait même si la clause n'était pas mentionnée expressément dans le contrat. Cet état de choses correspond mieux aux données des documents égyptiens où une telle clause fait défaut, d'autant plus qu'il subsiste de doute sur la fonction de la clause exécutoire.

Quant à l'obligation d'entretien, il est étonnant que les documents tant grecs qu'égyptiens gardent pour la plupart le silence sur ce point. En effet, ce point ne suscita que sporadiquement quelque intérêt. On peut dire donc que la femme divorcée n'avait en général aucun droit d'entretien à demander à son ex-époux, exception faite du cas où elle était enceinte. Une obligation d'entretien incombait à l'ex-mari, en revanche, pour les enfants dans certains cas, et avant tout dans le cas d'un enfant à naître. 93 Aussi peu réglée est la question de la puissance paternelle ou maternelle sur les enfants mineurs. Cette question fut résolue vraisemblablement selon le droit coutumier, étant donné que les renseignements fournis par les textes sont divergents. 94

Après les documents égyptiens et grecs, les documents coptes ne doivent pas échapper à notre attention. Étant donné que les Coptes surent conserver dans une large mesure leurs coutumes, leurs documents recèlent bien des éclaircissements sur les institutions

⁹⁰ A l'époque romaine la *pherné* est à restituer dans l'immédiat à la femme répudiée, et dans un délai (30–60 jours) si elle a quitté de son gré le domicile conjugal. En cas de *communi consensu* peuvent être stipulés d'autres arrangements. Les documents de l'époque byzantine ne mentionnent d'ailleurs aucun délai.

⁹¹ Voyez G. Häge, Ehegüterrechtliche Verhältnisse in den griechischen Papyri Ägyptens bis Diokletian (1968), 85 sqq., 131 et 169; en plus Modrzejewski, ZSS 87 (1970), 57 sq.

⁹² H. J. Wolff, 'Some Observations on Praxis' in Proceedings of the 12th International Congress of Papyrology (1970), 527 sqq.

⁹³ Taubenschlag, The Law of Greco-Roman Egypt, 121 sqq.; Cl. Préaux, 'La femme', Recueils de la société J. Bodin 11 (1959), 162; Merklein, Das Ehescheidungsrecht nach den Papyri, 99 sq. Il n'est pas sans intérêt de signaler ici un texte datant du Nouvel Empire; Allam, HOPR, 311. D'après ce texte, un père déclare par-devant le tribunal que ses enfants ne seront pas séparés de lui; il est probable qu'il s'agit là d'une obligation pour entretenir les enfants.

⁹⁴ Voyez Merklein, op. cit. 89, qui n'exclut pas un règlement législatif.

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les plus anciennes. En fait, il y a de bonnes chances pour y retrouver des survivances de quelques formes authentiques de l'époque pharaonique. De Certes, il est regrettable que la documentation copte en matière de mariage soit très mince; nous n'avons jusqu'à présent que très peu de pièces significatives. Mais elles nous permettront quand même de suivre la persistance et le développement de quelques éléments caractéristiques du mariage dans la vieille Égypte.

Il est surprenant que la littérature copte, malgré sa richesse, nous fournisse si peu de textes en matière de mariage. Le caprice du hasard des trouvailles peut-il être seul responsable de cet état de choses? Est-ce dû à la conception élaborée plus haut, on s'en souvient, que le mariage ne fut qu'un acte social qui ne nécessitait pas beaucoup de formalités, et par conséquent engendrait peu de paperasses? Ce n'est qu'une simple hypothèse qui ne paraît pas convaincante, vu l'abondance des documents égyptiens, grecs et arabes en matière de mariage.

A ce propos, il convient de signaler que contrairement à l'usage des documents de l'époque, qui portent l'empreinte byzantine, les documents coptes emploient bien des formules et des termes particuliers aux notions anciennes. Un de ces termes est le mot sap qui se rapproche visiblement de l'expression sp-(n-shmt) employée fréquemment dans les textes de langue égyptienne pour désigner une donation présentée par l'époux à sa femme lors du mariage. Les termes et formules coptes mettent ainsi en évidence qu'il s'agissait vraisemblablement du droit national attaché au sol égyptien, l'influence du formulaire byzantin, et ensuite arabe, ait été considérable.

Par ailleurs, la documentation copte est, elle aussi, révélatrice. En effet, la plupart des documents relatifs au mariage — peu importe qu'ils soient rédigés en égyptien, grec, copte ou arabe⁹⁹ — ont un trait commun: c'est qu'ils ont été émis pour régler des affaires principalement patrimoniales. Il est vrai que quelques-uns (sauf les égyptiens) contiennent, entre autres choses, l'énumération des devoirs réciproques des conjoints, à savoir: les conjoints ont à se traiter l'un l'autre avec ménagement et à se conduire de façon convenable, l'époux doit à sa femme une subsistance selon son rang, la femme de son côté doit ne pas manquer aux travaux domestiques et surtout obéir à son mari, etc.¹⁰⁰ Mais tout cela est dit plus ou moins en passant et ne porte pas sur le point essentiel.

⁹⁵ Voir 'Le droit égyptien ancien — État de recherches et perspectives', ZÄS 105 (1978), 3.

⁹⁶ Pour une vue d'ensemble voyez W. Till, 'Die koptischen Eheverträge', Festschrift J. Bick. Die österreichische Nationalbibliothek (hgg. von J. Stummvoll, 1948), 627 sqq. (avec la bibliographie ancienne); en outre Balogh–Kahle, 'Two Coptic Documents relating to Marriage', Aegyptus 33 (1953), 331 sqq.; P. Kahle, Bala'izah, II (1954), 566 sqq.; et tout récemment L. MacCoull, 'Coptic Marriage-Contract', Actes du XVe Congrès International de Papyrologie = Papyrologica Bruxellensia 17, deuxième partie (Papyri inédits) (1979), 116 sqq.

⁹⁷ Cf. Lüddeckens, Eheverträge, 353.

⁹⁸ Exception faite du mot προικώου; A. Steinwenter, Das Recht der koptischen Urkunden. Handbuch der Altertumswissenschaft (1955), 21 sq. Pour les termes coptes voyez aussi Till, loc. cit. 637; id., Erbrechtliche Untersuchungen auf Grund der koptischen Urkunden (1954), 7 sqq.

⁹⁹ Pour les documents arabes voyez A. Grohmann, Arabic Papyri in the Egyptian Library, I (Cairo, 1934), 65–121; II (1936), 209–23; en outre Grohmann, 'Arabische Papyri aus den staatlichen Museen zu Berlin', Der Islam 22 (1935), 1–68.

¹⁰⁰ Vide supra, n. 80. De même, quelques devoirs de l'époux sont stipulés dans les contrats de mariage en langue arabe.

A ce propos, il est à noter qu'un document copte relatif au mariage ne semble pas être spécifié par un terme précis. En effet, nous avons une variété de termes en grec pour désigner un tel document.¹⁰¹ Notre documentation révèle en outre que jusqu'au VIIIe siècle au moins aucun service public n'était compétent en matière du mariage. 102 De même, l'influence de l'Église ne se faisait pas partout remarquer, et les textes à notre disposition ne font aucune allusion à une bénédiction nuptiale. Tout relevait encore des coutumes, comme à l'époque païenne. Sous ce rapport, il n'est pas sans intérêt d'effleurer la question de la position de la femme, telle qu'elle transparaît à travers notre documentation. A en croire quelques textes, la femme était représentée par un parent, soit le père ou la mère, pour contracter le mariage. Toutefois, deux textes de notre matériel sont marquants, parce qu'ils montrent bel et bien qu'au début le mariage copte se formait ou se dissolvait seulement par consentement mutuel.¹⁰³ Suivant ces deux textes, la femme copte apparaît comme partie contractante vis-à-vis de son époux — cela en conformité avec sa capacité juridique reconnue depuis l'époque pharaonique.104 Sachant que les deux documents datent du VIIIe siècle, il est donc surprenant et, de surcroît, admirable que la femme copte ait gardé sa personnalité juridique si longtemps au beau milieu du monde arabe, tout au moins en ce qui concerne son mariage.

Pour saisir la conception du mariage chez les Coptes on ne saurait mieux faire que de recourir à un document datant du VIII^e siècle.¹⁰⁵ Dans ce document, c'est l'époux qui s'adresse à la femme sans intermédiaire. En vue du mariage il lui donne une somme d'argent (appelée šap); il s'agit d'une donation (ante nuptias) attestée souvent dans les documents en langue égyptienne.¹⁰⁶ Et puis, l'époux s'engage à ne pas maltraiter sa femme, de même à ne pas la répudier injustement et sans cause valable.¹⁰⁷ Pourtant, la possibilité du divorce n'est pas tout à fait exclue. En effet, elle est prévue pour l'époux autant que pour la femme, chacun ayant le droit de répudier son conjoint à son gré. A signaler que les vocables employés ici sont différents: noudje ebol (nore eĥoλ), 'repousser', signifie 'répudier' du côté masculin; et boque (ĥωκ), 'aller', exprime la même chose, mais du côté féminin — ce qui rappelle les vocables correspondants hr et šm dans les documents de langue égyptienne.¹⁰⁸ De plus, une pénalité conventionnelle (πρόστιμον) très élevée (6 solidi, en comparaison de δ solidi comme donation en vue du mariage) fut la sanction prévue pour un éventuel divorce, quel que soit le côté provoquant la répudiation;¹⁰⁹ c'est une sanction qui est peut-être due à

¹⁰¹ Les termes attestés sont les suivants: ἀσφάλεια, δόξον, ὁμολογία, συνάλλαγμα, χάρτης, ψήφισμα. Voir en plus Steinwenter, op. cit. 20 qui n'a pas retrouvé un modèle byzantin pour le document relatif aux fiançailles.

¹⁰² Exception faite du cas d'un époux appartenant, semble-t-il, au personnel clérical (P. Pierpont Morgan, publié par L. MacCoull; vide supra, n. 96).

¹⁰³ P. Bodleian Library (Kahle, *Bala'izah*, 11, 566 sqq.) et P. BM. Or. 6201 A 29 (Balogh-Kahle, *Aegyptus* 33 (1953), 335). Pour la datation du premier texte voir Balogh-Kahle, op. cit. 332 (3).

104 Vide supra, n. 9.

105 P. Bodleian; vide supra, n. 103.

¹⁰⁷ Steinwenter, op. cit. 20 fait remarquer que la πορνεία, comme cause légale pour divorcer d'avec la femme, se comprend dans le discours du mari. Pour cette cause dans les textes de langue égyptienne voir Pestman, *Marriage*, 75 sq.

¹⁰⁸ Cf. Lüddeckens, Eheverträge, 268 sqq.; Pestman, Marriage, 60.

L'amende conventionnelle s'élevant à 6 solidi est attestée également dans le document de divorce (Balogh-Kahle, loc. cit.); elle incombe à l'ex-épouse en cas de se dégager du contrat. La pénalité de 6 solidi est attestée d'ailleurs dans quelques documents grecs. Une pénalité conventionnelle de 3 solidi se rencontre dans un de nos documents coptes (Krall, Rec. Trav. 6 (1885), 70 sq.; Till, op. cit. 628) où il est question de fiançailles: le père de la fiancée aurait à la payer, s'il résilie son engagement.

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l'influence du formulaire byzantin. Et par-dessus le marché, ce sont le père, la mère et le frère aîné de l'époux qui approuvèrent expressément le contrat; ils s'en portèrent ainsi garants, comme l'exigeait le droit matrimonial de jadis, plus de mille ans auparavant.

Ce document démontre d'autre part qu'au VIIIe siècle le christianisme ne se faisait pas sentir dans tous les domaines de la vie quotidienne, ne fût-ce que notre document a été probablement dressé et conservé aux archives du monastère (d'Apa Apollo à Apollonopolis Parva), dont le père de notre époux faisait partie, semble-t-il. Toutefois, cet usage remonte à l'époque païenne où un tel document pour des raisons de sécurité était déposé parfois dans un temple, sans que le mariage lui-même ait été un acte sacré. 110 Notre document nous fait remarquer également que, dans les pratiques coptes du VIIIe siècle, le divorce se faisait simplement, comme autrefois, par la séparation des conjoints; suivant ce texte, la volonté d'un seul conjoint était considérée comme suffisante pour que le divorce fût valable. Dans de telles circonstances, on se demande, à juste titre, s'il était en fin de compte nécessaire d'établir un document pour valider un divorce qui se réalisait par la séparation des conjoints, comme il n'en était pas besoin, selon toute apparence, à l'époque païenne.

Au sujet du divorce une pièce significative nous est conservée. Il s'agit de cette catégorie de textes connus comme documents de divorce. De cette catégorie sont parvenus à nos jours, on se rappelle, quelques documents en démotique aussi bien qu'en grec. 112 Le contenu de notre document copte, qui au demeurant date du VIIe ou du VIIIe siècle, nous dévoile un usage qui était pratiqué depuis le VIe siècle av. n. è. D'après cet usage, un document pouvait être établi, dont l'essentiel était que l'un des conjoints, en renonçant à l'union conjugale, permettait à son ex-conjoint de se remarier avec un tiers. Or, le document copte présuppose un cas de divorce survenu par consentement mutuel des conjoints. Dans le document, c'est la femme qui, sous serment et sous peine d'une amende conventionnelle très élevée, promet de ne pas s'opposer dorénavant à un remariage de son ex-époux.¹¹³ Un remariage était donc possible — ce qui est évidemment incompatible avec l'interdiction de l'Église.114 Par ailleurs, le texte ne contient aucune cause de divorce; il est en outre certifié par quelques témoins, un organisme public n'y figurant pas. Dans cet ordre d'idées, il ne faut pas perdre de vue le fait que l'Église ne tarda pas à exercer son influence dans le domaine du mariage. En effet les textes littéraires nous font savoir que les fiançailles étaient placées sous surveillance cléricale, et qu'à cette occasion une prière était faite en commun.¹¹⁵ Pourtant, mœurs et coutumes pouvaient suivre parallèlement leur cours particulier; c'est ce que nous révèle clairement la documentation juridique. En effet, un document relatif aux fiançailles met en évidence cet état des choses au début du VIIe siècle, le texte ne faisant aucune allusion à un élément religieux, quel qu'il soit. 116 De même, les textes provenant de l'Église copte mentionnent un certain certificat (ἀποστάσιον) à délivrer au conjoint divorcé. Mais notre pièce relative au divorce n'en fait pas état. Rappelons enfin que, selon Tertullien, la célébration religieuse du mariage aurait été introduite.¹¹⁷ Toutefois notre documentation est tout à fait muette sur ce point, jusqu'au VIIIe siècle du moins, si l'on fait abstraction du cas d'un époux appartenant, paraît-il, au personnel clérical. 118

¹¹⁰ Erdmann, ZSS 60 (1940), 172 sq.; Pestman, Marriage, 176 n. 4; Merklein, op. cit. 16.

Balogh-Kahle, Aegyptus 33 (1953), 335 sqq.

¹¹² Vide supra, nn. 32 et 82. 113 A supposer que l'époux a établi, lui aussi, un document correspondant pour sa femme, comme il était d'usage à l'époque.

¹¹⁴ Le remariage des conjoints divorcés est attesté assez souvent dans les papyri grecs ; voir Merklein, op. cit. 86.

Till, op. cit. 635; Steinwenter, op. cit. 19.

¹¹⁶ Krall, Rec. Trav. 6 (1885), 70 sq.; Till, op. cit. 628 (1).

¹¹⁷ En fait, aucun indice ne permet de conclure que la célébration liturgique se soit imposée dans les Églises d'Orient au cours des trois premiers siècles. L'existence d'une bénédiction nuptiale devant l'assemblée chrétienne n'est nullement attestée d'ailleurs à l'époque de Clément, et le passage de Tertullien où l'on a voulu souvent reconnaître cette cérémonie a en réalité une tout autre signification si on l'examine dans son contexte. 118 Vide supra, n. 102. J.-P. Broudéhoux, Mariage et famille chez Clément d'Alexandrie (1970), 95 sq.

Il en ressort que la notion fondamentale du mariage (un acte social soumis seulement au droit coutumier) se maintint en Égypte pendant très longtemps; la continuité en transparaît notamment dans les témoignages coptes.

En conclusion de cet aperçu, deux documents de mariage en copte méritent d'être mentionnés.¹¹⁹ L'un en est daté au XII^e et l'autre au XIII^e siècle; celui-ci est désigné conventionnellement comme δμολογία, celui-là comme συνάλλαγμα. Pourtant, les deux textes révèlent certaines ressemblances frappantes en matière de mariage. A part quelques éléments nouveaux dus certainement à l'influence arabe, ¹²⁰ on y trouve aussi un discours religieux semblable dans les deux cas, et dans un cas il est certain que le mariage fut conclu cette fois en présence de l'évêque.

Thompson, 'A Coptic Marriage Contract', PSBA 34 (1912), 173 sqq. et 296 sq.; Möller, 'Ein koptischer Ehevertrag', ZÄS 55 (1918), 67 sqq.; Till, op. cit. 630 sqq. (nos. 4 et 5).

¹²⁰ C'est d'abord la donation (faite par l'époux en faveur de la mariée), laquelle est payée en partie seulement, le reste étant dû dans un délai. On remarquera aussi que la mariée est représentée par un tiers (son père en l'occurrence).

THE PYRAMIDS OF SNOFRU AT DAHSHÛR

THREE SEVENTEENTH-CENTURY TRAVELLERS

By KATHLEEN M. PICKAVANCE

Many accounts of travel in Egypt by Britons at an early date are difficult of access, and several have never been published in English. Three amongst the latter have, nevertheless, frequently been referred to by archaeologists and anthologists, and are sometimes misrepresented, even misquoted. Because these references are also reused constantly at second hand, it seems that the actual words written, or alleged to have been written, by them, albeit even now only in transcription or translation with attendant pitfalls, might be of interest and utility. The three travellers are an anonymous Scot (1657), Robert Huntington (1680-1), and Edward Melton (1661). The last-named has been so misused as to generate the belief, still universally held, that in the seventeenth century the interior of the Bent or South Stone Pyramid at Dahshûr was accessible. A study of Melton's account below together with Perring's description of the state in which he found this pyramid on entry in 1837² casts doubt on the respectability of this belief. Vyse appears to be the original source,3 and, even though in 1894 de Morgan suggests that the account of Perring's excavations at Dahshûr is 'empreint de . . . naïveté', 4 Wildung in 1975⁵ and Fakhry in 1959⁶ (see below), among others, appear to have accepted without question this version of the travellers' evidence. The accounts of the three travellers as they relate to the stone pyramids at Dahshûr are presented below. I conclude by proposing that Vyse was in error in stating that the interior of the Bent Pyramid was accessible in the seventeenth century and 'entered in 1660, by Mr Melton, an English traveller',7 and that the truth could alter our view of the later history of the monument. In fact, a reconsideration of the total history of the pyramid poses at least four questions of some interest to Egyptologists: (1) how is

- ¹ A useful series, 'Voyageurs occidentaux en Égypte', is produced by IFAO, Cairo. It republishes with classified indexes and annotation the accounts of early travellers to Egypt. No comparable study is available in English.
 - ² Colonel Howard Vyse, The Pyramids of Gizeh, VIII, 65-71.
 - ³ Op. cit. 67.
 - ⁴ J. de Morgan, Fouilles à Dahchour en Mars-Juin 1894 (Vienna, 1894), 2.
- ⁵ D. W. Wildung, LdÄ 1, 986: 'Die wissenschaftliche Erforschung beginnt mit Melton (1660) an der Knickpyramide, der allein zunächst das Interesse gilt (z.B. 1737/38 Pococke). Erst Perring (1837) wendet sich auch der Roten Pyramide zu.'
 - 6 Ahmed Fakhry, The Monuments of Sneferu at Dahshûr (Cairo, 1959-61), VI, 4.
- ⁷ Vyse, op. cit. VIII, 67, and VII, 222. He also cites a M. Lebrun (1974) as having entered the Bent Pyramid and finding a chamber. This is a simple error on Vyse's part. 'Lebrun' is Corneille or Cornelis de Bruyn and he never visited Saqqâra. He states this quite clearly on p. 202 of the French version of his book, *Voyage au Levant*, c'est à dire, etc. (Delft, 1700). He adds (pp. 203–6) passages reproduced from Jean de Thévenot (see p. 137 and n. 8) and from Melton, and clearly acknowledged as such, which report the experiences of these travellers at Saqqâra and Dahshûr.

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it possible to believe that robbers were ever in the western passage of the Bent Pyramid?; (2) given the appearance of the damage to the western portcullis wall of the chamber, why is it thought that this damage occurred by action *outside* the chamber?; (3) what is the evidence that Melton entered the pyramid?; (4) did anyone at all, in modern times, enter the burial chamber of the Bent Pyramid before Perring in 1837?

Awaiting the opening of a 'mummy pit' at Saqqâra, each man made use of the time to inspect nearby pyramids. They noted the number variously: the Scot counted twelve, Huntington sixteen, and Melton fifteen. Their accounts are as follows:

The anonymous Scot in 1657

The report is contained in a notebook in the British Library, Sloane MS 3228. It resembles an autograph album in size and shape; the writing is often badly smudged, although the pages are relatively clean; it is written in early Scottish 'secretary' hand. The Scot set off from East Lothian in November 1655 and crossed Europe, the Mediterranean, Lower Egypt, and the Holy Land, and the last words were entered at Chios 'where grow mastick trees and excellent wynes'. He had departed from Gîza for Saqqâra on 20 February 1657, almost certainly in the company of Jean de Thévenot, author of Relation d'un voyage fait au Levant, etc. (Paris, 1664–84). They lodged the night 'at a little village 3 miles from the place [the mummy pits]'. They went from the necropolis 'through a sandy dessert wherein there are 12 pyramids, some whereof considerable big, all within 2 leagues bounds'. 10

During the time they were opening the tombs we went 3 miles further in the desert to two pyramids which did, at a distance, appear to be no less than the first [Cheops'] and, if the other were wanting, might very well supply the place of the world's 7th wonder. Both of these 2 have the entries open but the one is filled with sand and rubbish and therefore cannot be entered and that which is the biggest is 643 foot square and is ascended by 148 degrees of stone from the bottom to the top, from which there is a brave prospect of all the country about it being 3 miles only distance from the river . . .

Descending, we entered the pyramid, the port being upon the north side about a quarter of the height from the ground, 327 foot from the west corner and 316 from the east. The entry is 3 foot $\frac{1}{2}$ broad and 4 foot high. It descends by a little descent 267 foot at the end of which there is a hall. The roof is in the form of an ass's back. It is 30 foot high 25 foot and $\frac{1}{2}$ long, 11 broad. In the corner of the hall there is a passage 3 foot square and 9 foot long parallel to the horizon, which leads unto another hall 24 foot long 9 foot broad [?]¹¹ foot high. In the end

⁸ De Thévenot describes how they were together at Gîza, and that the Scot descended the 'well' of the Pyramid of Cheops. Each reports that they then proceeded directly to Saqqâra, and each provides an identity of measurements and other descriptions too remarkable to be other than shared information. The Scot does not mention de Thévenot by name until, on his departure from Egypt for the Holy Land on 8 March 1657, he states that a 'M Tivanous' came to see him off on his journey (J. de Thévenot, *Travels into the Levant*, etc., done into English by D. Lovell (London, 1687), I, 133 and 135-6; the Scot, *Sloane MS 3228*, ff. 107-8, 115-7, and 130).

⁹ Sloane MS 3228, f. 113.

¹⁰ Op. cit. f. 114.

¹¹ Too smudged to decipher.

of that there is an entry 16¹² foot from the ground which leadeth unto other rooms. We could not ascend it without a ladder¹³ and, the day being spent, our curiosity a little blunted with the difficulties of our entry, being forced to creep upon our bellies all along, we returned to the place where our Moors were opening the cave of the Mummies.

Robert Huntington in 1680-1

Either late in 1680 or in January 1681, Robert Huntington, Chaplain to the Levant Company at Aleppo at the time, visited Saqqâra. In a letter to one D. Allexius, published in *Huntingtoni Epistolae*, edited by Thomas Smith, London, 1704, and here translated by Mr John Martineau, he describes on pp. 64–5 a monument which appears to be located at Dahshûr.

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About five or six miles to the south from here [Gîza] are more pyramids which are for the most part collapsed. I counted sixteen spread out through the desert, of which there is one to rival the largest [Cheops']. At the base of the northern side it reaches 700 feet (although it is not possible to measure it all) and the entrance as before is from the north, but it is higher, almost at the middle of the pyramid. All the others (as far as I know) are impenetrable. I entered here through an entrance 3 feet 3 fingers broad, 3 feet 8 fingers high. If I proceeded on hands and knees descending for 203 feet, and then horizontally for 27 feet. Now this leads to a chamber 27 feet 8 thumbs long and 11 feet and 11 fingers wide, arched above with 12 stones. From the northern side lies open an entrance, fairly low and $12\frac{1}{2}$ feet long to another chamber of the same proportions. Looking to the south is seen an entrance to a panelled room 20 feet wide. But I could not enter it because I did not have a portable ladder.

Edward Melton in 1661

Born c.1635 the second son of Sir John Melton, Kt. of London, Edward Melton undoubtedly went on the seventeenth-century equivalent of the Grand Tour. Between 1660 and 1677 he travelled extensively. The editor of the book entitled Zee-en Land-Reizen door Egypten, West-Indien, etc., . . . 1660-1677, published in Amsterdam by Jan ten Hoorn, claims that Melton's notebook record of his voyages is the sole source of this book. According to its preface, Melton studied at Oxford for some time, and had as his travelling companion, on and off until 1663, a fellow undergraduate, Thomas Browne. Ships' and Masters' names and dates of sailings are included in the preface. Nothing short of the untraced notebook could confirm absolutely that the book really is his account of his personal experiences, but, as will be proposed in the

This figure is clear but, of course, incorrect. According to Maraginglio and Rinaldi this is 7.80 m or 25 ft 4 in (Arch. delle pir. menfite (Rapallo, 1964), III, text, 130).

¹³ De Thévenot, however, did succeed in making this climb, and gives the height of the 'window' as 24²/₃ ft above the floor (op. cit. 136).

Conventional equivalents of 'finger' and 'thumb' were $\frac{3}{4}$ in and 1 in respectively (*OED*), but it is possible that R. H. was simply using his own fingers and thumbs, hoping to approximate only.

conclusion below, it contains much to support the belief that it is a genuine autograph. In the text we find a description of a pyramid near Saqqâra. In translation¹⁵ it reads:

Chapter 14

... we took the way to Sakkara, a village about 4 miles from the Pyramids [of Gîza] and 8 from Cairo, to the south, to which the cemetery of the Mummies is close . . . we were obliged to stay the night there.

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[A long description of the mummy pits area follows, then:]

One still sees there fifteen Pyramids among which are some of considerable height and which time, it seems, has wished to honour; because they are almost whole and unblemished. There is also an opening in every one which gives access to a room.

The curiosity common to travellers made us enter the one which was farthest removed from the village and which is commonly called the Pyramid of Rhodope. ¹⁶ We found the entrance, in my opinion better than the other one [Cheops'] which we had seen before, because the way which goes inwards has its start at a higher level but it is twice as deep as that of the other pyramid and not so steep, and therefore easier to get in; but so deep that I really believe that one descends to the foundation. At the bottom of this descent we did not find steps to climb as in the other pyramid, ¹⁷ but only the burial chamber, which was very roomy and high. The roof was not flat and smooth, but went up gradually into a sharp point. We did, however, not find a grave in this room, probably because nobody was ever buried there, or because the graves have been destroyed and broken.

This pyramid is built in the manner of a pavilion;¹⁸ and the Christians¹⁹ say that it is constructed by a certain Rhodope, a famous whore, who had it built with the money she had gained at the cost of her honour; but without doubt this is an error, at least, if it is true what Pliny says, namely that the Pyramid of Rhodope was small, although beautiful; which one cannot apply to this one, because it is one of the biggest in Egypt.

Concerning the other smaller ones which are situated on the same field, time has almost

- ¹⁵ Tr. by Mrs Sylvie Hulme, 52, 54. Vyse (op. cit. VIII, 67) states that a translation of at least part of this book was available to him, but I have been unable to locate it.
 - 16 See n. 19 below.
- ¹⁷ An ambiguity of sense, possibly the consequence of double translation, might be improved by inversion: 'As in the other pyramid, we did not find steps to climb.' Melton had just come directly from Gîza, and certainly found no steps in the Great Pyramid. See also de Bruyn's version in French (n. 7, de Bruyn, op. cit. 207) of this passage from Melton: 'Au bas de cette descente nous ne trouvâmes point de degrez pour monter, comme dans les autres Pyramides, mais seulement . . .'
 - ¹⁸ Dutch 'pavillieon', suggesting the form of a Crusader's pavilion.
- There is no indication why Melton says that this pyramid is 'commonly called the Pyramid of Rhodope'. He seems unique in picking up this version of the story, since the legend of Rhodope is ordinarily associated with the Pyramid of Mycerinus at Gîza. Nor is it clear what he means here by Christians; he may have in mind Egyptian Christians, but when discussing them earlier he uses the words Copt/Coptic. It is possible that at Oxford he might have acquired superficial knowledge of the existence of the Christian chronographers, e.g. Africanus and Eusebius, but more likely that he is referring to the historians and geographers of the early Christian era whether of the Christian faith or not. His mention of Pliny might indicate this. If his transference from Gîza to Dahshûr of Rhodope's pyramid-affinities signifies anything it serves to underline that *Zee-en Land-Reizen* etc. is the work of an amateur write and not of a professional: a polygraph relying on source books of classical writers would reproduce the legend correctly, and locate the pyramid properly. This kind of muddled reporting is typical of genuine travellers, and his comment on its size as opposed to what he mistakenly believes to be that ascribed to it adds authenticity. See also C. Coche-Zivie, 'Nitocris, Rhodopis et la troisième pyramide de Giza', BIFAO 72 (1972), 115–38.

completely destroyed these, for nowadays they are mere lumps of sand and do not have the shape of what they once have been.²⁰

There is also a square pile of hewn stones, which pile is called Mastabet Faraeum by the Arabs and of which they say that the Pharaohs used to climb it every time they wanted to issue their people with a new law . . .

To get back to the pits . . .

If records of the condition of the pyramids of Dahshûr before the work of Perring and Vyse (1837–9) are important enough to Egyptologists to quote and requote, then the actual words of these three late-seventeenth-century travellers to Egypt merit scrupulous consideration. The quotations given above may prevent the future misuse of their reports: they also provoke the questions suggested above.

The accounts of the Scot and of Robert Huntington provide no dramatic new information: they make it sufficiently clear that these men entered the North Stone Pyramid which is attributed to Snofru (Perring's 29). Not being either explorers or scientists they were not equipped with proper measuring devices. The dimensions they provide are not accurate, but are recognizably close to those of the North Stone Pyramid. Melton's account, however, raises a number of problems which have become significant through constant use as a source.

Melton's narrative generates doubts which range from the fundamental one about the authenticity of Zee-en Land-Reizen etc. itself to the supposed entry of the South Stone or Blunted Pyramid, commonly known as the Bent Pyramid, now also attributed to Snofru. Vyse presents as a statement of fact that Melton entered this pyramid and its burial chamber.21 Ahmed Fakhry says (The Monuments of Sneferu at Dahshûr, 1, 4): 'We know from the accounts of early European travellers that the interior of the Bent Pyramid was accessible to visitors as early as the seventeenth century and that in the year 1660 it was entered by the English traveller Mr Melton', thus more or less repeating Vyse's words. It is hardly to be believed. Close examination of the Melton text as it is presented above, taken from the book which purports to record his notes describing his experiences at Dahshûr, begins the process of doubt: from the particulars which we are given how can Vyse, Fakhry, Wildung (see nn. 4 and 5) et al. be justified in their assertions? The supposition that the pyramid which Melton speaks of entering was the Bent Pyramid rests on two words, albeit significant ones: 'farthest' and 'pavilion', but it also assumes that the pyramid whose striking shape Melton recalled was, in fact, the one which he remembered entering. Where the Scot (1657), undeterred descender of the 'well' in the Great Pyramid,22 and Huntington (1680-1) both assert that the passage into the Bent Pyramid was blocked so that they could not enter, where Pococke, in 173923, mentions only a hole on what we can assume to be the northern face leading to a passage that was not open—and Pococke is the author most likely to have said had it been otherwise—can we accept without question

²⁰ The three brick pyramids of Dahshûr built by Sesostris III, Ammenemes II, and Ammenemes III.
²¹ Vyse, op. cit. VIII, 67.

²² Sloane MS 3228, f. 108 and see n. 8.

²³ Richard Pococke, A Description of the East etc. (London, 1743), 1, 'Observations on Egypt', 52. Plate XX opposite p. 52 includes at E and D what seem to be the earliest published plans of the interior of the North Stone Pyramid.

that Melton found it possible to enter the pyramid and a chamber therein with no apparent difficulty? Moreover, and more damning, it follows from the description of the entry which he used—[it] 'has its start at a higher level' [than that of the Great Pyramid at Gîza]—that in the Bent Pyramid he would have to be speaking of the western entry at its height of 97 ft 8 in from the base and not the northern one (the entry of the Great Pyramid being at 45 ft and the northern entry of the Bent Pyramid at only 38 ft 4 in).

The greatest obstacle to the belief that Melton entered the Bent Pyramid by the western entry rests in Perring's description of the state of the western passage as he found it in 1837: 'The greater part of it was closed up with large blocks, which had only been removed for about 60 feet at the lower end. The entrance on the outside of the Pyramid was so well concealed as to have escaped the closest examination, and the blocks within it appeared to have been fitted with the greatest accuracy.'24 Later, Fakhry was to describe this blockage in greater detail: 'It [the passage] was filled with blocks having the same size as the passage which were plastered from the western side, the blocks being inserted from the western entrance, and every one of them was plastered all around it before inserting the next stone until they reached the casing.'25 The entry itself was 'closed by one of the blocks of the casing, which did not differ from any other and its place could never be detected by anyone whether in ancient or modern times'.

The total blockage of the western passage, discovered by Perring, and beginning at the obscured point of entry, is a fact not to be dismissed and, unlike travellers' tales and indirect references, has to be treated with respect and credence. We are then faced with the inconceivable possibility that the western passage was more or less open in 1661, and subsequently closed up again, with all the flush-fitting blocks in place, when Perring saw them in 1837. In fact, it is the archaeologists' findings which must surely prove that the belief that travellers entered a chamber in the Bent Pyramid from the west is untenable, and that any account which even suggests such a possibility is either misleading, false, or a misinterpretation. It is even likely that no traveller descended the northern passage either, at least no further than the 174 ft achieved by Nathaniel Davison in 1763.26 As to Melton's story, what is probable and quite typical of travellers, as opposed to serious, qualified reporters and explorers, is that he was in the North Stone Pyramid like everyone else (his brief description of entry, passage, and chamber fits that pyramid better than the Bent Pyramid), that he wrote his notes at a much later date elsewhere, recalled the more striking, and thus more memorable, outline of the Bent Pyramid, and then superimposed his memory-image of the form of the latter upon that of the interior of the other. The book as a whole discourages the easy option of dismissing the Melton report as spurious and written by Jan ten Hoorn in Amsterdam: it contains many accurate pieces about hitherto unrecorded or only partially described sites which could scarcely have been the imaginative or plagiaristic work of a deskbound polygraph.

The problem of the evidence for the activity of tomb robbers inside the Bent Pyramid

²⁴ Vyse, op. cit. VIII, 68-9.

²⁵ Ahmed Fakhry, op. cit. VI, 49.

²⁶ Robert Walpole (ed.), Memoirs, 2nd edn. (London, 1818), 363-4.

now calls for reconsideration. Perring found damage to the southern corner of the portcullis in the western passage, best seen in the photograph which forms plate X (B) in *The Monuments of Sneferu* etc. On the basis of this damage it has been inferred that robbers had made their way down the western passage, and that it was, therefore, equally possible for early travellers like Melton to have done the same. This is not the necessary conclusion. An alternative hypothesis is that the hole was made as the result of attempts by robbers to break through from the eastern side of the portcullis wall and from the chamber. The nature of the damage shown on plate X (B) does nothing to counter this suggestion.

THE REVEREND DR ANTHONY J. ARKELL

By H. S. SMITH

Sometimes there appears a man or woman of such versatility of talent, such fullness of vital energy, such breadth of heart and understanding as to transcend normal bounds. Such was Anthony Arkell. Even to list his four successive careers, as Political Officer and Commissioner for Archaeology in the Sudan, as university teacher and Church of England clergyman in this country, gives little idea of the range of his interests and achievements, still less of what his personal magnetism and inspiration meant to people in every walk of life.

Anthony Arkell was born at Hinxhill Rectory in Kent on 29 July 1898. The firm Christian faith he acquired from his parents is one of the keys to his career. He won a scholarship to Bradfield College, and thence the Jodrell Scholarship in Classics to The Queen's College, Oxford. War interrupted his university studies. He joined the Royal Flying Corps in 1916, and won great distinction in the air, culminating in an action in which he shot down a German bomber by night without the aid of modern instruments on Whit Sunday, 1918, for which he was awarded the MC.

He made the crucial decision of his life in 1920, when he joined the Sudan Political Service. He was appointed Assistant District Commissioner for the province of Darfur in 1921. The Sudan captivated him; every aspect of that vast country, its extraordinary range of climates, habitats, fauna, flora, peoples, languages, customs, and monuments excited his keen observation and scientific interest. For Arkell was a Renaissance man in as much as natural history and human history were for him part of one web of learning, as his writings show.

In 1925 Arkell became Resident at Dar Masalit, whence he was appointed as District Commissioner at Kosti (1926–9), and later at Sennar. At Kosti, Arkell captured the hearts of the Sudanese by arresting the dealers who had been trading slaves across the border with Ethiopia; he settled the freed slaves in new villages, and they thenceforward called themselves the 'Beni Arkell'. For this humanitarian service he was awarded the MBE in 1928, and was further distinguished by the award of the Order of the Nile (4th class) in 1931. He was promoted to be acting governor of the province of Darfur in 1932, a post which he held until 1937.

During the years in Darfur, Kosti, and Sennar his interest in the history and archaeology of the Sudan had grown into a ruling passion. In this he was no doubt encouraged by the remarkable group of men who were pioneering the scientific study of the Sudan in those days: McMichael, Jackson, Hillelson, Grabham, Crowfoot, Seligman, Schweinfurth, Reisner, Evans-Pritchard, to mention but a few. But life as a District Commissioner or Governor was both lonely and exacting, and it must have required resolution and an irrepressible spirit of inquiry to produce the long series of articles in

PLATE I



ANTHONY J. ARKELL

Sudan Notes and Records which Arkell published on the most manifold topics, anthropological, archaeological, geographical, historical, and scientific. While on leave he set himself to acquire the techniques of excavation under Sir Mortimer Wheeler on British sites, and presented a history of Darfur Province for the award of the Degree of B.Litt. at the University of Oxford.

When G. W. Grabham retired as Acting Conservator of Antiquities, Arkell was appointed the first Commissioner for Archaeology and Anthropology for the Sudan in 1938. This was very much at his own wish, against the feelings of some of his superiors in the Sudan Political Service, who foresaw high honours ahead of him. At that time, the Sudan had no National Museums, though a nucleus of archaeological and ethnographical collections had been growing up at the Conservator's office at Khartûm. It was Arkell's energy, enthusiasm, and determination which created the first Museums of Antiquities and of Ethnography at Khartûm; much of the archaeological collections he catalogued and arranged with his own hands. In the process he encouraged Sudanese students, and any other Sudanese who showed themselves willing, to take an interest in the history and archaeology of their country, and co-opted them to the work. From these men he made the first Sudanese appointments to the nascent Antiquities Service as regional Inspectors of Antiquities. He started the systematic mapping and recording of sites and finds, and to him was due the healthy development of this Service, which later dealt so effectively with the challenge presented by the UNESCO campaign to salvage the monuments of Nubia. Unfortunately, Arkell's term of office as Commissioner for Archaeology was interrupted during the war, when he served as Chief Transport Officer in the Sudan (1940-4); otherwise his contribution might have been still greater. As soon as he returned to his post, he started the first official excavations of the Antiquities Service on a prehistoric site near Khartûm railway station, following these up at Shaheinab in 1949. True to his educative purpose, he used Sudanese assistants on this work. He thus became not only the principal creator of the Sudanese National Museum of Antiquities and of its Antiquities Service, but also the father of Sudanese prehistory.

Arkell's excavations at Khartûm established the existence of a pottery-using culture associated with stone and bone tools which he characterized as 'Mesolithic', at a time when the climate was much wetter than at present, as was shown by faunal and floral evidence. His long-standing interest in land-snails enabled him to isolate the presence of *Limicolaria* as one indication of this; others, identified by a palaeontologist at the British Museum (Natural History), Miss Bate, were the presence of bones of the Nile lechwe, of numerous species of antelope, and of a hitherto unrecorded species of extinct reed-rat (*Thryonomys Arkelli*), named after him. Seeds of the tree *Celtis integrifolia* confirmed this interpretation; use of such data to characterize the ecology and environment of a culture, though developed in Europe, had barely been attempted in the Nile Valley. Arkell was also able to give detailed accounts of the diet of his 'Early Khartûm' people, and the techniques of hunting, fishing, and gathering which they had used to obtain it. From the single skull which could be restored adequately it was possible to describe this people as long-skulled with massive jaws from which the upper

incisors had been removed, a trait of interest as some modern Sudanese people remove the lower incisors. He showed the pottery (principally brown-ware open bowls handmade from Nile clay admixed with sand, decorated with interwoven patterns of grouped wavy lines incised with the spine of a cat-fish (Synodontis schall)) to have a very wide distribution across the Sudan from the Wadi Howar to Kassala. Arkell noted the likeness of this pottery, the ancestor of many later wares, to basketry, and suggested, in view of its very early date, that it may have been near to the origin of pottery; and that the technique of potting might originally have been discovered through the accidental firing of baskets which had been coated with mud to make them watertight. This pottery he held, with reason, to be ancestral to that of the Badarian culture of Egypt, hitherto the earliest decorated ware found in the Nile Valley. His subsequent work at Shaheinab, El-Qôz, and elsewhere traced the development of this pottery through the 'dotted wavy-line ware' into a variety of impressed, combed, and incised wares typical of what he reasonably termed the 'Khartûm Neolithic'; this included a 'blacktopped red ware', which may be related to the famous ware typical of the Naqada cultures of Upper Egypt. On the basis of its use of stone 'gouges' and of beads of amazonite, Arkell connected the 'Khartûm Neolithic' with the early Neolithic Egyptian culture 'Fayyûm A', discovered by Dr Gertrude Caton-Thompson on the margins of the Fayyûm depression. This suggested a tentative dating for the 'Khartûm Neolithic' in the early fourth millennium, subsequently partially confirmed by radio-carbon dating, then in its infancy. Moreover, it excited Arkell's latent interest in the Hoggar and Tibesti ranges of the central Sahara, whence the amazonite might have come. Later, this led to his last great adventure in 1957, when, at the age of 59, he travelled with the British Ennedi Expedition the harsh journey to Tibesti and Wanyanga. He returned with interesting evidence including amazon-stone from Eghei Zumma supporting the archaeological connections he had established, and emphasizing the wide range through north-east Africa of the pottery traditions he had discovered. Arkell published these excavations with admirable thoroughness and promptitude. Though not everyone has agreed in detail with all his conclusions, none can deny that they laid a sound scientific basis for the prehistory of the northern Sudan. This was of the utmost value later when, during the Nubian Rescue Campaign, teams of prehistorians with no previous knowledge of the Sudan had to survey large areas under severe time restrictions.

In his post-war years as Commissioner, Arkell found time to edit Sudan Notes and Records, to which he had contributed so much, and was also president in 1947 of the Philosophical Society of the Sudan, of which he became a Life Member in 1949. He retired as Commissioner in 1948, and returned to England, but continued to serve as archaeological adviser to the government of the Sudan. It was after his retirement that he set the seal on his long career of service to that country by publishing A History of the Sudan from the Earliest Times to 1821 in 1951 (2nd edn., 1961). This is the work for which he is most famous in the Sudan, for it was the pioneer in its field, and two generations of educated Sudanese have been brought up on it. Among its many virtues, it taught them to think of themselves as a nation with a long history and a cultural

tradition of their own. If, as was not unnatural given his interests, Arkell's treatment of earlier periods was relatively fuller than that of medieval and later times, and individual portions of his work are now superseded, yet it remains the most concise and readable general introduction to the full sweep of Sudanese history. Its straightforward approach and its lucidity have especially endeared it to its Sudanese readers. In 1955 Arkell's distinction as an archaeologist and historian were recognized by the award of the D.Litt. degree of the University of Oxford, and he became an Honorary Member of the German Archaeological Institute in 1953.

On his retirement from the Sudan in 1948, Arkell had accepted a post as Lecturer in Egyptian Archaeology at University College London, where he became Honorary Curator of the Petrie Collection. Here he undertook a most challenging, indeed daunting, task. The Department of Egyptology's premises had been destroyed by enemy action, and it was not until the early 1950s that the collections could be unpacked from the 800 heavy crates into which they had been hurriedly crammed for safe keeping at the beginning of the war. Arkell manhandled the objects himself, with the help of only one assistant, taking the greatest care to preserve the association of the objects, which was often the only surviving clue to their identity. By patience, persistence, and hard physical work, he completed the task of unpacking and obtaining preliminary treatment for the objects, many of which had suffered. At a time of much pressure on college finances, by dint of ardent persuasion, he obtained funds for suitable cases and modern storage cupboards for the collections, and supervised their design. Once more, as at Khartûm, he shouldered the burden of identifying, sorting, cataloguing, and exhibiting this unique collection; for though the process had been started by Glanville before the war, relatively little progress had been made. Resolutely, over fourteen years of unremitting labour, Arkell unpacked and stored the whole, cataloguing at least a third in his own hand, after having minutely scrutinized each piece for excavation numbers to compare with the publications and manuscript records of the British School of Archaeology in Egypt. If Petrie was the father of the Museum, Arkell was its god-father, and students of Egyptian archaeology, not only at University College, but throughout the world of learning, owe him an immense debt.

During these arduous years, Arkell deepened and widened his knowledge of ancient Egyptian civilization, more particularly of the Predynastic Period, as a long series of notes and studies in this Journal and elsewhere shows. Many of these brought visitors and students to the Petrie Museum, notably his attribution of one of the Hierakonpolis maceheads to King 'Scorpion', which, though perhaps erroneous, has excited enduring and profitable interest. His 'Review of Predynastic Development in the Nile Valley', contributed with his student P. J. Ucko to Current Anthropology in 1965, stimulated a new interest in Predynastic Egypt when it was being somewhat neglected, and led on to his last work, The Prehistory of the Nile Valley, published in the Handbuch der Orientalistik in 1975. He himself, however, always thought more about his service to others than about his own work. To all visitors to the Petrie Museum, scholars, students, laymen, or children, he was equally attentive, informative, kindly, and obliging, filling them with his own enthusiastic delight at the ancient heritage under his care.

To the Egypt Exploration Society, too, he gave his service as a Committee member for many years; quiet, friendly, constructive, and absolutely unwavering in advancing the studies he loved. He was also a member of the Council of the Society of Antiquaries from 1956 to 1957.

It was by his forthright character and his warm personality that Arkell won the respect, loyalty, and love of his colleagues and subordinates alike, both in the Sudan and at home. A deeply sincere but undogmatic Christian, he led by example, not by precept. He gave so much of himself to everything in which he engaged that others could not but respond; all that he did was in the spirit of service, not of self-seeking. He had a humorous twinkle in his eye, a faintly mordant wit, and a kindly, though unsentimental, sympathy for the human predicament which endeared him to people.

He had been promoted Reader in Egyptian Archaeology at University College in 1953, and retired in 1963. In 1960, after a short course at Cuddesdon College, he had been ordained into Holy Orders, and he had served as Curate at Great Missenden, where he then lived from, 1960 to 1963. On his retirement he became Vicar of Cuddington with Dinton in Buckinghamshire. He had always wished to enter the church at the end of his life and so return to the profession of his father, whose Christian inspiration and example he had always acknowledged with respect and affection. In his two parishes, his liberal and practical approach to religion and to personal problems, his transparent goodness, and his friendly nature gained the confidence of all and made him the centre of a community, which he left with infinite regret when, on his final retirement, he moved to Little Baddow in Essex. He died on 26 February 1979.

In Anthony Arkell we have lost not only a fine soldier, administrator, and scholar, but a Christian friend to many in all walks of life. In the hearts of the Sudanese people he will keep an enduring place, as a benefactor to their country and a founding father of the study of its history and archaeology. The President of the Democratic Republic of the Sudan has acknowledged this by awarding to him posthumously the Order of Sciences, Arts and Art of the Golden Class.

Short List of Principal Scientific Publications

BOOKS

Early Khartum. An account of the excavation of an early occupation site carried out by the Sudan Government Antiquities Service in 1944/5. London. Oxford University Press. 1949.

Shaheinab. An account of the excavation of a Neolithic occupation site carried out for the Sudan Government Antiquities Service in 1949–50. London. Oxford University Press. 1953.

A History of the Sudan from the Earliest Times to 1821. London. Athlone Press. 1955. 2nd edn. 1961.

Wanyanga, and an Archaeological Reconnaissance of the South-West Libyan Desert. The British Ennedi Expedition, 1957. London. Oxford University Press. 1964.

The Prehistory of the Nile Valley, being Handbuch der Orientalistik, 7. Abteilung, 1. Band, 2. Abschnitt A, Lieferung 1; Brill, Leiden-Köln. 1975.

ARTICLES

Sudan Notes and Records: Arkell's contributions extend from Vol. 5 (1922) to Vol. 40 (1959); editor 1945-8.

Kush: Arkell's contributions extend from Vol. 1 (1953) to Vol. 12 (1961).

JEA: Arkell's contributions extend from Vol. 19 (1934) to Vol. 48 (1962).

Sudan Antiquities Service Occasional Papers No. 1: 'The Old Stone Age in the Anglo-Egyptian Sudan'. Khartûm. 1949.

Current Anthropology, Vol. 6, No. 2: 'Review of Predynastic development in the Nile Valley'. With P. J. Ucko. 1965.

Vol. 7: 'The Iron Age in the Sudan'. 1966.

Articles, reviews, and contributions in many other periodicals and other publications, including the *Encyclopaedia Britannica*.

MUSEUM ACQUISITIONS, 1979

EGYPTIAN ANTIQUITIES ACQUIRED IN 1979 BY MUSEUMS IN THE UNITED KINGDOM

Edited by JANINE BOURRIAU

THE list of newly registered objects in the Petrie Museum includes only items which are unpublished, or published without illustration. The British Museum's acquisitions include items from the Zouche collection which was bequeathed to the Museum in 1917. The Bolton Museum received the Ragdale collection in 1979, which was formed by a local antiquarian John Rowland Ragdale in the late nineteenth and early twentieth centuries. The collection was originally presented in 1913 to the Stand Grammar School, Whitefield, Bury.

Palaeolithic

1-3. Acheulian hand axes and Mousterian retouched flake, University College 34547-9. From Coptos. Petrie, Koptos, 3.

Predynastic

- 4-12. Basalt and greywacke axes, basalt and limestone celts, University College 34490, 34523, 34541-6, 34491. From Coptos, lower levels of the town. Ibid. 4, cf. pl. II, 7-9.
- 13-155. Flints: points, blades, scrapers, and knives, University College 34492, 34550-691. From Coptos, from pits in basalt clay beneath the town. Ibid. 3. University College 34660, ibid. pl. II, 1. Predynastic-Old Kingdom.
- 156-8. Half of a pear-shaped limestone macehead, a rim sherd of white crossed line ware, and a copper bodkin, University College 34493-5. From Coptos.

Early Dynastic

159-60. Fragment of a slate palette, and of a porphyry bowl, University College 34497, 34776. From Coptos. Ibid. 26.

Old Kingdom

- 161-72. Fragments of gypsum, University College 31196, 31202 A-K. From Meidûm. IVth Dynasty.
 - 173-4. Sherds of Meidûm ware. University College 31198-9. From Meidûm. IVth Dynasty.
- 175. Wooden stick, University College 31197. From the filling of Mastaba 6, Meidûm. IVth Dynasty.
- 176. Fragment of a bronze rod, University College 31203. From Mastaba 17, Meidûm. IVth Dynasty. Petrie, *Medum*, 36.
- 177. Borings taken from an adze: copper, arsenic, antimony, iron, sulphur, phosphorus, University College 31204. From Mastaba 6, Meidûm. IVth Dynasty. Ibid. 36.

- 178-208. Fragments of linen, including shawls and sheets, University College 31205-34. From Deshâsheh, tombs 99, 148? Vth Dynasty. Petrie, *Deshasheh*, 32 and some unpublished.
- 209-11. Fragments human skin, cow's skin, and horn, University College 31236-8. From Deshâsheh. Vth Dynasty.
 - 212. Rim sherd of Meidûm ware, University College 30149. From El-Kab?
- 213. Fragment of limestone relief with painted male figure, University College 30150. From Nubt? Petrie, Nagada and Ballas, 3.
- 214-53. Fragments from pottery vessels with incised and relief decoration, and from large pottery sculptures of men and animals, University College 34808-46. From Coptos temple, below the reliefs of Inyotef. Petrie, Koptos, 5-7, pl. v, 1, 3; B. Adams Bulletin de Liaison, 4 (1979), 25-6.

First Intermediate Period

254. Faience beads, University College 31257. From Qau, Cemetery S, tomb 7892. VIIth Dynasty.

Middle Kingdom

- 255. Faience beads, University College 28735. From Tarkhan, tomb 1369. XIth Dynasty.
- 256. Wooden coffin of Khnumhotpe, son of Henib, with texts on lid and sides, Royal Scottish Museum, 1979. 203eA. From Meir, excavated in 1910. A. Kamal, ASAE 12 (1912), 106–7, no. 28.
 - 257. Limestone maul, University College 31239. From Qau el-Kebir, tomb of Wahka I.
- 258-60. Wooden male servant figure and hand, University College 31240-1. From Qau el-Kebir, tomb of Wahka II. Petrie, *Antaeopolis*, 10.
- 261-3. Alabaster dish, beads of amethyst, faience, jasper, turquoise, and lapis lazuli, mud brick, and basalt column fragment, University College 31242, 31247, 31275, 31283. From Qau el-Kebir, tomb of Waḥka II. Ibid. 10.
- 264-87. Fragments of male statues and statuettes, one with name and title of Waḥka I, in basalt, granodiorite, dolerite, and chlorite schist, University College 31276, 31282, 31284-305. From Qau el-Kebir, tomb of Waḥka II? Ibid. 10.
- 288–90. Limestone fragment of the head of a statue, carnelian and faience beads and amulets, University College 31280, 31255–6. From Qau el-Kebir, tomb of Waḥka I or II.
- 291-2. Faience fragment with the name of Waḥka II and beads, University College 31248-9. From Qau el-Kebir, *redîm* east of upper terrace of tomb of Waḥka.
- 293-6. Wooden model vase, faience and carnelian beads, and sandstone weight, University College 31243-4, 31246, 31245. From Qau el-Kebir, Tomb of Sobkhotpe. Petrie, *Antaeopolis*, 10.
- 297. Faience beads, University College 31250. From Qau el-Kebir, south-west of Tomb of Sobkhotpe.
- 298-9. Alabaster vase and fragment, University College 31251-2. From Qau el-Kebir, bone deposit.
 - 300. Serpentine scribe's palette, University College 34763. From Coptos. Petrie, Koptos, 26.
 - 301. Pottery canopic jar lid, human headed, University College 30103.

- 302-4. Carnelian, jasper, and turquoise beads and pendants, Fitzwilliam E.4-6.1979.
- 305. Linen from mummy wrappings, Bolton 211.1979.576. From the mummy of Khnumnakhte, Rifeh. From the Ragdale collection. Petrie, Gizeh and Rifeh, 12-13.
 - 306-13. Model copper axes, British Museum 68969-76.

Second Intermediate Period

- 314-24. Fragments of pottery with incised and applied decoration, University College 34746-56. From Coptos.
- 325-7. Fragments of painted limestone relief, University College 31277-9. From Qau el-Kebir, tomb of Nubkha?
 - 328. Limestone stela of Ab-imes, British Museum 68978.

New Kingdom

- 329-511. Sherds of Mycenaean pottery, University College 24960-25036, 25048-152. From El-'Amarna, rubbish dumps of the central city. Petrie, Tell el Amarna, 16-17.
- 512-15. Sherds of Mycenaean pottery, and fragments of a faience bowl, University College 25045-6, 30152-3. From El-'Amarna.
- 516-24. Fragments of faience, glass, and Egyptian blue, University College 25037-44, 25047. From El-'Amarna, glass factory. Ibid. 25-6.
- 525. Fragments of ash, charcoal, and copper slag from a crucible, University College 30175A-J. From El-'Amarna, Petrie excavations.
 - 526. String of blue, yellow, and white glass 'eye'-beads, Fitzwilliam E.7.1979. Amarna Period.
- 527. Faience beads, University College 30114. From the Temple of Amenophis II at Thebes. Petrie, Six Temples, 6.
- 528-42. Beads, shells, glass, and copper fragments, reed kohl tube and human hand bone, University College 31045-59. From Meidûm excavation of 1911, tombs 57, 59, 60, 61.
- 543-66. Beads, amulets, and hair-rings, University College 31072-6, 31078, 31097-100, 31102-10, 31119-22. From Meidûm, excavations of 1911, tombs 75, 81, 51, 82, 21, 79.
- 567-71. Fragment of alabaster bowl, wooden kohl pot lid, and stick, University College 31077, 31096, 31168, 31113, 31131. From Meidûm, excavation of 1911, tombs 79, 51, 78, 37, 38.
- 572-620. Beads, rings, and amulets, University College 31079-87, 31089-91, 31093-5, 31111-12, 31123-4, 31128-30, 31132-5, 31137-42, 31144, 31146-51, 31153-9, 31161, 31201. From Meidûm, excavations of 1911, tombs unknown.
- 621-7. Tortoiseshell and wooden kohl sticks, black limestone weight, fragment of glass vase, faience gaming pieces, copper spear, University College 31088, 31129, 31136, 31143, 31152, 31163-4. From Meidûm, excavations of 1911, tombs unknown.
- 628-9. Cypriote base-ring-ware juglets, University College 31166-7. From Meidûm, excavations of 1911, tombs unknown.
 - 630. Bronze razor with handle in form of an ape holding a dom palm, University College 30135.
- 631. Quintriple ebony kohl tube, with figures of Bes and an ape, University College 30136. From the Wellcome collection.

- 632-4. Human scalp fragments, University College 30137-9. From Gurob tombs 23 or 24. Petrie, Kahun, Gurob and Hawara, 39, 41.
- 635-6. Beads, University College 30106-8. From Thebes, the foundation deposits of Siptah and Twosret. Petrie, Six Temples, 14, 17.
 - 637-8. Faience inlays with the cartouche of Sethos II, University College 34535-6. From Coptos.
- 639. Greywacke fragment of the stele of Neb . . ., with scene of the Ḥatḥor cow, Fitzwilliam E.9.1979 (pl. XV, 1). XIXth Dynasty.
- 640. Fragment of faience tile with figure of a foreigner, University College 30124. From Thebes? XIXth Dynasty.
- 641-50. Fragments of faience and glass inlays and tiles, University College 34526-34, 34537. From Coptos.
 - 651. Faience beads, University College 30105. From Tarkhan 1921.
 - 652. Fragment of pottery canopic jar with Qebhsennef formula, University College 30123.
- 653-723. Figured ostraca in pottery and limestone, University College 33190-260. Probably from Deir el-Baḥri. Catalogue in preparation.
 - 724. Green schist pounder, University College 30159. From Gebel es-Silsilah quarries.
 - 725. Limestone head of a king, University College 34522. From Coptos.
- 726-37. Faience scarabs with the names of Amenophis I, Tuthmosis III, Amenophis III, and an Assyrian sard scarab, University College 30160-71.
- 738-45. Steatite and faience scarabs, three posthumous examples with the name of Tuthmosis III, Bolton 211.1979.
 - 746. String of graduated faience disc beads, Fitzwilliam E.8.1979.
- 747. Fragment of limestone relief, inscribed . . . mry Ḥt-ḥr Bolton 211.1979.597. From the Rag-dale collection.
- 748. Foot of painted wooden coffin showing a Nubian and Asiatic on the sole of sandals, British Museum 66423. From the Zouche collection.
- 749-55. Wooden writing board and ostraca inscribed in Hieratic, British Museum 66414, 66407-12. From the Zouche collection.
- 756-60. Fragments of Books of the Dead inscribed in Hieratic, British Museum 10745-7, 10783-4. From the Zouche collection.

Third Intermediate Period

- 761. Book of the Dead inscribed in Hieratic of the chantress of Amen-Rēc Astemkhebit, British Museum 10743. From the Zouche collection. XXIst Dynasty.
- 762-7. Pottery and faience shabtis of Ta-bak-en-Khonsu, Pa-neb-Montju, Anhotep-em-Mut, Nes-iry-Rē^c, Userḥat, and Nes-Khonsu, Bolton 211.1979.577-82. From the Ragdale collection. XXIst-XXIInd Dynasty.
- 768-72. Faience amulet and ring, University College 31125-6. From Meidûm, excavations of 1911. XXIInd Dynasty.

- 773. Wooden sticks with papyrus binding, University College 31160 A, B. From Meidûm, tomb 18B. XXIInd Dynasty.
- 774-9. Faience and glass beads and amulets, University College 31185-90. From Meidûm, burial near temple of Snofru? XXIInd Dynasty.
- 780. Faience and shell beads and Bes amulet, from a child's burial in a pottery coffin. University College 31191. From Meidûm, north-east corner of Mastaba 17. Petrie, *Medum*, 14. XXIInd Dynasty.
- 781. Fragment of a faience block with figures of a king being libated by a god and a king, inscribed with part of the name of an Osorkon. University College 34695. XXIInd Dynasty.
- 782-6. Painted wooden stelae of Ḥorsiese, son of Nebnetjeru; I-Khonsu-shedef, son of the fourth prophet of Amūn Nakhtef-Mut; Ḥorkhebe, son of Ḥor; I . . ., son of Djed-Mut-iuf-ankh; Djed-Montju-iuf-ankh, son of Khamipen, British Museum 66421-2, 66424-6. From the Zouche collection XXIInd Dynasty.
- 787. 'Alabaster' (calcite) shabti of Taharqa, Fitzwilliam E.1.1979 (pl. XV, 2). From the king's pyramid at Nuri. Formerly collection of the Museum of Fine Arts, Boston. XXVth Dynasty.
 - 788. Carnelian scarab, Bolton 211.1979.526. From the Ragdale collection.

Late Period

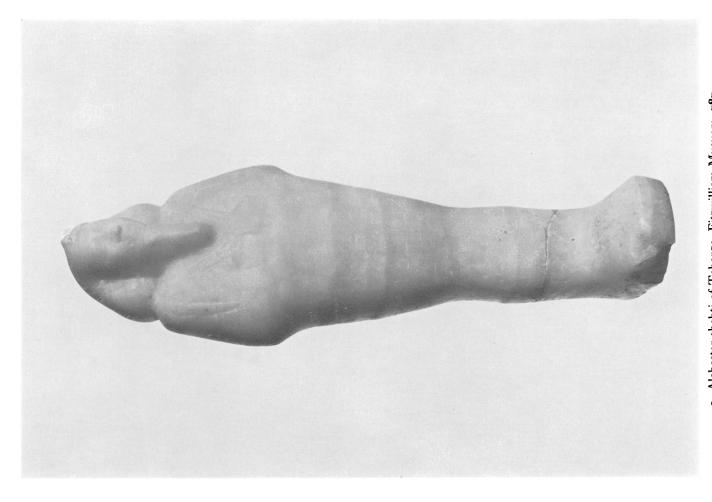
- 789-90. Faience shabtis of Pedeḥor, son of Taēsi, Fitzwilliam E.2-3.1979 (pl. XVI, 1-2). From the collection of Samuel Shepheard of Shepheard's Hotel. XXXth Dynasty.
 - 791-5. Faience shabtis, Bolton 211.1979.563-7. From the Ragdale collection. XXXth Dynasty.
- 796-829. Faience and carnelian beads and amulets, Bolton 211.1979.531-6, 211.1979.543-50, 211.1979.552-71. From the Ragdale collection.
- 830-6. Bronze figures of Harpocrates and Osiris, and amulet of Thoeris, Bolton 211.1979.537-42, 211.1979.551. From the Ragdale collection.
 - 837. Green schist heart scarab, Bolton 211.1979.575. From the Ragdale collection.
 - 838-9. Mummified hawks, Bolton 211.1979.584-5. From the Ragdale collection.
 - 840. Limestone figure of a seated baboon, University College 30140. From Gurob.
- 841-3. Faience inlay, Horus amulet and beads, University College 34538-40. From the temple, Coptos. Petrie, Koptos, 24.
 - 844. Limestone mould showing a benu-bird, University College 34694. From Coptos.
- 845. Serpentine statuette of Kek, frog-headed, University College 30154. From the Wellcome collection.
 - 846-8, Canopic jar lids, University College 30102, 30112-13.
- 849. Demotic papyrus concerning a bill of sale, British Museum 10744. From Lower Egypt. Probably Ptolemy II. From Zouche collection.
- 850-1. Two letters, one dated to a year 10, British Museum 10785-6. Ptolemaic Period. From the Zouche collection.
- 852-5. Pottery ostraca inscribed in Demotic, from the archive of Horsiese, son of Amenhotpe, British Museum 66380-3. Mid-Ptolemaic Period. From the Zouche collection.

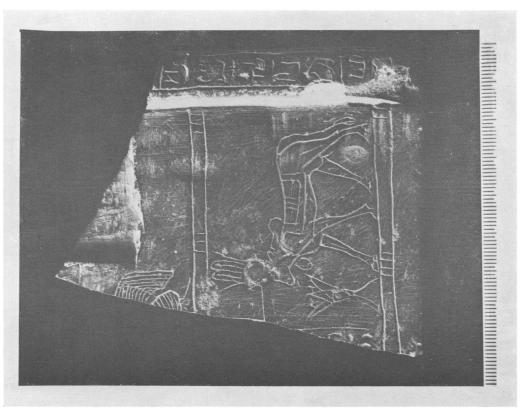
- 856-7. Thread and tape on a reed, cord and fragment of papyrus, University College 31330-1. From Saqqâra, Sacred Animal Necropolis, sector 7, surface debris and west-dump. Ptolemaic Period.
- 858-61. Fragments of jars with remains of contents, University College 31332-5. From Saqqara, Sacred Animal Necropolis, sector 7, surface debris and west-dump. Ptolemaic Period.
- 862-5. Faience model lettuce, limestone unfinished head of a woman, plaster trial piece of a man's head, and rim of a limestone vase with a Greek inscription, University College 34696, 34706-7, 34710. From Coptos. Petrie, *Koptos*, 24; B. Adams, *GM* 37, 9-15.
 - 866. Pottery vase, Bolton 211.1979.596. Ptolemaic Period. From the Ragdale collection.
- 867-74. Fragment of terracotta figures and mask, University College 30131, 30200-5, Bolton 211.1979.583 (pl. XVI, 3). From Memphis. Cf. Petrie, *Memphis*, 1, pl. xliii. Graeco-Roman Period.
- 875-85. Fragments of pottery plaques with female figure in relief, University College 30189-99. Possibly from Memphis. Cf. Petrie, *Memphis*, I, pl. xxxv. Graeco-Roman Period.
- 886. Faience figure of Harpocrates, Ashmolean 1979.15. Gift of Gerald Reitlinger. Graeco-Roman Period.
- 887-96. Pottery lamps, Bolton 211.1979.586-95. From Memphis. From the Ragdale collection. Roman Period.
- 897. Egyptian blue vase, University College 30104. From Memphis, faience factory. Petrie, *Memphis*, 1, 14-15. Roman Period.
- 898–904. Bone hair-pin, coins, ring, beads, ear-rings, and doll, University College 31258–64. From Qau, tomb 7865. Roman Period.
- 905. Iron lance head, University College 31329. From Qau, water channel over the tomb of Wahka II, Petrie, Antaeopolis, 7. Roman Period.
- 906-8. Limestone box, fragment faience bowl with lion's head on rim, solid alabaster (calcite) roller, University College 34714-15, 34717. From Coptos. Petrie, Koptos, 25. Roman Period.
- 909–10. Plaster trial piece with head of a woman and pottery lamp, University College 34716, 34739. From Coptos. Ibid. 25. Roman Period.
- 911-21. Terracotta figures, University College 34718-28. From Coptos. Ibid. 25. Roman Period.
- 922-6. White clay figurines of animals, University College 34729-33. From Coptos. Ibid. 25. Roman Period.
- 927-9. Pottery plaque with relief of a crocodile, tab handles with figures in relief, University College 34734-6. From Coptos. Ibid. 25. Roman Period.
- 930-7. Pottery, including Eastern sigillata A-ware dish, and sherds, University College 34737-8 34740-5. From Coptos, probably rubbish mound east of town, Ibid. 25. Roman Period.
- 938–54. Specimens of minerals, chryso-beryl, garnet, obsidian, mica schist, red jasper, grey steatite, red breccia, marble, amazonite, malachite, red ochre, brown haematite, specular iron, imperial porphyry, chert, University College 34758–62, 34764, 34767–74, 34777–9. From Coptos. Ibid. 26. Possibly Roman Period.
- 955-9. Painted linen shrouds and fragments of shrouds, British Museum 68950-4. From the Zouche collection. Roman-Coptic Period.

- 960. Black granite tablet with Greek inscription recording the dedication of a statue in the month of Thoth, British Museum 664.13. From the Zouche collection. Roman Period.
- 961-5. Wooden mummy labels inscribed in Greek for Orsenonphis; Besis son of Pkulis; Panos; Sentithoes daughter of Pachrates; Besion?, British Museum 66416-20. From the Zouche collection, Roman Period.
- 966. Wooden mummy label with Greek inscription, British Museum 66415. From the Zouche collection. Roman Period.
- 967-8. Fragment of a red glass rim and sherd of African red-slip ware, University College 30157-8. From Meroë. Meroitic Period.

Coptic Period

- 969. Fragment of linen, University College 31235. From Deshâsheh.
- 970-6. Bronze, copper, and brass crosses, armlets, and ear-rings, University College 31253, 31267-9, 31271-3. From Qau, Cemetery S.
- 977. Copper coin, bone hair-pin, glass beads, and ivory pot, University College 31254, 31266, 31270, 31274. From Qau, Cemetery S.
 - 978. Fragment of linen garment with design in wool, British Museum 68977.





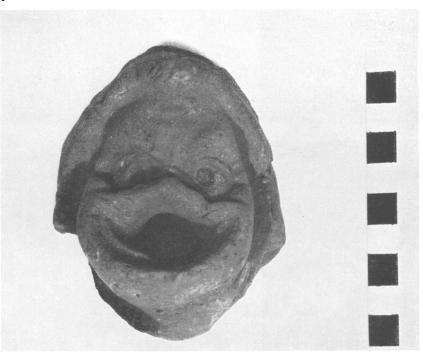
1. Greywacke stele fragment, Fitzwilliam Museum, 639





1. Faience shabtis of Pedeḥor, Fitzwilliam Museum, 789–90

2. Faience shabtis of Pedehor (backs)



Terracotta mask, Bolton Museum, 874
 MUSEUM ACQUISITIONS, 1979

REVIEW ARTICLE

Two problems connected with New Kingdom tombs in the Memphite area*

By JAROMÍR MÁLEK

1. Were there New Kingdom tombs at Gîza?

THE definition of the northern limit of the Memphite necropolis during the New Kingdom still remains something of a problem. In her fundamental study of the material from Gîza Christiane M. Zivie was of the opinion that New Kingdom tombs had once existed there, but was hard put to find a sufficient number of monuments to support this view. To make things worse, I believe that four of her six 'documents', purported to have come from New Kingdom tombs at Gîza, must be declared as 'non-admissible' evidence:

NE 52: a relief of Hri, HPM, dedicated by his 'son' (sc. descendant) Pz-hm-ntr, HPM, son of Mh.

The supposed provenance of the piece¹ ('trouvé dans un champ près des Pyramides') is based only on a statement of the dealer Tano in whose possession it was when J. Yoyotte copied its text in 1953. However, the same monument was seen with Tano and was recorded already in 1944 by B. Grdseloff (MSS 3.22.3, at the Griffith Institute) who, apparently, was not told of the circumstances of the discovery. In the absence of any other evidence the proposed provenance must be regarded as very unreliable.

NE 62: relief-fragments of Tis.

It seems that the tomb of this man has been discovered north of the mastaba of Ḥaremḥab at Saqqâra,² despite C. M. Zivie's more recent reiteration of her view.³ I cannot, unfortunately, claim to have accurately anticipated this development a couple of years before the actual discovery;⁴ when I proposed Saqqâra as the location of Tia's tomb I thought of the Memphite New Kingdom necropolis par excellence.

NE 67: a relief of the Overseer of the Royal Harim⁵ Pth-ms(w), Brit. Mus. 160.

The unpublished relief originally formed part of the collection of Henry Salt, and was sold at Sotheby's in 1835.6 Significantly, the sale catalogue does not mention Gîza at all, but includes the object under the heading 'Ornamental tables taken from the pyramids'. It was only in 1909⁷ that

- * A review article discussing questions raised by two recent publications: Christiane M. Zivie, Giza au deuxième millénaire I (nstitut Français d'Archéologie Orientale du Caire. Bibliothèque d'Étude, 70, 1976); G. A. Gaballa, The Memphite Tomb-Chapel of Mose (Warminster, 1977). The line-drawings in this article are by Mrs M. E. Cox. I am grateful to Miss K. M. Lorimer for additional help.
 - ¹ Repeated in CdÉ 53 (1978), 72.
 - ² G. T. Martin, JEA 62 (1976), 13 n. 13. Now included in PM 111², 654-5, cf. plan LXII.
 - ³ CdÉ 53 (1978), 72, 73, but compare now J. Berlandini, BIFAO 79 (1979), 262 n. 1.
 - 4 JEA 60 (1974), 164 n. 20, 167.
- ⁵ The second title given in PM III², 308 ('stela'), following A Guide to the Egyptian Galleries (Sculpture) (1909), 178 (642), is doubtful. I am beholden to M. L. Bierbrier for showing me his copy of the texts of the relief and his commentary to appear in Hieroglyphic Texts, 10, and for allowing me to examine the monument.
 - ⁶ Sotheby Sale Catalogue (Salt), June 29-July 8, 1835, no. 1265.
 - ⁷ See n. 5 above.

E. A. Wallis Budge stated that the piece was 'found near the pyramids of Gîzah.' This misleading statement was, somewhat uncritically, accepted by the *Topographical Bibliography*.8

NE 68: a relief of Pth-ms(w), Boston 34.50.

A photograph of the monument and its description are among the notes made by Battiscombe Gunn at Saqqâra in the early twenties (MSS xix.2[1] and Notebook 7, no. 43, at the Griffith Institute). The piece was almost certainly found by C. M. Firth at North Saqqâra and subsequently acquired by the Museum of Fine Arts (probably together with several other pieces, including, for example, the stela of *Ptḥ-Sty*, Boston 25.635,9 also recorded in Gunn's papers). The confusion apparently arose because the relief was brought from Egypt together with finds of the Harvard-Boston Gîza expedition.¹⁰

This leaves us *only* with the two groups of reliefs of Ptaḥmay and Kha'emwese (NE 43 and 49)¹¹ in the Cairo Museum; shabtis (NE 99) which were not found in controlled excavations can hardly be used as reliable indicators in this case. According to G. Maspero,¹² the tombs were destroyed by inhabitants of the village of Kafr el-Batrân in 1883; unfortunately, their precise location is anything but certain.

On the credit side one must mention the block of a certain Pth-ms(w), who was 'Overseer of works on all monuments of the King', reported as reused in a Moslem tomb at Gîza by C. R. Lepsius.¹³ The unpublished lower part of a naophorous statue¹⁴ of the same man in the British Museum (no. 1119) shows that Ptaḥmose must be dated to the Ramesside Period (probably Dynasty XIX), but the provenance of the statue is Saqqâra (from Petrie photos. 531-2, at the Griffith Institute), and so the block was probably taken to Gîza to be reused. No other New Kingdom monuments found at Gîza seem to have came from tombs.

When all the facts are taken into account, the verdict on the existence of New Kingdom tombs at Gîza must be, at least for the time being, 'unproven'. There is no compelling reason why large decorated tombs (as opposed to simple graves) could not have been built in this general area, but no clear evidence has yet come forth. If a suggestion concerning the location of the tombs of Ptaḥmay and Kha'emwese is to be made without trying to cast doubts on the accuracy of Maspero's statement, it is that they were situated *outside* the area generally understood by the term 'Gîza Necropolis', perhaps closer to the modern village. This is also the solution preferred by C. M. Zivie, but unless at least same unambiguous evidence to this effect is produced, it cannot be fully accepted. A comparable lack of evidence for large New Kingdom tombs is apparent at Abû Rawâsh further north, and at the other traditional sites south of Gîza, Zâwiyet el-'Aryân, 15 and Abûsîr, and also at Mît Rahîna. This leaves only Saqqâra as a New Kingdom necropolis of importance in the Memphite area.

2. A Saqqara New Kingdom chapel of unusual interest.

The still very incomplete picture of the New Kingdom necropolis at Saqqâra shows concentrations of mastaba-chapels in two areas: near the pyramid of Teti, and south of the causeway of Unis,

- 8 See n. 5 above.
 9 D. Dunham, JEA 21 (1935),148-9 pl. 17[2].
- ¹⁰ Accepting this reasoning: W. K. Simpson, *Boston Mus. Bull.* 70 (1972), numbered 71 (1973) in error, 79, 82 n. 31. Now included in *PM* 1112, 572-3.
- ¹¹ Both now published by C. M. Zivie, BIFAO 75 (1975), 285-310 with pls. 51-6, and 76 (1976), 17-36 with pls. 7-13, adding further reliefs to those listed in PM 1112, 303-4.
 - ¹² Guide du visiteur au Musée de Boulaq (1883), 304, 427-9.
- ¹³ C. R. Lepsius, Denkmäler, Text, 1, 126(8). In PM 1112, 310 still as 'probably Saite'.
- ¹⁴ Cf. A Guide to the Egyptian Galleries (Sculpture) (1909), 127 (450). I am grateful to W. V. Davies for information.
- ¹⁵ The fragment of a statue-base of *P3-hm-ntr*, HPM, Boston 11.2428 (D. Dunham, *Zawiyet el-Aryan. The Cemeteries Adjacent to The Layer Pyramid*, 41 (x3) with fig. and pls. 29(c), cf. 29(b)), must be intrusive.

with isolated rock-cut tombs in between, e.g. those of the Amarna Vizier 'Aperia¹⁶ and of Ra'mose.¹⁷ It is, in fact, likely that a large conglomeration of New Kingdom tombs originally extended along most of the eastern edge of the North Saqqara plateau.

The number of Memphite chapels where the plan can be established with reasonable certainty, and where also a fair portion of the original relief-decoration is still extant, can even now be counted on the fingers of one hand: Amenemone,¹⁸ Ipuia,¹⁹ Maya,²⁰ Patenemḥab,²¹ and the most recent addition, Ḥaremḥab.²² Isolated reliefs, often in considerable numbers, are attested from other tombs, but a reconstruction of their chapels is not yet possible. The plans of several other tomb-chapels are known,²³ but their decoration is almost completely lost, or extant reliefs cannot be assigned to them with certainty.

In the recent publication G. A. Gaballa concentrated his attention on unpublished figurative reliefs, since the beginning of this century in the Egyptian Museum in Cairo, and the reconstruction of the plan of the chapel of Ms, a 'Scribe of the Treasury of the Temple of Ptaḥ' (at Mît Rahîna), who lived in the reign of Ramesses II and had his tomb built north-east of the pyramid of Teti at Saqqāra.

The plan of Mose's tomb-chapel is of particular interest since, with the exception of the tomb of Ḥaremḥab, it is the most original known from Saqqâra at this period. In Gaballa's reconstruction all elements of the chapel are situated on the perimeter of a large open court. The main Cult-Chapel (I) is, quite contrary to expectation, situated asymmetrically in the north-west corner of the mastaba. A large room (II) containing a seated Osiris-statue flanked by reliefs showing Mose and wife Mutnofret in scenes illustrating texts from the Book of the Dead forms the centre of the west wall of the mastaba, while another two rooms (III and IV) occupy the south-west corner.

The main entrance was from the south. The lower part of a 'doorpost' with scenes 27–9 (Gaballa's pls. 36–7) assigned by Gaballa to this doorway, now in Cairo, can be completed (see fig. 1). Its upper part is recorded in B. Gunn's Notebook 6, no. 28 (at the Griffith Institute). It is of 'limestone', measures '48 by 36 by 22 cm', and its texts are 'incised on coat of pink plaster, most of which has now gone, leaving rough-dressed surface of stone'. Parts of the 'surface . . . scaled in some places' (all citations from Gunn's Notebook). The texts are reproduced here as found in Gunn's hand-copy, and fitted above the lower part of the 'doorpost' published by Gaballa. No attempt has been made to smooth over a slight misalignment of the two copies.

- ¹⁶ PM 111², 562; now A.- P. Zivie, BSFE 84 (March 1979), 21-32.
- W. M. F. Petrie (in Sayce MSS 22a, at the Griffith Institute) described it as follows: 'It has been all plastered over with mud, and it is only where this coat has fallen off that the inscriptions are visible: if properly cleaned a large amount might be copied. Its name is owing to a forepart of a huge Apis being sculptured standing out from the wall at right angles, beside the tomb well. The whole has been painted, mainly in blue and green, and is very exquisitely cut, though apparently very late.' According to Petrie, the hieroglyphs of the owner's titles translated in PM were: (1) $\{ \{ \{ \{ \{ \} \} \} \} \} \}$, and (3) $\{ \{ \{ \{ \{ \} \} \} \} \} \}$. A representation of the 'Western Goddess', comparable with that on block Gunn 30 in the chapel of Mose (pl. 48), is accompanied by a text which mentions $\{ \{ \{ \{ \} \} \} \} \} \}$, where the hieroglyphs of the Saqqâra necropolis (H. De Meulenaere, $\{ \{ \{ \} \} \} \}$), $\{ \{ \{ \{ \} \} \} \} \}$, the name of this area of the Saqqâra necropolis (H. De Meulenaere, $\{ \{ \} \} \}$), $\{ \{ \{ \} \} \} \}$, $\{ \{ \{ \} \} \} \}$, $\{ \{ \{ \} \} \} \}$, is accompanied by a text which mentions the Meulenaere, $\{ \{ \} \} \}$, $\{ \{ \} \}$, $\{ \{ \} \} \}$, $\{ \{ \}$
- ¹⁹ PM III², 555-6, with the plan modified according to K. A. Kitchen in Festschrift Elmar Edel (ed. M. Görg and E. Pusch) (1979), 283, fig. 1.

 ²⁰ PM III², 661-3.
- ²¹ PM III², 709–11. ²² PM III², 655–61; G. T. Martin, $\mathcal{J}EA$ 65 (1979), 13–16. ²³ For a general discussion see K. A. Kitchen, op. cit. 272–84. Another tomb, not mentioned by Kitchen, but fitting well into his scheme is that of Nekhtamün (PM III², 571), but he would have had some problems with the

plan of the later tomb of Hekma etrē -neheh (PM 1112, 558).



Fig. 1. 'Doorpost' (pilaster) with scenes and texts 27 (= right), 28 (= middle), and 29 (= left). Lower part re-drawn from G. A. Gaballa, *The Memphite Tomb-Chapel of Mose*, pls. 36–7; upper part from Gunn Notebook 6, No. 28, courtesy Griffith Institute, Ashmolean Museum, Oxford

- (29) Words spoken by Osiris, the Scribe of the Treasury of Ptah, Mose, j. He says: 2'Greetings to you, Foremost of the Westerners. I have given you adoration so that you hear out (my) declaration: 3I am one truly correct. I have done what is a right (in) Egypt'.
- (28) Your ba will live, your corpse will endure, you will behold Ḥarakhti, you will taste the breezes, you will breathe the north wind, you will live, you will not die, (o) Osiris, Scribe of the Treasury of Ptaḥ, Mose, j.
- (27) 'Osiris, the Scribe of the Treasury of Ptah, Mose, j. He says: 'You rise [every] day '[from] your horizon, (your) rays truly shining. May you give a [long] lifetime '[...] every day to Osiris, the Scribe of the God's offerings of the lords of Memphis, the Scribe of the Treasury of Ptah, 'Mose, j. in peace.'

Notes:

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aUsually m.
b(m) cOnly as a noun ('tongue') in Wb 11, 320, however.
and e Ramesside writings; for the latter (n) see R. Anthes, ZAS 74 (1938), 109-13, and 77 (1941), 55-6.
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Gaballa's reconstruction of the plan of Mose's tomb-chapel is ingenious but, in my opinion, does not take into account the following points:

- 1. The decoration of 'doorpost' (better: pilaster) 27–9 is a logical counterpart of scenes 23–5 (pls. 32–3) on another pilaster which in Gaballa's reconstruction adjoins large funeral-scene 26 and separates it from the remains of scene 22. It seems, therefore, likely that the two pilasters are companion-pieces. A comparison of their widths and thicknesses supports this view: 32 by 18 cm, and 36 by 22 cm (Gunn) or 19 cm (Gaballa) respectively. This, however, seriously affects Gaballa's reconstruction because pilaster 27–9 cannot be found a place in Room IV (the outer southern wall of Room III, i.e. the inner northern wall of Room IV, is complete and fully decorated). If the present position of pilaster 23–5 is retained, the only suitable location for its counterpart 27–9 is in Room II, but this in Gaballa's reconstruction again will not do because its interior northern wall (scene 8) is fully decorated. Pilaster 27–9, however, does not seem happily placed as a doorpost of the main entrance doorway at any rate: the adoration-of-the-rising-sun scene would, surely, be unusual for an outer jamb of the main doorway, and one wonders whether the Egyptians would not have found the deceased facing west (or south at best) in this scene somewhat improper.
- 2. Despite the fact that, with the notable exception of stelae, all main elements are present, the plan of Mose's chapel as reconstructed by Gaballa is very unusual in its internal arrangement. It is very difficult to see a reason for this unorthodoxy if all the space allowed for the chapel by Gaballa was available. The reason, in my opinion, must have been the exact opposite: a restricted space which forced the architect to adopt a less usual solution. This is not surprising since Mose must have been a relative newcomer to an already heavily built-over area: as far as one can judge, the majority of neighbouring mastabas are somewhat earlier.
- 3. It is not easy to see where some of the relief-fragments would fit into Gaballa's reconstructed plan, e.g. Gunn 30-2 (pl. 48).
- 4. On Loret's plan a wall runs westward in an apparent continuation of the southern wall of the Cult-Chapel (I), and shows two 'buttresses'. The distance between these corresponds to the depth of Rooms II–IV (though, admittedly, according to Loret's small-scale plan, the wall itself projects some 50 cm further west).
- 5. Finally, the proposed reconstruction of the large open court surrounded by unprotected reliefs is not entirely satisfactory. One of the reasons, and probably the main one, for the existence of pillars or columns in courts of New Kingdom mastabas was to afford protection to their decorated walls by creating roofed-over ambulatories. In Gaballa's reconstruction this does not happen.

My reconstruction, therefore, introduces the following emendations to Gaballa's plan (see fig. 2):

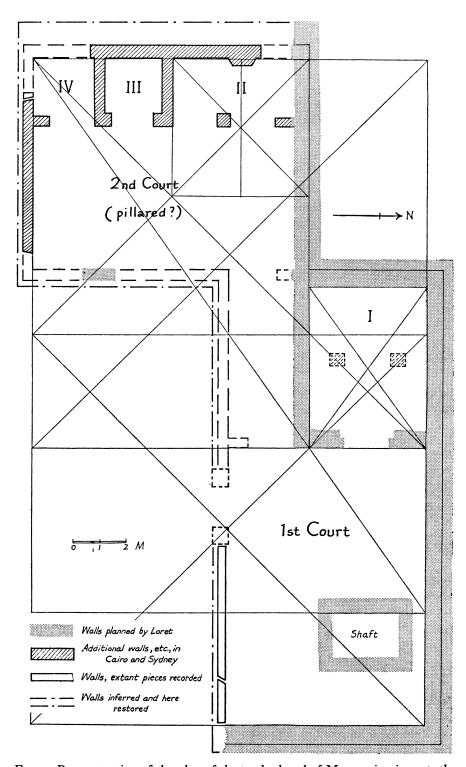


Fig. 2. Reconstruction of the plan of the tomb-chapel of Mose, using in parts the plan of G. A. Gaballa, op. cit. pl. 1

- 1. The 'Osiris-wall' complex (Rooms II-IV) has been moved further west and placed as indicated by the 'buttresses' on Loret's plan. The east-west length of the chapel has thus been considerably extended.
- 2. Pilaster 27–9 has been moved to the spot indicated by the second 'buttress' against the northern wall of the chapel on Loret's plan.
- 3. The northern interior wall of the room with the Osiris statue (II) provides an emplacement for Gunn's blocks 30-2 (pl. 48), which otherwise cause considerable embarrassment (p. 6). Pilaster 27-9 abutts against Gunn's block 32 where the latter shows a blank area.
- 4. The continuation of the southern interior wall with funeral-scene 26 is not certain. The remains of a wall south of Cult-Chapel I on Loret's plan, however, seem to indicate the position of the eastern wall of the Second Court which precedes chapels II–IV. This would almost certainly reduce the eastern interior wall of the First Court to about the length shown on Loret's plan.

It is apparent that in the plan corrected as proposed above the Cult-Chapel (I), the 'Osiris-complex' (II-IV), and the whole chapel of Mose are geometrically related. The basic principle of the design is one which was well known to ancient Egyptian architects:²⁴ the relationship of the side of a square to the hypotenuse $(a/a\sqrt{2})$. Since the Osiris statue was probably, according to the original plan, to be situated in the centre of the western wall of Room II, the outside width of Rooms III+IV would be identical with that of Room II if it were not for the fact that the northern wall of the latter was built within the square which underlies the plan of the west wing. This reduced the internal length of the western wall of Room II by some 30-40 cm, though apparently it did not affect the position of the statue,²⁵ and thus only one pillar (probably that in Cairo) was required to produce a uniform appearance of the façade of Rooms II-IV. The exact position of the eastern part of the southern wall of Mose's chapel, in which the main doorway was situated, is not certain. There was no reason for Room IV to contain a pillar; this, together with one from Gaballa's Room II (plus probably others, now lost), must be assigned to one of the courts, but their exact positioning does not seem possible.

The relationship of the measurements of various parts of the chapel can be expressed in mathematical terms. Thus, if module a = the length of the 'Osiris-complex' plus the thickness of the northern wall of Room II, the measurements of the Cult-Chapel are:

- (A) the internal length+the thickness of the façade wall = $a(2-\sqrt{2})$
- (B) the internal width = $a(\sqrt{2}-1)$, and the over-all measurements of Mose's tomb-chapel are:
- (C) the internal east-west dimension = $a(\sqrt{2}+1)$,
- (D) the maximum internal north-south dimension = $a\sqrt{2}$.

The only reasonably well-preserved measurement which can be ascertained from the remains of the chapel is (A): 2.85 m rounded up to 2.90 m plus 0.30 m for the thickness of the façade. The basic module a, calculated from the equation $A = a(2-\sqrt{2})$, is then 5.46 m. The measurement intended was, no doubt, 10 Egyptian cubits (should be 5.23 m, the difference being due to ancient or modern measuring errors). On the assumption that a = 10 cubits = 5.23 m, the other dimensions are approximately as follows: (A) 3.06 m; (B) 2.17 m; (C) 12.62 m; (D) 7.40 m.

The visitor, therefore, entered from the south through a now-lost doorway. On his right, walls of the 1st Court carried reliefs and the all-important legal text. Turning left, the visitor faced the

²⁴ Implied, though not discussed: A. Badawy, Ancient Egyptian Architectural Design, 21-3, 29.

²⁵ Gaballa's text (p. 5), unfortunately, does not agree with his plan at this point: although he states that the total surviving length of the rear wall of Room II is 1.55 m, his plan suggests some 10-15 cm more.

façade of the Cult-Chapel (I) and the passage-shaped western extension of the First Court skirting it to the left through which one approached the Second Court, probably pillared, with a complex of small chapels against the western wall of the mastaba. Mose's tomb-chapel thus consisted of two

parts: the east wing, with the First Court and Cult-Chapel, connected by a passage with the west wing containing the Second Court and rooms devoted to Mose's and Mutnofret's worship of gods. Despite the asymmetrically placed Cult-Chapel in the east wing, the statue of the enthroned Osiris (normally shown in the upper register of the centrally placed main stela) dominated the chapel. Although the lack of suitable space did not allow of constructing subsidiary chapels on either side of the 'Cult-Chapel', the mastaba meets all the requirements of the period. The nearly L-shaped rather than fully axial plan of Mose's chapel may seem surprising at first, but it is well known that Ramesside architects were prepared to be remarkably flexible when faced with problems of horizontal stratigraphy, e.g. in the case of the parallelogramshaped plan of the Ramesseum or the L-shaped temple of Sethos I at Abydos.

The case of Mose's chapel demonstrates to what extent the extreme fragmentation and dispersal of Memphite New Kingdom reliefs hinders any prospective systematic study of the material. This unhappy state of affairs is the result of the long period during which the necropolis has been exploited (a Memphite New Kingdom relief,²⁶



Fig. 3. Block from the tomb-chapel of Mose. Sunk relief, measurements and present location unknown. Drawn from a photograph.

brought from an as yet unidentified tomb at Saqqâra by the Revd. Robert Huntington, was already in the Ashmolean Museum in Oxford some 300 years ago, in 1683, though it was catalogued only later as no. 1836.481). Sections of the decorated walls of Mose's chapel must have either been destroyed or, unrecognized, still await identification. The lower part of one of the blocks recorded by Gunn (no. 29, Gaballa's pl. 30a) was acquired by the Boston Museum of Fine Arts in 1974 (no. 1974.315). I can quote one other important relief-fragment (present location unknown) from Mose's chapel which was not included in Gaballa's publication (see fig. 3):

Mose and wife Mutnofret, both with their arms raised (the wife holds an arched sistrum with serpent-shaped rods in her left hand), stand in adoration before a now lost deity. The text above the couple and before the wife, apart from giving their names and titles, asks the deity to grant 'coming forth from Ro-setau to behold Rē-Ḥarakhti', and the remains of a horizontal bandeau text above refer to 'august [gods?] of the necropolis'.

A left-hand side wall, i.e. probably southern, is required for this relief, and Room IV (scene 22, below the relief shown on pl. 34 right) seems the likeliest candidate.

It is to be regretted that Gaballa was not able to include photographs of the Sydney pillars. Admittedly, the pillars have seriously deteriorated²⁷ since their acquisition in 1862, and so it is improbable that a significantly better reading of some of the less-clear parts of their texts could now be obtained; nevertheless, the antiquated style of line-drawings used by Sir Charles Nicholson and

²⁶ Shown on pl. 6 of the twenty-five plates without letterpress published by Alexander Gordon in 1737–9.

²⁷ The upper part of pillar II = Nicholson B, apparently, is not in the Nicholson Museum: see A. Nibbi, GM 27 (1978), 8.



Fig. 4. Ramesside block, probably from a Memphite tomb, in the possession of Dr E. Rotellar, Barcelona. Sunk relief. Drawn from a photograph in an advertising leaflet (1978) of L'Ibis Gallery, New York

further adapted by the author is not satisfactory. Gaballa's pillar IV = Nicholson E/D illustrates the point well (see pl. XVII);²⁸ incidentally, the text behind the deceased on side 3 can now be read as [r]-gs tpy $\underline{dw}[.f]$, 'beside the One-upon-his-Mountain'.

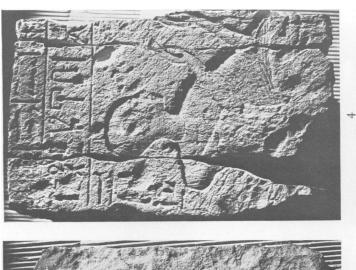
²⁸ I want to thank Geoffrey T. Martin for allowing me to use his set of prints, and Professor Alexander Cambitoglou, Curator of the Nicholson Museum, Sydney, for permission to reproduce them here.

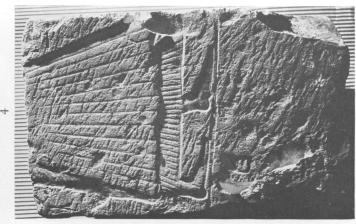
One other thing regarding the existing documentation of the tomb must be mentioned: four unpublished photographs, showing the legal text on the north wall, still *in situ*, and the north-east corner of the court, are among Gardiner's papers at the Griffith Institute (MSS 28.1084-7).

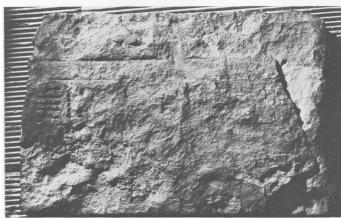
It ought perhaps to be pointed out that the controversial sketch-plan in Gunn MSS xx.11 (Gaballa's pl. 30b), certainly was not drawn by B. Gunn, as stated in Gaballa's notes 4 and 8 on p. 34, but, to judge from the handwriting of the accompanying notes, by C. M. Firth or J. E. Quibell. It is also interesting to note that parts of Mose's chapel already fell victim to that energetic 'explorer' of New Kingdom Saqqara around the middle of the last century, Youssef Masarra.²⁹

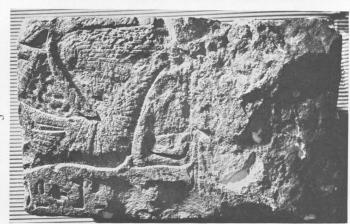
The representation of Mose as a scribe on the northern part of the façade of the Cult-Chapel hardly reflects his status as employee of the Treasury of Ptaḥ, as Gaballa suggests on p. 7, but more likely was a convention or fashion. An almost certainly Memphite relief of about the same date, recently with a dealer in New York³⁰ and now in the possession of Dr E. Rotellar in Barcelona,³¹ shows a seated man wearing the characteristic 'garment of vizier' engaged in the same activity (see pl. XVIII and fig. 4). The theme and location are curiously reminiscent of the depictions of the tombowner 'painting seasons' in two Saqqara mastabas of the early Sixth Dynasty nearby, those of Mereruka³² and Khentika Ikhekhi.³³

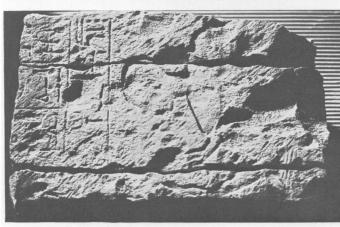
- ²⁹ Sir Charles Nicholson, Aegyptiaca, etc. (1891), 95-6.
- ³⁰ Advertising leaflet (1978) of L'Ibis Gallery, in which the relief is said to measure 19 by 14\frac{3}{4} in (48 by 37.5 cm). The relief does not seem to be earlier than the reign of Ramesses II. A colour slide which the present owner of the monument very kindly sent to me shows traces of red paint on the arms and the feet of the man, while remains of light brown persist on parts of the costume, the 'naos', the chair, and the papyrus-container(?) under the chair.
- ³¹ I am grateful to Dr E. Rotellar for information and a photograph of the relief, and for permission to use it here.
 - ³² P. Duell, The Mastaba of Mereruka, I, pls. 6, 7; cf. PM III², 526(10)(f).
- ³³ T. G. H. James and M. R. Apted, *The Mastaba of Khentika called Ikhekhi*, 20–1, 43 pl. 10; cf. PM 111², 509(13).

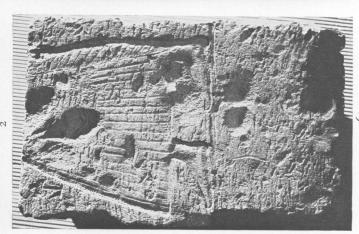






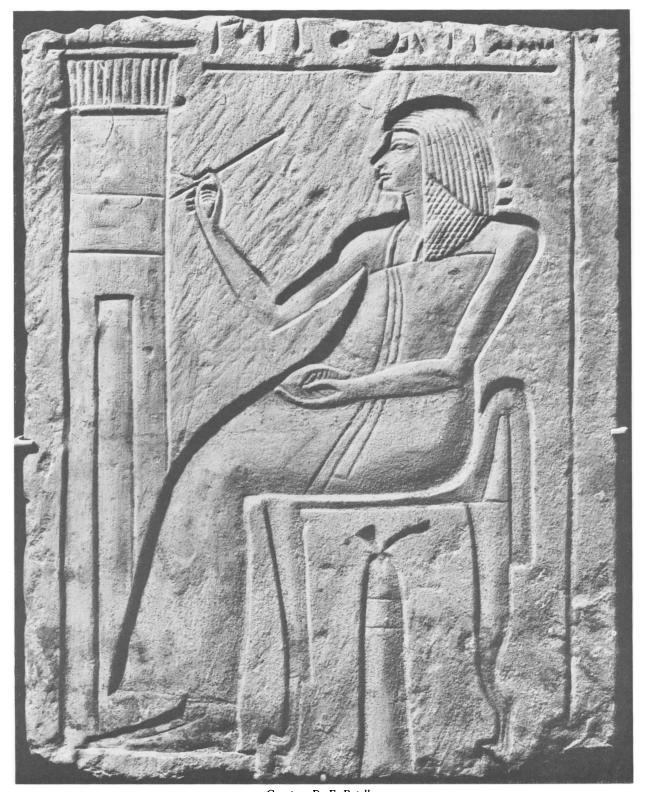












Courtesy Dr E. Rotellar

Ramesside relief, probably from a Memphite tomb, in the possession of Dr E. Rotellar, Barcelona

NEW KINGDOM TOMBS IN THE MEMPHITE AREA

BRIEF COMMUNICATIONS

Notes on two tomb chapels at Gîza

The Sixth Dynasty tomb chapel of *Idw* at Gîza (G 7102) shows, in the tympanum above the entrance, a representation of the coffin on a sledge which is dragged by two oxen and six men.¹ The sledge (see fig. 1) is followed by a lector-priest, labelled as such and wearing the customary bandoleer; he extends an open hand slightly forward, perhaps in a gesture of speech,² while the other holds a roll of papyrus. The inscription above the procession is, as W. K. Simpson says, damaged and partly illegible. He reads: *ir n Inpw smi-ti krs* [...] *imntyt di smyt cwy: ir·k šd r Idw*.³

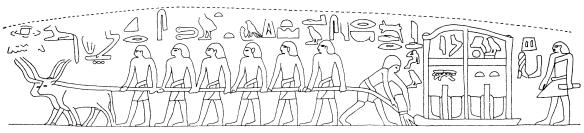


Fig. 1

Although the damaged condition of the inscription does indeed leave a slight degree of uncertainty at some points, the following transcription seems highly probable:

- ¹ W. K. Simpson, *The Mastabas of Qar and Idu*, pl. 18 and fig. 35 (on which our fig. 1 is based, with the curve of the vault added at the top); Lüddeckens, *MDAIK* 11 (1943), pl. 5.
- The degree to which the hand is raised in such cases varies greatly: cf. H. Müller, MDAIK 7 (1937), 65. An example exactly like the present one, in Murray, Saqqara Mastabas, I, pl. 23, is accompanied by the words sift in hry-hbt, 'transfiguration by the lector-priest', and this too evidently involves the recitation of funerary formulae.

 3 Simpson, op. cit. 22.

 4 Op. cit. 25.
- ⁵ See Simpson, op. cit. fig. 24; also Capart, Rue de tombeaux, pls. 48, 55, and Blackman and Apted, Meir, v, pl. 29.
 - ⁶ Simpson gives parallels (loc. cit.), for which see also Lüddeckens, op. cit. 20 and 22-3.
 - ⁷ For this type of ellipsis see Edel, Altäg. Gramm. II, § 997.
- 8 The sign \triangle behind $\frac{6}{2}$ is suggested more tentatively in the drawing published by W. Stevenson Smith, A History of Egyptian Sculpture and Painting in the Old Kingdom, fig. 84b.

In this case the initial portion of the statement would have to be translated: 'Anubis has made the interment and the burial; thou (\underline{twt}) art come to the West.' But the traces seem to favour \overline{A} rather than \overline{A} . The choice between \overline{A} and \overline{A} is likewise uncertain, but I believe that I can see the head of the cobra, and it seems more likely that the lector-priest says: 'I address \overline{Idw} ' than that he says: 'I read to \overline{Idw} ', especially since one would expect \underline{sdi} to have a specific direct object. In view of the sequence of name and epithet in ' \overline{Idw} the revered', as noted earlier, it seems unlikely that the final words are to be linked even more closely to the lector-priest's label: 'addressing \overline{Idw} , the revered (by) the lector-priest'. But, if that were the case, \underline{dd} would be infinitive, and the alternative reading of \underline{sdi} would be even more definitely excluded, since the form would be \underline{sdt} .

The same scene poses another small problem that has not, to my knowledge, received any comment whatever. Like several coffins of the period, that of Idw shows a pair of wdt eyes at the head-end; if they appear to be on the back of the coffin, that is because the usual rightward orientation is here reversed. To the right of the eyes, taking up the remaining space, are the signs c. I see no other explanation than to regard these as a writing of the feminine dual ending (wdty), very much like the writing of c in PT 1248d(P),4 although I know of no other case where the emblematic use of the two eyes shows the addition of the feminine ending in any form.

- ¹ For the phrase 'thou having been taken' compare, on the same wall, to the right of the entrance, the cry of a mourner: (Simpson, loc. cit.; Lüddeckens, op. cit. 16–17); for *iţi r* (to a place) cf. Wb. 1, p. 149 (14).
 - ² For the occasional omission of in in such cases see Edel, op. cit. 1, § 696.
- 3 The damaged state of the reliefs has likewise led to doubtful readings of the inscriptions elsewhere in this publication, and notably the bottom of fig. 27, where, among other difficulties, which is surely with a surely with
- 4 Quoted by Edel, op. cit. 1, § 296, and by Faulkner, Plural and Dual in Old Egyptian, 18 n. 1, who points out that this actually refers to a son and daughter: cf. his § 27, where some analogous writings are quoted; also the plural writing $\frac{1}{2}$ in post-Old Kingdom inscriptions at Naqâda: Fischer, Inscriptions from the Coptite Nome, 73, 85 (nos. 23, 30).
- ⁵ W. K. Simpson, *The Mastabas of Kawab, Khafkhufu I and II*, pls. 38(b), 39(b) and fig. 48 (on which my fig. 2 is based).
- ⁶ W. S. Smith, op. cit. p. 198; for the scene in the tomb of Nb(·i)-m-·ht see LD Ergänzungsband, pl. 34(a) and Hassan, Gîza, IV, fig. 82, p. 143. The suggested parallel is not at all close.
 - ⁷ Simpson, The Mastabas of Kawab, Khafkhufu I and II, 25.
 - 8 Wb. 111, 433.
- 9 The same publication contains a few other minor lapses of this kind. On p. 2 n. 2 the alternative reading is the only one possible: 'She who is powerful and noble in the sight of the great god'. On p. 7, for $smr\ w^c ty\ n$ mrw(t), 'sole companion of love', read $smr\ w^c ty\ ny\ mrwt$, 'sole companion, possessor of love'. On p. 13, the text in fig. 29 is not 'throughout the day, the sole one(?) of the dining pavillion [sic]', but 'one day's provisions of the

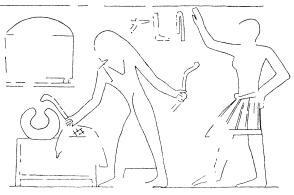


FIG. 2

to that of the dancers (\rightarrow) . It is true that it does not agree with the orientation of the long-skirted woman either, but she extends one hand backwards, and the hand evidently does not hold an 'ornament' but one of a pair of sinuous wands or clappers, the other of which is held in her other hand, perhaps being removed from the objects on the box before her. I surmise that she is giving the signal to begin to dance and that the word bb is associated with her gesture. In all probability this is not a verb 'instructing', for which there is no parallel in such scenes, but is rather the designation of the woman who is the 'instructress' of the dancers. In this case the feminine ending t should be understood, and perhaps restored, for the surface below and beyond the sign t is much damaged.

'Instructors' are at least twice identified as such in Old Kingdom scenes of singing and dancing at Saqqâra,² and the title \(\frac{1}{2}\) \(\frac{1}{2}\) \(\frac{1}{2}\) shi haw nswt, 'instructor of singers of the king', is known from Gîza.³ This is the first piece of written evidence for an instructress, but several women of the same period are known to have been 'overseer of singers', 'overseer of dancers' and the like.⁴

HENRY G. FISCHER

Two linen dresses from the Fifth Dynasty site of Deshasheh now in the Petrie Museum of Egyptian Archaeology, University College London⁵

In 1978, during registration work on material from Deshasheh in the Petrie Museum, the author examined a jumbled mass of funerary rags only to discover two fine linen tunics. One of these, UC 31182 (see pl. XIX, 1), had been wrapped by Petrie in a sheet of newsprint from *The Athenaeum* of 26 December 1898, and was labelled by him on the outside, in characteristic blue crayon: 'Galabiyeh. V dyn. Deshasheh'. The other, UC 31183 (see pl. XIX, 2), was simply found amongst the linen fragments.

dining pavilion'. On p. 17 (fig. 33) the name read \mathcal{H}^{jj} is clearly written \mathcal{H}^{jm} , and the name Bbs is Bbi (cf. also p. 20). On p. 25 (fig. 49) the name st(?)-Pth is undoubtedly $S^{jb}-Pth$ i.e. $\bigcap_{i=1}^{n} \bigcap_{j=1}^{n} \bigcap_{i=1}^{n} \bigcap_{j=1}^{n} \bigcap_{j=1$

- ¹ Cf., for example, the clappers held by dancers in v. Bissing, *Re-Heiligtum*, III, pl. 16; Junker, *Gîza*, x, fig. 44; Hassan, *Gîza*, II, fig. 228.
- ² Hassan, Excavations at Saqqara 1937–1938, I, fig. 7, p. 23; Moussa and Altenmüller, Das Grab des Nianchchnum und Chnumhotep, pls. 69, 70(b) and fig. 25. In the latter tomb (pl. 27a and fig. 10) the same term is applied to a master barber, and the related term sbity occurs in still other contexts: see op. cit. 80 n. 352.
 - ³ Hassan, *Gîza*, 1, 67 and pl. 44.
 - ⁴ Fischer, Egyptian Studies, 1, 71.
- ⁵ I am grateful to Dr J. Málek for reading this manuscript, and for useful observations of a philological nature.

These garments are presumably two of Petrie's nine 'shirts' discovered in the Fifth Dynasty Tomb 148b¹ piled directly on top of the female burial lying in its solid-block wooden coffin. They are made in one piece of linen from waist to feet, joined selvage to selvage down the right-hand edge, with a fringe of extended weft threads turned back to create an ornamental fringe on the outside. There is a rolled hemmed edge at the bottom of the garment secured by whipping stitches. Two pieces of material form the bodice, passing over the shoulders and continuing out into long sleeves, with rolled hems at the wrists (see pl. XX, 1). The V-shaped gaps at front and back would have been closed by tying with three pairs of strings, now very fragmentary. UC 31182 was by far the stronger and more complete of the two garments, and, although UC 31183 was of a much finer weave, both the right side of the bodice and its sleeve were missing.

The extraordinary feature of these garments, as noted by Petrie, is their excessive length and extremely narrow width. UC 31182 is 142 cm long with a width of 38 cm across the body, whereas UC 31183 is 156 cm long and 47 cm wide. The female body measured 135 cm for the corresponding distance. This seems to indicate that the dresses were designed exclusively as grave-goods, and indeed both show characteristically stained areas from a mummified body, but absolutely no evidence of creasing from having been worn. Thus they represent a transitional stage² between the placing of simple hanks of yarn with the body, attested as far back as Naqâda I burials,3 and the pictorial representation of garments intended to act in a magical fashion as evidenced by the tomb-chapels of Khufukha'ef (I) at Gîza⁴ and Fetekti at Saqqâra.⁵ Here men are shown placing long pleated lengths of linen into boxes as part of the funerary equipment of the deceased. It is noteworthy that the determinative of a sleeved garment T is occasionally used in the Old Kingdom linen-lists for zzf-linen with the amount written with a thousand-sign below.6 Certainly linen was one of the main objects of the tomb robbers at Deshasheh (where it was often found half dragged out of a coffin, and hanging over the edge), as doubtless elsewhere, and this may have encouraged the substitution of wallreliefs for the actual material, further developing into the representations of garments on Middle Kingdom coffins.7

The closest parallels to the Deshasheh dresses in the way of extant garments, and of course extant early garments are extremely rare, are sleeved dresses found by Reisner at Naga ed-Dêr.⁸ The most perfect, from the Sixth Dynasty Tomb N94, now J. d'E. 88144,⁹ had a skirt shortened

- ¹ W. M. F. Petrie, *Deshasheh* (London, 1898), 16, 31-2, and pl. xxxv. His account of the discovery is given in the unpublished Petrie, 'MSS Journal', 28 December 1896-9 March 1897, 47-50; original in the Griffith Institute, Oxford, copy in the Petrie Museum.
- ² For parallel uses of wrappers and garments with the deceased see id., Kafr Ammar, Heliopolis and Shurafa (London, 1915), 12–19; G. A. Reisner, A History of the Giza Necropolis, I (Cambridge, Mass., 1932), 452–3 and pl. 42.
- ³ Petrie, Naqada and Ballas (London, 1896), 29 (Grave 1563 of Petrie's Sequence Date 32); id., Diospolis Parva (London, 1901), 34 (Cemetery C of Petrie's Sequence Date 30).
 - ⁴ A. Mariette, Les Mastabas de l'Ancien Empire (Paris, 1884), 562, iv. Reisner tomb no. G7140.
- ⁵ C. R. Lepsius, *Denkmäler aus Aegypten und Aethiopien* (Berlin, 1904), Band IV, Abteilung II, pl. 96. Lepsius tomb no. LS1.
- ⁶ The slab-stela of Sethhekent from Tomb G1227 in the Western Cheops cemetery at Gîza has most of the features of the fully developed linen-list. For the linen-list in general W. Stevenson Smith, 'The Old Kingdom linen-list', ZÄS 71 (1935), 134-49.
- ⁷ G. Jéquier, Les Frises d'objets des sarcophages du Moyen Empire (Cairo, 1921). Petrie did find three or four sleeveless shirts in a Twentieth Dynasty tomb at Kahun. They were neatly folded up in packets and wrapped between the mummy bandages: Petrie, 'MSS Journal' (unpublished), 26 September 1889–27 June 1890, 22.
- ⁸ G. A. Reisner, A Provincial Cemetery of the Pyramid Age. Naga-ed-Dêr, 111 (OUP, 1932), 11–13. Two similar long-sleeved linen dresses with horizontal pleating were found at Deir el-Gabrâwi: M. A. B. Kamal, 'Rapport sur les fouilles de Said Bey Khachaba au Deîr-El-Gabraouî', ASAE 13 (1914), 171–2, fig. 21.
- 9 For an illustration of this dress see Stevenson Smith, op. cit. 139, fig. 1. A further example is J. d'E. 88145 found in a pit near Tomb N110 at Naga ed-Dêr.

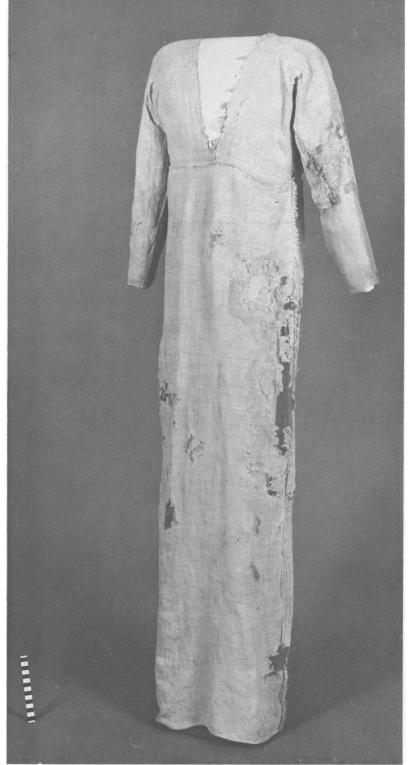
by horizontal pleating bringing the length to 70 cm; this made everyday wear possible. Doubtless the Deshasheh dresses would also have displayed this pleating had everyday wear been intended. The Petrie Museum also contains a dress evidencing everyday wear, UC 28614B¹ (see pl. XX, 2), discovered at Tarkhan in the First Dynasty Mastaba 2050 to which Petrie assigned his Sequence Date 80, contemporary with the reign of Djet (Wadji).¹ Although the whole of the bottom of the skirt is missing, with no part of the hem remaining to indicate the original length, the dress does carry some very fine tight pleating on both sides of the yoke and round the sleeves. As with the Deshasheh dresses, the width is noticeably narrow and the ornamental fringe of warp-ends again appears down the side seam of the body and the sleeves. Generally, however, the cut and manner of making-up is much more sophisticated than with the Deshasheh and Naga ed-Dêr garments. Distinct signs of wear are present—there is creasing round the armpits and elbows, and the garment was discovered at the time of conservation in 1977² to be inside out, as it very well might be after pulling it off the head.

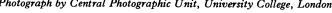
Representations of sleeved garments on the monuments are decidedly absent. However, it must be acknowledged that both the reliefs and statue groups are often so badly worn as to make it impossible to determine any line around the wrists which would indicate sleeves. During an examination of all the major rock-tomb sites, of both the Old and Middle Kingdoms, in Middle Egypt, as well as at Gîza and Saqqâra, during the summer of 1979, only one sleeved garment was noted by the author, and this was at Deshasheh itself. The tomb of the Fifth Dynasty Inti, the imy-r wpwt imy-r mnw nsw hki hwt, 'Overseer of Commissions, Overseer of Royal Fortresses, Manager of an Estate', contains a depiction, on the south side of the recess, of a young girl, Sit-kiw, standing in front of the feet of the tomb-owner and his wife.3 She is obviously some relation of the deceased, and appears to be wearing a long-sleeved garment as opposed to the customary female dress,4 which is sleeveless and held up by straps. The conclusion is, therefore, reached that the Deshasheh garments may be indicative of a purely local fashion dictated by the adverse cold of the Middle Egyptian winters, and adapting the form occurring on the monuments simply by extending the shoulder straps along the arms. This need for warmer clothing is illustrated in similar fashion by the long robes, kilts, and stoles depicted in the Meir tombs.⁵ Indeed in form the Deshasheh dresses are remarkably close to the modern Arab galabiyeh with the narrow bodies and very light sleeves; thus they would have been equally effective in a hot summer climate.

The coffin and body from Tomb 148b are now in the Cairo Museum, J. d'E. 31894 and 31875 respectively. According to Petrie, two of the nine dresses were too coarse and rotted to unfold, but the author has been unable to trace the present whereabouts of the remaining five garments, despite an exhaustive search of the Journal d'Entrée. Further linen from this tomb and from Deshasheh, generally now in the Petrie Museum, takes the form of roller bandages placed on the bodies, and large cloths and shawls laid over them as winding sheets. The cloths and shawls, often newly laundered, invariably have a selvage at one long side, and a fringe at the other, with rolled hemmed short edges. An interesting fragment of 'fishing-net' linen, UC 31209 from Tomb 99, was also found, characterized by very open weave and the use of fine thread.⁶

Conservation was carried out on UC 31182 during 1979 by Mrs S. Landi, head of Textile

- Petrie Tarkhan II (London, 1914).
- ² S. Landi and R. M. Hall, 'The discovery and conservation of an Ancient Egyptian linen tunic', *Studies in Conservation* 24 (1979), 141–52; Hall, 'New exhibitions in the Petrie Museum of Egyptian Archaeology. Ancient Egyptian linen dresses', *The Museum Archaeologist* 4 (1979), 9–10.
 - ³ Petrie, Deshasheh, pl. ix.
 - ⁴ E. Staehelin, Untersuchungen zur ägyptischen Tracht im Alten Reich (Berlin, 1966).
- ⁵ A. M. Blackman, *The Rock Tombs of Meir*, III (London, 1915), pl. xiv (Tomb B4); id., op. cit. v (London, 1953), pls. xiv, xvi (Tombs A1 and A2).
 - ⁶ Petrie, Deshasheh, 32; so named after the description in Papyrus Westcar of Snofru's female rowers.





Photograph by Central Photographic Unit, University College, London 1. Deshasheh Dress, UC. 31182 LINEN DRESSES FROM THE FIFTH DYNASTY SITE OF DESHASHEH



Photograph by Central Photographic Unit, University College, London

2. Deshasheh Dress, UC. 31183



Photograph by Central Photographic Unit, University College, London I. Deshasheh Dress, UC. 31182. Detail of stitching on the bodice

Photograph by Central Photographic Unit, University College, London 2. Tarkhan Dress, UC. 28614 B1

LINEN DRESSES FROM THE FIFTH DYNASTY SITE OF DESHASHEH

Conservation at the Victoria and Albert Museum, London. The dress was mounted on a wire-netting frame shaped to fit (see pl. XIX, 1), and is now on display in a purpose-built exhibit case. UC 31183 was too weakened and fragile to attempt conservation, and has, therefore, been retained in storage.

ROSALIND M. HALL

Middle Egyptian smsyt, 'archive'

THE term smiyt is restricted mostly to Middle Kingdom titles and has so far not been successfully translated. Several officials having to do with the smiyt are known, though not a single case has emerged of this term used in a context other than official titles. The combined evidence of these titles suggests that smiyt is a Middle Kingdom term for 'archive'. The various titles and the documents on which they occur are listed in the appendix to these notes.

Previous attempts to translate sm;yt have assumed that it is the well-attested word for 'association, confederacy': Petrie et al., Lahun, II, 41; Steindorff, ASAE 36 (1936), 167 and 170, nos. 30 and 69; Helck, Verwaltung, 277 n. 7. But this does not fit the numerous titles listed in the Appendix. Grapow's rendering of sš sm;yt as 'Scribe of the sm;yt-book' comes, I think, much closer to the truth: see his Kranker, Krankheiten und Arzt. Grundr. der Medizin, III (Berlin, 1956), 93 f. The general sense of 'books' fits all the instances where sm;yt appears, and one can compare iry sm;yt (no. 1) with iry md;t, 'Keeper of Books' (cf. Gunn, ASAE 25, 251 f.), and sš sm;yt (nos. 5-7) with sš md;t, 'Scribe of Books'.

It seems quite plausible that *smiyt* means 'archive'. The officials associated with the *smiyt* are mostly scribes whose other titles show that they must have regularly dealt with documents of various sorts. The term would thus be a derivative of *smi*, 'join, unite', and refer to the collection of documents housed in a library.

Libraries, in the broadest sense of the term as collections of documents, did exist from very early times. The pr mdit, pr mdit nir, pr n siw, and pr cnh all represent institutions in which documents were stored. Texts such as the Inscription of Mes, the Adoption Papyrus, etc., mention temple archives where legal records were maintained. I suggest that smiyt is a collective term denoting the records or documents preserved in such institutions; the smiyt nsw (no. 18) would perhaps refer to a palace archive. The titles listed in the appendix thus enumerate the staff responsible for the care and maintenance of archives in the various libraries of Egypt.

Appendix: Officials of the smryt, 'archive'

Numbers preceded by an asterisk indicate title held by (co-)owner of object. All objects are of Middle Kingdom date except nos. 9 and 14 (Empire).

irv sm3yt

*1. Statue: Engelbach, ASAE 35 (1935), 203. tw n smyyt

- 2. Stela: Wb. v, 349, 10 (autographed text).
- *3. Scarab: Martin, Egyptian Administrative and Private-Name Seals (Oxford, 1971),
- 4. Stela: van de Walle and De Meulenaere, *RdE* 25 (1973), 71 f.

sš sm3yt

- *5. Block and false door: Petrie, Dendereh (London, 1900), pls. viia, xic.1
- *6. Record of expedition: Anthes, Die Felseninschriften von Hatnub (Leipzig, 1928), Gr. 12, 3-4.2
- *7. Stela: Cairo 20088.3

sš nsw sm; yt

- *8. Seal-impressions: Martin, op. cit. no. 87.4
- *9. Statues: Cairo 42167-8.

sš' nsw n sm3vt

- *10. Statuette: Engelbach, ASAE 37 (1937),
 - 11. Stela: Cairo 20282.
- *12. Stela: BM Stelae, IV, pl. 41.
- *13. Scarabs: Martin, op. cit. nos. 878-87. All belong to same person.
- *14. Ebony palette: Aeg. Inschr. Berlin, 11, 323.

W. A. WARD

- *15. Scarab: Martin, op. cit. no. 2.
- *16. Scarab: op. cit. no. 209.
- *17. Seal-impression: op. cit. no. 741.

hry-c n sm3yt nsw

*18. Scarab: op. cit. no. 385.

The owner, Rehwy, also bears the title sš hn, 'Scribe of the Document-chest'. On this sense of hn see

- Williams, JEA 47 (1961), 103; Habachi and Ghalioungui, CdÉ 91 (1971), 70; Posener, RdÉ 10 (1955), 68. On the peculiar form of the smj-sign used in these examples see Fischer's discussion of the term 'smj-territory' in Dendera in the Third Millennium B.C. (Locust Valley, N. Y., 1968), 127.
- ² Commenting on this passage in JEA 42 (1956), 52, Goedicke assumes a statement of fact rather than a title: 'I was a scribe of restoring the gaps (destroyed papyri), skilled with his fingers.' The phrase in questionsš smiyt dfdfw kn m dbew—contains a unique word which Goedicke explains as a reduplicated form of dfi, itself explained as related to terms which generally express material decay. Assuming sm?yt to be derived from smi, 'join', he arrives at 'a scribe of restoring gaps', that is, a scribe able to restore missing portions of an older text which he is copying. In the light of the numerous titles collected here, it is far more likely that the present example contains the title 'Scribe of the Archive'. Furthermore, Goedicke's rendering of the obscure dfdfw rests on dubious arguments. I think it more likely that this should be related to the root df_i , 'be provided with; abundance'. The passage in question is thus better rendered: 'I was a scribe of the archive, abundant of skill with his fingers', or the like. Djehutinakht-cankhu, the owner of this text, also carried the title sš mast ntr. 'Scribe of the Sacred Book(s)', on which see Gardiner, AEO I, 58* f.; Helck, Beamtentiteln, 38.
- ³ The owner, Antyemhat, also held the titles 'Master Physician, Master of Scorpions'. The wr swnw is the grade just above the ordinary physician: Jonkheere, CdÉ 52 (1951), 251 f. The hrp srkt dealt primarily with scorpion-stings, though he is sometimes defined more generally as a magician; for a summary discussion cf. Junker, Gîza, XI, 84.
- ⁴ The owner, Iufsenebu, also held the title wr m/w m Twnt, which is of some interest as it adds a further example of Middle Kingdom date to the examples collected by Moursi, Die Hohen Priester des Sonnengottes (Munich, 1972), 38 ff. Twnt, 'Denderah', may be an error for Twnw, 'Heliopolis'. A wr m; w is known from this site and others, but not from Denderah: Gardiner, AEO 1, 36*.
- ⁵ The owner, Yi, also held the title hry-sšt; nr-prw rsy mhy, 'Privy Councillor of Temples South and North'. I can quote no other occurrence of this title, but it is probably only an extended form of hry sst; nr-prw: Cairo 20539; Newberry, El-Bersheh, I, vi; Adam, ASAE 56 (1959), 215.

Abnormal or cryptic writings in the Coffin Texts

The Ancient Egyptian scribes appear to have taken pleasure in occasionally making their writings hard to read. One aspect of this tendency appears in the 'crosswords' discussed by Zandee, An Ancient Egyptian Crossword Puzzle (Leiden, 1966), but a more extensively used puzzle was cryptic writing, which consisted in the substitution of other signs for those normally used, and even the invention of new ones; thus it is often difficult or impossible for a modern scholar to interpret cryptic texts with confidence. In some cases the intent may have been to hide the meaning of a temple text as being too sacred for the profane eye, but that does not account for inscriptions in cryptic form hidden in tombs; one can only wonder if the real reason was the author's joy in his own ingenuity. The use of cryptography seems to arise in the early Middle Kingdom, to crop up from time to time all through Egyptian history, and to culminate in the temple inscriptions of the Ptolemaic Period. An early example is to be found in Newberry, Beni Hasan, II, pl. 14, where there is no obvious reason why Akhtoi's titles should be expressed in this manner, and the same comment applies even more strongly to the Coffin Texts, where cryptic writing is confined to single signs or groups of signs, and nowhere is it possible to discern the reason for these vagaries. The examples I have collected are set out below.

Single signs

for ink, 'I', de Buck, CT vII, 357a, 361e, 521b. Unexplained.

for mrht, 'oil-jar(?)', VII, 447a; also with squatting man. Ideograph.

for mdw, 'speak', 11, 247c; var. f. Ideograph.

for m, common. Exx. are: genitive n, VII, 288j; preposition n, IV, 214a; V, 154e, 165c, 382h, and especially VII, 237-8; in n mrwt, 'in order that', 78a; in n ntt, 'because', I, 384b, 385c, and often. Note also n = 100 for n in its interrogative, VII, n ff. Homophones.

for imy, 'who is in', 1, 54j: IV, 124f; V, 339b, 364e, 367c. From m-hnw, 'within'.

T for T in grh, 'night', e.g. 1, 254f, 268g; 11, 255a; VII, 294c. Originally doubtless a misreading of Hieratic; a mediating form T is common also, e.g. 1, 254f, 268g (B10Cd, det. wh, 'night'); II, 162e.

= for irt, 'eye', also =, vII, 134g; 137g, 138a, g, 139i, 140l; parallel to =, III, 294b. Ideograph for corner of eye?

for $d\check{sr}$, 'red'(?), in bdt - (red(?) emmer', III, 97a. Obscure.

I for I in II for II nn, 'this', vII, 109u: see de Buck's note 13*. Also in I I is for I

f tr in f for $n\underline{t}r > ntr$, 'god', I, 20 a.

for so in isw twt, 'full equivalent of', VII, 140j. Unexplained.

in for hhi in in hhit, 'rule', IV, 88c, From hhit 'bushel'.

for ¼ in ⊕ ¼ ½ ⅓ 111, in 'fiery ones', VII, 486f; similarly ∑ ¼ ⅓ 111, 487g; ↑ ½ ¼ ½, 'pierce' like fire, 487h. Unexplained, but perhaps a corruption of the sign for fire.

Groups of signs

F of for m-hnw, 'within', vI, 147g; the last group is corrupted into on in IV, 144 m, n. The skin-sign is derived from hnt, 'skin', 'hide': Faulkner, Concise Dict. 201.

The last question quoted above is answered by rightharpoonup rig

It is noticeable that many abnormalities are confined to single texts or to groups of texts perhaps deriving from a common ancestor, as if reflecting the fancies of a single copyist somewhere in the history of the text. It should also be remarked that nowhere in the CT is there a connected text in cryptic script, but only single signs or small groups of signs.

R. O. FAULKNER

A note on Shipwrecked Sailor 147-8

THE point has been made that in cases in which love is predicated of man's relationship to god it is usually god who is said to love man, and not the other way around. This cannot be denied, although it might be kept in mind that most of the evidence consists of self-laudatory material in which it enhances the subject's reputation to say that god loves him. One passage, however, has recently given rise to a slight controversy, and that is Sh.S. 147-8: di-i in-t(w) n-k h-w 3tpw hr spssw nb n Kmt mi irrt n ntr mrr rmt m t; w; w n rh sw rmt. The phrase beginning m t; w; w clearly refers back to irrt n ntr: the god in question resides in a far-off land, and the actions of which he is the beneficiary likewise involve that far land. But the problem lies in mrr, which can be either a geminating active participle, 'who loves people' or a geminating relative form, 'whom people love'.2 Most commentators and translators have opted for the former, 3 although no one seems to have appreciated the gratuitous nature of the resultant rendering. Why should Egyptians send gifts (i.e. offerings) to a god in a remote land with which they are unfamiliar? That he loves them would be of no moment whatsoever; in any case, it is not a god's business to love a community alien to his own. Further, in most, if not all cases the ancient mind would have construed the god's love for man as a result of man's making offerings to the god, or performing benefactions for the god. What is required in a rendering of the elements following mi is the reason why men act so for a god, and this none of the renderings heretofore have elicited from the passage.

The context of the passage is the direct speech of the *šmsw* to the snake in which he pours forth

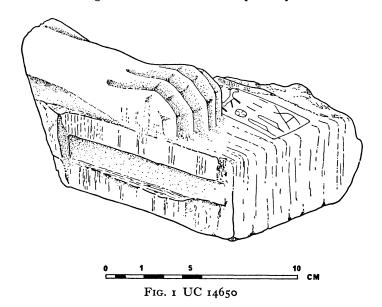
- ¹ See W. K. Simpson in J. Assmann, E. Feucht, R. Grieshammer (eds.), *Fragen an die altägyptische Literatur* (Wiesbaden, 1977), 493 ff.
- ² Gardiner, Egyptian Grammar³, §§ 357; 387, 1; Lefebvre, Grammaire, §§ 436, 476. Why Simpson should characterize the translation 'a god whom people love' as 'grammatically unsound' (loc. cit.) I fail to understand. The relative form frequently has a generic force: see the examples in Gardiner, op. cit. 306, § 389, 1; J. B. Callender, Middle Egyptian (Malibu, 1975), 81 (nos. 11, 13) and cf. the similar use of nty: J. G. Griffiths, JEA 54 (1968), 60 ff.
- ³ Erman, ZÄS 43 (1906), 19; G. Lefebvre, Romans et contes égyptiens (Paris, 1949), 38; S. Donadoni, Storia della letteratura egiziana antica (Milan, 1958), 143; E. Brunner-Traut, Altägyptische Märchen (Düsseldorf-Köln, 1963), 8 f.; W. K. Simpson, The Literature of Ancient Egypt (New Haven and London, 1973), 55; M. Lichtheim, Ancient Egyptian Literature (Berkeley, 1973), 214; Maspero's 'ami des hommes' skirts the issue: Les Contes populaires de l'Égypte ancienne (Paris, n.d.), 145; Gardiner (op. cit. § 357, ex. 26) and Lefebvre (Grammaire, § 436) both treat mrr in our passage as active participles.

his gratitude. In the course of his emotional delivery he cites the analogous practice of sending offerings to far-off culture centres, and the qualifying elements following $n\underline{t}r$, agod..., provide the motivation for the action of gift-giving. The 'god' in the narrative is the snake, and the sinsw promises the presents because of the deep affection, nay love, which he feels towards the snake for having saved him. Similarly, in the practice invoked as precedent, the sending of presents (i.e. offerings) to a 'god... in a land far away which people do not know' comes about not because that god loves them, but because people ($rm\underline{t}$, i.e. Egyptians) have affection for a far-away deity. Their love explains their gift-giving. That a far-off god should love Egyptians would provide no compelling reason within the present context for the giving of presents. I see no reason therefore to depart from the translation: 'I shall have ships sent thee laden with all the luxuries of the land of Egypt, as they do for a god whom people love in a far-off land which people do not know'.

D. B. Redford

Two inscribed objects from the Petrie Museum

PUBLISHED here for the first time are two minor antiquities, one a fragment of sculpture, the other an axe-head, from the rich reserve-collection of the Petrie Museum, University College London.² The objects are not especially remarkable in themselves, but they merit attention, and are treated here together, as each bears an inscription naming a king of the Second Intermediate Period. Both are to be added to the invaluable 'Belegliste' of such names compiled by von Beckerath.³



This is reflected in such assemblages of Egyptian votive offerings as appear in the foreign cult centres of Byblos, Serabit el-Khadîm, etc. (although in all probability the vast majority of Egyptian objects of Middle Kingdom date found in Western Asia arrived through later, Hyksos, plundering: cf. J. M. Weinstein, BASOR 217 (1975), 9 f.; W. Helck, Ugaritische Forschungen, 8 (1976), 114). The practice seems to be alluded to occasionally in Middle Kingdom Egyptian texts: cf. Merikare, 67–8 (cf. Westendorf, Der Gebrauch des Passivs (Berlin, 1953), 57; R. O. Faulkner in Simpson, op. cit. 185; Helck, Die Beziehungen Ägyptens zu Vorderasien² (Wiesbaden, 1972), 69); Cairo 20086 ('... accompanying (§ms) the monuments of the sovereign to distant foreign lands').

² I am grateful to Dr G. T. Martin for permission to publish the objects and to Mrs B. Adams and Miss R. Hall for providing me with information and facilities during my visits to the Petrie Museum. My thanks are due also to Mrs C. Barratt and Mr P. Hayman, of the British Museum, who are responsible for the drawings and photographs respectively.

³ Untersuchungen zur politischen Geschichte der Zweiten Zwischenzeit in Ägypten, 226-99.

The sculpture-fragment (see fig. 1 and pl. XXI, 1) has the number UC 14650. It consists of part of the right foreleg and pedestal of a small statue of a sphinx. The merest vestige remains of the left leg. Its maximum surviving depth is 13.6 cm, its maximum width about 9 cm, and its maximum height (which is the height of the break at the rear) 7.5 cm. The height of the pedestal at the front



Fig. 2 UC 14650 (Inscription)

is 4.3 cm. The fragment is not an excavated piece but, as far as is known, was purchased by Petrie in Egypt some time before 1915 when it is first noted, very briefly, as 'Paw of granite sphinx of Sebek-hetep' in an exhibition catalogue. It is subsequently mentioned in the first volume of his *History of Egypt*, where its provenance is given as Atfih and it is attributed to Khaneferre Sobkhotpe (IV) of the Thirteenth Dynasty. In neither place is it specifically stated that the piece bears an inscription, and this may explain why it has been overlooked in more recent works dealing with the monuments and kings of the period.

It is made of an unusual hard stone, mottled-grey and black in colour, which has been identified as granitic gneiss.³ The sculpting is of good quality, and the surface of the stone has received a finely polished finish. Care has been taken to reproduce some of the anatomical detail of the lion's leg, in particular that of the paw, but the treatment over all, and especially that of the musculature of the foreleg, rendered in this case by gentle grooving, is not as elaborate as that accorded to other sphinxes of the period.⁴ Along the right side of the pedestal a channel has been cut. It is 9.4 cm long, about 0.5 cm deep, and 1.5 cm high, narrowing slightly towards the rear. The surface of this area is rough, and it bears traces of red matter.⁵ This can hardly be an original feature. Almost certainly it is the result of a later (ancient or modern) reuse of the stone, though to what exact purpose, beyond that it was probably meant to serve as a socket of some kind, is obscure. A likely explanation of the red matter is that it represents the remains of a cement.

The inscription on the pedestal (see fig. 2, and pl. XXI, 1), which is crudely done, consists of a single vertical column of hieroglyphs reading: [$^{\circ}$] $^{\circ}$] $^{\circ}$ $^{\circ}$] $^{\circ}$ $^{\circ}$] $^{\circ}$, 'So[n of Re], Sobkhotpe, beloved of Ḥatḥor, mistress of $^{\circ}$ $^{\circ}$ [$^{\circ}$] (Atfih)'. It is likely that originally this inscription began up on the sphinx's chest with the king's *prenomen*. The loss of this means of close identification leaves us with some considerable choice in our attribution of the piece. Nine kings are known to have borne

- ¹ Handbook of Egyptian Antiquities Collected by Professor Flinders Petrie, Exhibited at University College, Gower Street, London, June 7 to July 3, 1915, 31, no. 425.
 - ² (1923), 224-5.
- ³ By Dr I. Freestone, Geologist of the British Museum Research Laboratory. This stone is to be distinguished from the diorite-gneiss or anorthosite-gneiss of Lucas, *Ancient Egyptian Materials and Industries* (4th edn., revised by J. R. Harris), 409; Wildung, *Miscellanea Wilbouriana*, I, 150–1.
- ⁴ Cf. Evers, Staat aus dem Stein, II, 86-7; Schweitzer, Löwe und Sphinx im alten Ägypten, 46. Four other stone sphinxes can be definitely attributed, on inscriptional grounds, to kings of the Second Intermediate Period, all now in the Cairo Museum. These are JE 52810 (Sobkhotpe III), CG 421 (Sobkhotpe IV), and JE 48874-5 (both Mentuhotpe VII). A number of others can probably be assigned to the period on stylistic grounds, among them Louvre A 21, Cairo JE 37478, and Cairo JE 46393 (this latter with an illegible cartouche on the chest). Not to be forgotten in this connection, though they are not made of stone and are not sculptures proper, are the two silver sphinxes of Seqenenre⁵ (A Catalogue of the Egyptian Antiquities in the possession of F. G. Hilton Price, Dir. S. A., II, 98, no. 4876, pl. xxx; van de Walle, Les Antiquités égyptiennes, grecques, étrusques, romaines et gallo-romaines du musée de Mariemont, 34, E. 55, pl. 9) and a third, identical specimen, made of some copperbased alloy, in the Louvre, E. 11097 (acquired by purchase in 1906). It is highly desirable, however, that these metal sphinxes be submitted to scientific analysis, especially in view of Fischer's note in MMJ 9 (1974), 14 n. 55.
- ⁵ A sample of this matter was submitted to X-ray diffraction analysis by Miss M. Bimson of the British Museum Research Laboratory and found to consist of coarse particles of quartz. The cause of the colour was not determined but Miss Bimson suggests it may be due to a small amount of iron.

the nomen Sobkhotpe and any one of these is, in theory, a possibility here. The most likely, however, is indeed Petrie's choice, Khaneferre Sobkhotpe. From the material remains, he appears to have erected more statues than any other king of the Second Intermediate Period, and, more to the point, one of these statues is a sphinx dedicated like this one to 'Hathor, mistress of Tp-ihw(t)'.2 His, in

fact, is the only royal name of the period which has yet been connected with the site of Atfih.3 However, the early evidence from Atfih is extremely sparse, and, until a great deal more is known about its cult of Hathor and its royal patrons, Petrie's attribution remains no more than an attractive possibility.

The axe-head (see fig. 3 and pl. XXI, 2) has the number UC 30079. It is known to have been in the collection for many years, but there is no record of its date or means of acquisition. Since it is not included in Petrie's Tools and Weapons, it is probably safe to deduce that it was acquired after the completion of that work (1916). It is of a type well dated by a number of excavated specimens to the Second Intermediate Period.4 It has a symmetrical narrow-waisted form with straight butt, lugged on either side, and a deep, rounded cutting edge. One of the lugs is broken. The end of the remaining, intact, lug is slightly curved, and the ends of the cutting edge, where it meets with the sides, appear originally to have been pointed. The sides are slightly bevelled. The axe is 13.7 cm long, 5.4 cm wide at the butt, and 5.2 cm wide at the cutting edge. Its thickness at mid-butt is 0.25 cm tapering to 0.1 cm at the end of the intact lug. Its maximum thickness is 0.5 cm at a point nearer the cutting edge than the butt. It weighs about 144 gr and is made of tin-bronze including a small but probably significant amount of arsenic.5 It is a well-manufactured piece, properly shaped and weighted, and undoubtedly designed for practical use as a weapon.

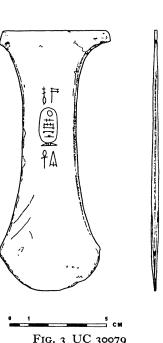
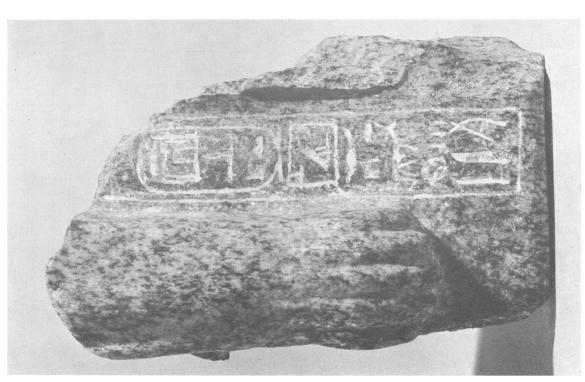


Fig. 3 UC 30079

Whether it was actually used it is impossible to say, as corrosion has so eroded the cutting edge as to remove any possible indication of wear. The corrosion products, which once covered parts of the

- ¹ There are at least eight belonging to this king: Cairo CG 421; Cairo JE 37486; Khartûm 5228; Louvre A 16; Louvre A 17; Beirut, National Museum (from Tell Hizzen); Engelbach, ASAE 21 (1921), 63; Montet, Les Nouvelles Fouilles de Tanis (1929-1932), 117, pl. lxvii, 4. Add to these also possibly Louvre AF 8969, a statue inscribed with the nomen Sobkhotpe and a prenomen which is damaged but begins with the requisite signs re and he. This could, however, equally well belong to either of the kings He-enh-Re or He-htp-Re.
- ² Cairo CG 421. To judge from the size of the remaining paw, the UC sphinx must originally have been smaller than the Cairo piece.
 - ³ Cf. PM IV, 76; Allam, Beiträge zum Hathorkult (bis zum Ende des Mittleren Reiches), 92.
- ⁴ They are listed, with other examples of the type, in Kühnert-Eggebrecht, Die Axt als Waffe und Werkzeug im alten Ägypten, 110 and 119, where the form is subdivided into two types, G-IV and G-V. (Note that BM 30462, cited under G-V/3, is not equivalent to Petrie, Diospolis Parva, pl. xxxii, 25, and that the Eighteenth Dynasty date given under G-IV/3 for Petrie, Gizeh and Rifeh, 14, pls. xii, xiii, 8, is not, in fact, substantiated by Petrie.) Typologically, the form seems to stand between the symmetrical splayed axes which appear for the first time in the Thirteenth Dynasty, if not already in the Twelfth (cf. JEA 60 (1974), 115 n. 12), and the asymmetrical waisted form of the late Seventeenth and early Eighteenth Dynasties (as exemplified by the Ashmolean axe-head published in op. cit. 114-18, pls. xxix-xxx). A full discussion of this type will appear in my forthcoming publication of the axes in the British Museum.
- 5 Chemical analysis of the axe was carried out by Mr M. Cowell in the British Museum Research Laboratory using the technique of atomic absorption spectrophotometry. The full result was as follows: Cu: 91.9; Pb: 0.13; Sn: 4.90; Ag: 0.02; Fe: 0.19; Sb: 0.01; Ni: 0.06; Au: <0.01; Co: <0.01; As: 1.10; Zn: <0.01; Bi: o.o. This analysis was one of a large series undertaken in connection with my publication mentioned in n. 4 above. All the results and their implications will be discussed therein.





Courtesy Peter Hayman I

blade, have been cleaned off at some time by chemical means, though some green matter still adheres here and there. There is pitting on both faces, more so on one than the other.

more likely, possibility is a Seventeenth Dynasty king, whose prenomen survives as Line 100 2.2

This name has caused some difficulty to commentators, Hayes reading it tentatively as 'Semenmedjat(?)re',³ while von Beckerath has attempted to construe it as 'Semenenrēc'.⁴ Since scribal error in the writing of names is found elsewhere in the Canon,⁵ one is led to ask whether the puzzling last elements of this name are not, in fact, superfluous, the result of scribal corruption, beginning, it might be suggested, with dittography of the 'papyrus-roll' determinative, which was then misunderstood and written in full as mdrt. The 'corruption' eliminated, we obtain our required name, Smn-rc. It must, of course, be admitted that this explanation is no more than conjecture and far removed from certainty, but there is one independent factor in its favour: the resulting equation of these two names would place the axe in about the middle of the Seventeenth Dynasty, a dating which fits the typological evidence very well.6

A Bes Amulet from the Royal Tomb of Akhenaten at El-'Amarna

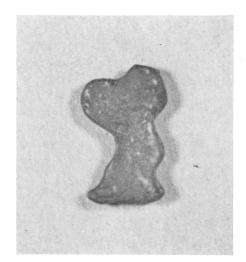
THE small amulet which is shown in pl. XXII, 1-2 comes from the collection of Egyptian antiquities made by Mr H. M. Tudor during his travels in Egypt, from January to March 1911.7 He mentioned his acquisition in his diary, 8 and in a manuscript label attached to the piece, which identifies it as 'a Bes-god' and gives its provenance as 'picked up in the tomb of Khu-en-aten, Tell el Amarna. 11/3/1911'. According to his diary, he bought on the same day 'a few curios at Amenhotep's [sic] palace, but nothing . . . particularly rare', 9 and he wrote that the unique object found on the spot was the Bes-like amulet.

- ¹ Gardiner, The Royal Canon of Turin, pl. iii, col. viii, 26.
- ² Op. cit. pl. iv, col. xi, 7.

- ³ CAH 11, i, 69, with n. 12.
- ⁴ Op. cit. 185, with n. 3, and 290 (XVII, 8). Von Beckerath curiously quotes Gardiner's transcription as support for his reading: 'Es ist aber hier... mit Gardiner lediglich Semenenrē' ($Smn-n-R^c$) zu lesen', but he omits the first 'papyrus-roll' determinative from his own version and restores n at the end, where Gardiner reads a stroke following the lacuna.
 - ⁵ E.g. the \not of 3w-ib-rc is written \not in cols, vi, 17 and viii, 12.
- ⁷ On Mr Tudor and his travels in Egypt see further information in Ogdon-Baqués, 'Escarabeos egipcios con inscripción en las colecciones argentinas', *BAEO*, año XIV, part 1 (Madrid, 1978), 97-8; Ogdon, 'Estatuillas funerarias egipcias del Tercer Período Intermedio, I. Inscriptas . . .', in *Aeg.Ant.* 3 (1) (Buenos Aires, 1978), 1-2. The amulet is now in the possession of the author.
- ⁸ The manuscript is in the possession of the sons of Mr Tudor, to whom we are deeply grateful for their courtesy and assistance during our visits.
- ⁹ These 'few curios' are probably four polychrome beads, and surely a Beset amulet (in front view!), which we reserve for a future paper. Many pieces in this collection are still under study. Perhaps the diary's reference implies more objects than those aforementioned.

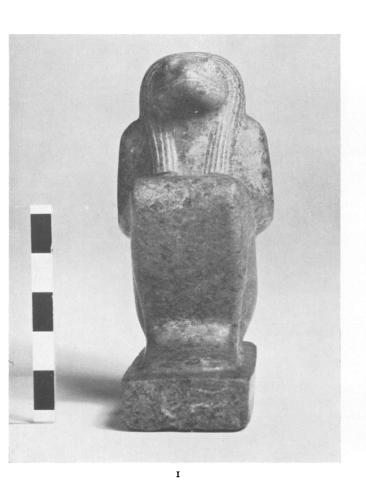


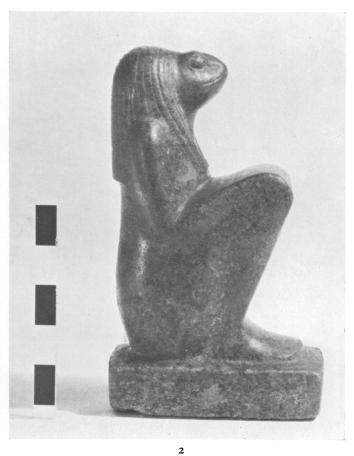
1. Bes amulet, front



2. Bes amulet, back

A BES AMULET FROM THE ROYAL TOMB OF AKHENATEN





A STATUETTE OF THE GOD KEK

The piece is made in the form of the naked god Bes, dancing and beating a circular tambourine, in side view, the form usually found at El-'Amarna. It is made of bluish faience, and it is only 1.1 cm high. The amulet is not of an outstanding quality, and details are not easy to recognize. Nevertheless, the lion-tail can be discerned, as well as the lion-ears, but we cannot say if it has a bearded face.

Similar amulets of Bes from the royal tomb at El-'Amarna are well known, and some of them are now in Edinburgh.¹ Others, pendants of a necklace, were found in the north-western quarter of the city,² and Sir Flinders Petrie found such Bes-figures during his excavations.³

An important fact is worthy of note: the back of the piece is completely flat, and no trace of the suspension-ring or -hole can be seen. This leads us to think that the amulet was originally not intended as a pendant but more probably as a mummy-amulet. Could it possibly have been one of those funerary amulets placed on one of the mummies of the royal family?

We will not go into details on the importance and the role played by Bes in the religious iconography of the El-'Amarna Period, as these points have been studied by other scholars,⁴ and our purpose is only to draw attention to this 'new' piece as an additional contribution to the excellent book of Dr T. G. Martin on the objects from the Royal Tomb at El-'Amarna.

J. R. Ogdon

Nefertiti's regality: a comment

In JEA 63 (1977), 88-97, Julia Samson propounded the theory (expressed in less concrete form by some earlier authors) that Akhenaten's successor was none other than his wife, Nefertiti. While I find the theory attractive, and a solution to a number of the Amarna Period's many problems, two basic facts make me doubt the theory's veracity.

Firstly, there is the existence of the mummy from Bîbân el-Molûk Tomb 55, generally accepted, since Harrison's examination, as that of Akhenaten's successor (cf. pp. 53 ff.). If, however, we make the latter a woman, in the shape of the former Nefertiti, we are left with the problem of who: (a) was a king (uraeus etc.), (b) died at the age of 20, (c) died during the Amarna Period, (d) was a brother (or very close relation) of Tut'ankhamūn, (e) had a memory reviled in later times (desecration of burial)? Apart from postulating an ephemeral, otherwise unknown, king who ruled before the return to orthodoxy, the only answer is that he is 'Ankhkheperurē', Akhenaten's coregent.

Secondly, these is the existence of an inscription on a box from Tut'ankhamūn's tomb, which disposes of Mrs Samson's contention that Meritaten was never married to 'Ankhkheperurēc'. The inscription reads as follows: The King of Upper and Lower Egypt, living in truth, the Lord of the Two Lands, Neferkheperurēc, Wacenrēc son of Rēc, living in truth, Lord of Diadems, Akhenaten, great in his duration, the King of Upper and Lower Egypt, Lord of the Two Lands, Ankhkheperurēc-mer-Neferkheperurēc, son of Rēc, Lord of Diadems, Neferneferuaten-mer-Wacenrēc, and the King's Principal Wife, Meritaten, may she live eternally!

This shows that at a given point in Akhenaten's reign, he (without consort) shared the throne with a coregent and the latter's wife. This must mean that the said coregent is a man.

Thus, it appears to me that Mrs Samson's identification of Nefertiti with Akhenaten's successor is erroneous, though, if both of my above points could be satisfactorily disposed of, I should be prepared provisionally to accept her hypothesis.

AIDAN DODSON

- ¹ Inv. number 1883.49.16: see Martin, *The Royal Tomb at El-'Amarna*, 1 (London, 1974), 79-80 and pl. i. 28.
 - ² Pendlebury et al., The City of Akhenaten . . . , II (London, rep. 1972), 41 and pl. xxviii, 7.
 - ³ Petrie, Tell el Amarna (London, 1894), pl. xvii, nos. 286-8.
- 4 See, e.g., Bosse-Griffiths, 'A Beset amulet from the Amarna Period', JEA 63 (1977), 98-106, esp. 99-102, and pls. xv-xvi.
 - 5 K. Sethe, Urkunden, IV, 2024, l. 7 f, quoted in F. J. Giles, Ikhnaton: Legend and History (London, 1970), 89.

The Heb-sed robe and the 'ceremonial robe' of Tut'ankhamūn

In JEA 55 (1969), 74, figs. 1 and 2, Cyril Aldred published a statue-fragment of a king, formerly in the magazines of the Luxor temple, which he suggests should be dated to the reign of Amenophis III. This sadly damaged statue is noteworthy because the surviving piece features an unusual knee-

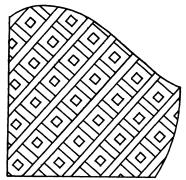


Fig. 1. The Luxor fragment (after Aldred, JEA 55 (1969), fig. 2)

length garment, which Aldred identifies with the Ḥeb-sed robe.¹ I should like to suggest a probable identification of the materials which comprise the decoration of this garment as well as an alternative occasion for its use.

The decoration of the garment on the Luxor fragment consists of a repeated pattern of diamond shapes, or rhomboids, each inset with a smaller lozenge of the same form. The larger diamonds are delineated by a network of parallel lines. The diagonals from lower left to upper right are unbroken stripes; the diagonals from upper left to lower right are a series of short segments broken at regular intervals by the continuous double lines described above. There is no differentiated border at the hem. The pattern simply terminates at the lower edge of the garment where the carving switches from the vertical plane to the horizontal. British Museum

37996, an ivory statuette of a king wearing the white crown, found at Abydos and dated to the Archaic Period, provides another example of this knee-length garment, with a diamond pattern in raised relief.²

A painted representation of this costume, firmly dated to the reign of Amenophis III, occurs in the tomb of Surer, Theban Tomb n. 48, on the right side of the left back wall in the First Hall.³ The seated figure of Amenophis III wears a close-fitting robe which envelops his body down to the knees. The fabric of the garment is decorated with a pattern of blue diamonds, each of which contains a smaller red diamond.⁴ That the pattern consists of diamonds rather than squares can be seen clearly in the part of the garment which stretches across the torso of the king.⁵ The costume is complemented by an item described as 'a sporran(?)' which 'protrudes from the lap of the king, marked and coloured like the tail of a bird'.⁴ In referring to this scene, Säve-Söderbergh expresses doubts that the event which is depicted here is one of the jubilees of Amenophis III.⁶ Though the Luxor fragment apparently does not preserve any colour, the painted figure from the tomb of Surer indicates that the incised lines and the lozenges probably represent elements of the garment that were of different colours.

The so-called 'coronation pectoral' from the tomb of Tut'ankhamūn offers yet another parallel for this knee-length garment of the king.⁷ The figure of the young king is shown standing between enthroned images of Sekhmet and Ptaḥ.⁸ The diminutive size of the figure (approx. 7 cm) prohibited a more detailed working of the pattern of the king's garment, so a simplified network of gold and lapis-lazuli-coloured glass was employed by the jeweller to represent the diamond pattern. The featherwork noted on the costume of Amenophis III in the tomb of Surer is here represented by an

- ¹ See also E. Hornung and Elisabeth Staehelin, Studien zum Sedfest (Aegyptiaca Helvetica 1 (1974)), 75.
- ² S. R. K. Glanville, JEA 17 (1931), 65-6, pl. 1X, and especially fig. 2, p. 65.
- ³ PM 1, i, 2nd edn., 90 (48), plan, 4.
- ⁴ Säve-Söderbergh, Four Eighteenth Dynasty Tombs (Private Tombs at Thebes 1), 38.
- ⁵ Op. cit. pl. xxxi.
- ⁶ Op. cit. 36 n. 5.
- ⁷ Helen Murray and Mary Nuttall, A Handlist to Howard Carter's Catalogue of Objects in Tutcankhamūn's Tomb (Tutcankhamūn's Tomb Series 1), 267 q.
 - 8 C. Aldred, Jewels of the Pharaohs, pl. 99.

imbricated 'rishi' design of turquoise, red, and dark-blue glass which forms a projection from the lower front of the ceremonial robe.

Since it has been established that Tut^cankhamūn was a child at the time of his accession, and no one would suggest that he lived to celebrate a Ḥeb-sed, it must be assumed that this garment is also associated with some other occasion, such as the king's coronation. The similarity of this ceremonial robe to the Ḥeb-sed robe is striking and certainly not unexpected, since the Ḥeb-sed, with its rejuvenating significance, must have commemorated at some point the king's coronation with its associated paraphernalia.²

A 'ceremonial robe' of Tut'ankhamūn (Handlist, 21d) may be an extant example of this type of garment, which was worn by the kings of Egypt at some point during both their coronation, and their jubilee celebrations.³ The network pattern of blue and green faience beads on the Tut'ankhamūn robe illustrates rather nicely the double parallel incised lines on the Luxor statue-fragment and the raised relief diamonds on the Abydos ivory statuette. Tut'ankhamūn's gold sequins are represented by the smaller inset lozenge shapes in the other examples. A quick check of Carter's Handlist and its index has failed to turn up any reference to the survival of the featherwork component to this costume. Carter was clearly of the opinion that this ceremonial robe and the other garments found in Tut'ankhamūn's 'painted box' (Handlist, 21) were those of a child, and were probably worn by the king after his accession.⁴

The incised pattern shown on knee-length garments of the king, thought to represent either coronation or Ḥeb-sed robes, probably represent beadwork patterns sewn on to the fabric of the garment, an example of which has survived among the objects found in the tomb of Tut'ankhamūn. In the light of this information, the Luxor fragment believed by Aldred to represent a Ḥeb-sed statue of Amenophis III could as easily be a coronation figure of Tut'ankhamūn, who contributed to the decoration of the Luxor temple only a generation later than his ancestor. There is certainly not enough remaining to decide between the two.

JOHN LARSON

'Love' in the love songs

MRWT in the Egyptian love songs may designate not only the emotion of love but also the beloved person. In many cases it is difficult to know whether mrwt bears a concrete or an abstract sense, but sometimes the concrete sense, 'beloved', is clearly intended.

- ¹ Op. cit. pl. 99 and p. 220, nos. 99, 100.
- ² C. Aldred, JEA 55 (1969), 75-6.
- ³ H. Carter and A. C. Mace, The Tomb of Tut-Ankh-Amen Discovered by the Late Earl of Carnarvon and Howard Carter, 1, pl. xxxiv a and b.
 - 4 Op. cit. 171.
 - ⁵ G. Posener, FIFAO 18 (1972), pls. 75-9 (1266+Cairo Cat. 25218).
 - ⁶ W. M. Müller, Die Liebespoesie der alten Aegypter (Leipzig, 1899), pls. 2-15.

the word, but the context favours the concrete sense. In P. Chester Beatty I, C_2 , 10¹ the girl says, 'Fleeing is my heart $dr shi i mrwt \cdot k (\sim \circ \circ \circ)$, sc. whenever I think of your love [= you]'. At the end of this stanza (C_3 , 4) she says to her heart, 'Make yourself firm whenever $shi \cdot k$ sw, sc. you think of him, O my heart, and do not flee'. Here a personal pronoun replaces mrwt. See also P. Harris 500, 5, 10; 5, 12.

In the Song of Songs too 'love' ('aḥābâ) may mean 'beloved'. This use is quite clear in 7: 7, 'How beautiful you are, and how lovely you are, O love, daughter of pleasures' (reading bat ta'ănûgîm). 'Love' seems to bear the concrete sense also in 2: 7, 3: 5, and 8: 4. We may note that in English too 'my love' can mean 'my beloved' and 'love' can be term of address.

'Love' may also refer to sexual intercourse. Wb. II, 103, 1, notes the use of mrwt with a sexual connotation and refers to P. Harris 500, 4, 2: $ib \cdot i \, m - s \cdot mrwt \cdot k$, 'my heart desires your love', and ib. 4, 9: $itt \ wi \ mrwt \cdot k$, 'your love has caught me'. Both these cases are ambiguous, but the supposition that mrwt can mean sexual intercourse is supported by the use of mry (fem. = mrwt) in the Turin papyrus 55001.2 Here a girl tells an ithyphallic man: (§ 9) $ptr \ mi \ m - s \cdot ri$ (§ 9a) $hr \ t \cdot y \cdot k \ mry$ (rickin = line =

There are many places where *mrwt* is ambiguous. This ambiguity is often deliberate *double entendre*, in which the love songs excel.

MICHAEL V. Fox

Generation-counting and late New Kingdom chronology

In arguing against an accession date of 1304 BC for Ramesses II, M. L. Bierbrier has asserted recently that the number of generations which, he has calculated, elapsed from the time of Ramesses II to the end of Dynasty XXV in 664 BC affords support for a later date (1290 or 1279 BC) for this event.⁵ Bierbrier bases this conclusion on a reconstruction of both commoner and royal genealogies for the period. While his arguments at particular points are often persuasive, in other respects he pushes his procedure too far. The purpose of the present note is to argue that, whatever other evidence may exist favouring a late accession date for Ramesses II, neither the genealogical data adduced by Bierbrier nor his interpretation of them can possibly warrant the conclusion that 'the generation analysis of the period . . . tends to weaken the argument in favour of 1304 BC as the accession date of Ramesses II'.⁶

- ¹ A. H. Gardiner, The Chester Beatty Papyri, No. 1 (London, 1931).
- ² J. A. Omlin, Der Papyrus 55001 und seine satirisch-erotischen Zeichnungen und Inschriften (Turin, 1973), 67-8, pl. xiii.
- ³ I.e. she is not willing to let him stop. Müller (op. cit. 17 n. 1) says that the infinitive is used to indicate 'cupiditas', but the noun has that meaning too.
 - 4 I.e. the intoxicant you have to offer is sex.
- ⁵ M. L. Bierbrier, The Late New Kingdom in Egypt (c. 1300-664 B.C.): a Genealogical and Chronological Investigation (Warminster, 1975), 44, 112-13; reiterated in Bierbrier, 'The date of the destruction of Emar and Egyptian chronology', JEA 64 (1978), 136.
 - 6 Bierbrier, Late New Kingdom, 113.

To take last things first, Bierbrier's method requires tolerances which are far too narrow to be susceptible to useful analysis by any technique which requires the use of averages. After all, the period in dispute represents only one year for each of the generations involved in Bierbrier's sample. This is certainly smaller than any likely margins of error in inferring the 'average' length of a generation, so that in the exercise the attempt to calculate and use such averages is of no value as a device either to establish or to confirm dates which may be known or deduced from other evidence.

Since Bierbrier's chosen procedure requires that he establish as a first step such an average generation length, let us look at the ways in which he goes about doing this. After raising the possibility of a twenty-year average generation only (no doubt correctly) to reject this figure as too low, Bierbrier settles on twenty-five years as more appropriate. The sum of this argument is simply that 'any increase of the time span of each generation over 25 years is suspect'. Bierbrier does not elaborate on this opinion so starkly stated, nor does he offer any justification for it, but at least a whiff of circular reasoning can be detected. The implication seems to be that, if the proposed genealogical reconstruction is correct (and there are numerous imponderables involved in it), then twenty-five years per generation is the highest possible figure consonant with the known chronological parameters, regardless of which date is used for Ramesses' accession. In turn, the results emanating from the use of this particular average then validate the genealogical reconstruction and, pari passu by Bierbrier's argument, a late accession date.

To argue that a figure of more than twenty-five years is suspect on the grounds that it does not suit the lines of the general argument, which in turn is at least partly based on the adopted generation averages themselves, is clearly dubious. On the other hand, to argue that any figure greater than twenty-five years is empirically unlikely is even less satisfactory since it can be shown to be untrue. I base this conclusion on a study of the succession patterns of 737 dynasties whose history and genealogical relationships are well documented. This survey showed the following distribution of generational averages:

15 to 19 years	27 dynasties	35 to 39 years	87 dynasties
20 to 24 years	118 dynasties	40 to 44 years	21 dynasties
25 to 29 years	263 dynasties	45 to 49 years	4 dynasties ³
30 to 34 years	217 dynasties		

This result suggests that it is normal for dynasties (or any succession through a male line to a particular office over time) to have generations which cluster in a range from twenty-five to thirty-five years. In this sample dynasties with average generation lengths of 25 years numbered 44, while those with averages from 26 to 32 years numbered 53, 58, 54, 54, 38, 56, and 59 respectively. While these differences are not of a particularly large order, they do indicate how very speculative it is to consider, as Bierbrier apparently does, that dynastic generational averages of over twenty-five years are aberrant. Both in their range and their distribution, the dynasties noted above militate against Bierbrier's argument. If anything they demonstrate that generational averages of less then twenty-five years are only about one-fourth as likely to occur as those over twenty-five years, and, therefore, should themselves be considered 'suspect' when inferred from exiguous data.

It is not hard to see why the incidence of averages above twenty-five years should be significantly

¹ But cf. op. cit. xvi.

² Op. cit. 113. For a recent application of this argument see K. A. Kitchen, 'The King List of Ugarit', Ugarit-Forschungen 9 (1977), 136.

³ David Henige, The Chronology of Oral Tradition: Quest for a Chimera (Oxford, 1974), 123. For a list of the dynasties represented see op. cit. 136-44.

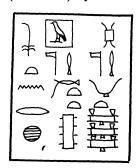
more common since there are several factors which encourage higher rather than lower averages. For instance, there is only an even chance that a first-born child will be a son. Moreover, in Ancient Egypt it was unlikely, one would imagine, that the eldest son would have survived his father and then been succeeded by his own eldest son very often for very long. As a result younger sons often succeeded. So too the premature death of office-holders often results in fraternal or other kinds of collateral succession, thereby tending to lengthen generations, since it is the son of the last succeeding brother who is most likely to succeed in his turn.

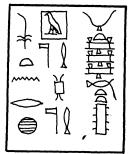
In fact Bierbrier's reconstruction of the family of Kaha I, the commoner genealogy which he uses to construct his longer generation count, shows several successions of this kind. It is interesting too that the period from the young adulthood of Kaha I, the first of the family known to hold office, to the latest available dates of Kenna II, the last member known to hold the same office, is 165+x years or 27.5+x years per generation. If the entire life span of Kaha I is considered, the later figure could rise to more than thirty-one years.1

In short both the comparative data and the evidence from New Kingdom commoner genealogies suggest that imposing a ceiling of twenty-five years for an average generation is neither necessary nor, for that matter, even very expedient. Bierbrier's extensive use of commoner genealogies demonstrates that several kinds of interesting information can be gleaned from this genre of evidence. At the same time it must be recognized that at several points in his reconstruction the exiguousness of data precludes any but the most conjectural conclusions. But even if this were not so, the counting of generations in undated or partly dated genealogies, especially over a long period of time, cannot help in establishing exact dates. If we have enough data to be certain that the genealogical details are substantially correct, we probably have enough to draw fairly firm chronological conclusions anyway. DAVID HENIGE

A non-existent epithet of Memphite Hathor

In his study of the cult of Hathor in the Old and Middle Kingdoms (Beiträge zum Hathorkult, 4-5) Schafik Allam suggested that Memphite Hathor, usually described as nbt nht (rsyt), 'Lady of the (Southern) Sycamore', could also have the epithet mhtt inh, 'North of the Wall', normally confined





solution, rejected by the Egyptian designer.

to Neith. The proposition was, somewhat uncritically, adopted by me in the new edition of the Topographical Bibliography (1112, 135), and recently it was repeated, again without questioning, by Abdulla el-Sayed Mahmud in his publication of the temple of Ramesses II at Kom el-Rabi'a (A New Temple for Hathor at Memphis, 20 n. 71). The problem would be trivial, if it did not invite conjectures regarding the location of the as yet unidentified early shrine of Hathor based on the geographical relationship of the Fig. 1. Left: part of text of Berlin 1125 (after sanctuary to Memphite 'walls'. These, in turn, affect Lepsius, Denkmäler, 11. 87); right: alternative other things, such as the reconstruction of the route of Sinuhe's flight (Sin. B 8; cf. Allam, op. cit., but

also Goedicke, JEA 43 (1957), 82-3, both, in my opinion, off the mark). It seems, therefore, desirable to point out that the case almost certainly rests on a misunderstanding.

The sole example is known from the title of the lady *Htp-nbw* on a Fifth Dynasty false-door of her husband Stw (Berlin 1125), where it was inscribed to the right of the panel (C. R. Lepsius, Denkmäler, 11, 87; see fig. 1). It is tempting to regard the epithet mhtt inb as belonging to hmt-ntr, but more

¹ Bierbrier, Late New Kingdom, 36-9. These figures would be even higher if Kaha I was born earlier than Bierbrier surmises or if Kenna II held office for a long time after his latest attestation.

likely the correct reading of the titles is rht nsw, hmt-ntr Hthr, hmt-ntr Nt wpt wiwt mhtt inb. The 'bracketing' of the two epithets with Neith is indicated by (a) the reversal of the mh-sign, and (b) the positioning of mhtt inb, which does not properly align with hmt-ntr Hthr. The reason was almost certainly an attempt to achieve an aesthetically pleasing and meaningful arrangement, with 'the King', 'Hathor' and 'Neith' heading the columns, and to avoid overcrowding the third column of the text. The ability of the Egyptian 'script's pictorial character to convey . . . information additional to the linguistic text' (Schenkel, RAIN 15 (1976), 6) should have been enough to avoid misunderstanding.

The epithet 'North of the Wall', therefore, belongs to Neith, and is thus nothing out of ordinary. I. MÁLEK

A statuette of the god Kek at University College London

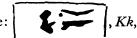
It is not often that an object of apparently unique type is noted, and it is particularly unusual in a body of material largely purchased, such as the Wellcome collection. The object in question, UC 30154, is a statuette in finely finished green serpentine of a frog-headed deity, squatting on a square base, which is inscribed on the front (see pl. XXII). I should like to thank Dr G. T. Martin, Curator of the Petrie Museum of Archaeology, and Dr D. M. Dixon, who is responsible for Wellcome material, for permission to publish this piece.

Dimensions: Base 5.14×3.0; height 9.2 cm.

Provenance: Wellcome accession number: $\frac{866}{1936}$; index card gives 15635. It was purchased from the sale of the Macgregor collection, Sotheby's, 30 June 1922, lot 872. The description on the card, apparently copied from the Sales Catalogue, identifies the statuette as Heket, counterpart of Sobk-Re at Kom Ombo. The piece could not, unfortunately, be traced any further.

Description: The technique is extremely fine, the realization of the details being precise but not laboured. The deity is shown in a squatting position common from the New Kingdom onwards.² The body is, as usual, shown as though swathed in a cloak or wrappings, and its arms are concealed beneath this, being placed on the knees. The head is covered by the archaic wig common for most male deities,³ and the potentially rather unattractive frog's face is skilfully framed by this. There is no engraving on the body, except for a line running across where the knees are drawn up against the chest and the grooves representing the separate locks of the wig. The transition from the sides of the legs to the knees is somewhat angular, and emphasizes the frontality of the figure. On the

front of the base is engraved, in a surprisingly crude manner, the deity's name:



a male member of the Hermopolitan Ogdoad. It thus conforms to the later iconography of the Ogdoad, exemplified from the time of Amasis as pairs of frog- and snake-headed deities,⁴ but there

- ¹ When the idea first occurred to me I discussed it with John R. Baines, and I should like to thank him for his interest in the problem.
- ² For example, the funerary statues of the New Kingdom royal tombs, Hornemann, Types, 484 (BM 50707), 485 (BM 50700); see also op. cit. 1109 (group of Horus and Shu, Michailidis collection, bronze), 1758 (Brooklyn Museum 36.838, glass, possibly Twenty-sixth Dynasty); Roeder, Ägyptische Bronzewerke (Glückstadt, 1937), pl. 15h; Geschenk des Nils: Aegyptische Kunstwerke aus Schweizer Besitz (Basel, 1978), 315a, b; CG 38.904, 38.600, CCG 38001-39384, pls. 34, 45. Another serpentine statuette, Hornemann, op. cit. 1354 (Brooklyn 37.592 L).
- ³ Schäfer (tr. Baines), *Principles of Egyptian Art* (Oxford, 1974), 288; cf. Hornemann, op. cit. 372-3 (JE 35885, Leiden E XVI 319), 147a (Hildesheim 121).
- ⁴ Louvre stela D 27 (Lanzone, *Dizionario*, pl. 17), and still the basic study of these gods, Sethe, *Amun*, especially pl. 1. For a useful selection of visual material, although sometimes inaccurate, see Lepsius, *Über die Götter der vier Elemente bei den Ägyptern* (Berlin, 1856).

exists, to my knowledge, no other three-dimensional representation of these gods, in this or any other guise. The absence of such images of the Ogdoad is particularly surprising at Hermopolis,¹ even though a late Eighteenth Dynasty text mentions the manufacture of gods' images in connection with this, and a variety of other Middle Egyptian cults.² The squatting attitude is also unusual for these divinities. I have only been able to find one other instance, in a relief at Edfu, and that in a mutilated context.³ It is, however, interesting to recall here the squatting cynocephalus figures noted by Jéquier in a relief fragment, from the temple of Pepi II,4 although his attempt to identify them with an alternative tradition for the Ogdoad should be viewed with extreme caution. The writing of the name can only be compared, among the examples collected by Sethe, with a Ptolemaic instance from Medinet Habu. 5 This reads $\Longrightarrow \psi$, the determining figure holding the wis sceptre. This, again, is normal for the anthropomorphizing representations of these gods which regularly show the males with the wis sceptres and the females with widts. The engraving on the University College statuette could perhaps be interpreted as a so knife, and this can be compared with a representation of the Ogdoad at Dendera.⁷ In the squatting type, attested at Edfu, the figure holds an cnh, but, even in view of the summary engravings, it cannot be considered as a possibility for our example. It seems that extreme iconographic licence was permitted for representations of the Ogdoad; they occur as baboons, ram-headed gods, and in completely human form, as well as in their more familiar guise.8 They can also appear in a variety of headgear and costume. This can no doubt be explained by their vague and largely conceptual nature; in earlier times, their names, as a rule, were determined without the gods' figure.¹⁰ This is probably the reason for the extreme paucity of representations until the Ptolemaic Period.

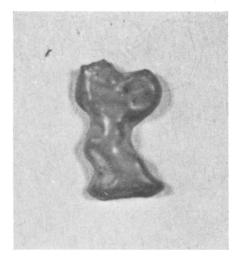
It is impossible to say whether our figure is part of a large group or pair. It must be noted that Kk(w) as well as Hh can be found as independent beings in the New Kingdom in totally human form, ¹¹ but afterwards such separate usage seems to have vanished. ¹² That our statuette is later there seems no doubt; both from an iconographic and stylistic point of view it can be no earlier than the Twenty-sixth Dynasty. Furthermore, the highly polished surface and choice of material, as well as the extreme sureness of expression, all point to the Late Period, and, if the very meagre palaeographic parallels and unusual posture are taken into account, it may well be of Ptolemaic date. All this being so, it seems almost certain that our figure was part of a set of eight, but why no others have survived is most perplexing. The small size seems to preclude its being an actual cult-statue

- ¹ Roeder, *Hermopolis*, 172. From an iconographic point of view I doubt that the possibility of the inscription's being added at a later date affects the discussion, since images of these gods definitely existed.
 - ² The stela of H?ti?y, Boeser, Leiden, VI, pl. 1.
- ³ Chassinat, *Edfou*, XIV, pl. 560—apparently the same as Lepsius, *Elemente*, pl. 3 n. x according to *PM* VI, 162, but the latter is quite different.
 - 4 Jéquier, Pepi II, 11, pl. 50; see also Egyptian Religion 2, 78 ff.
 - ⁵ Lepsius, Elemente, pl. 4 n. xi; PM 112, 462.
- ⁶ For example, Bénédite, *Philae*, pl. 39; LD IV, 66; Clère, *La Porte d' Evergète à Karnak*, pl. 67; Chassinat, *Edfou*, IX, pl. 85; XIV, pl. 603.
 - ⁷ Mariette, Dendera, IV, pl. 81.
- ⁸ As baboons, Jéquier, op. cit. Also Sethe, Amun, 85; Birch, TSBA 5, 293, pl. 1; Golénischeff, Metternich Stele, pl. 1; LD IV, pl. 28; Chassinat, Edfou, IX, pl. 29b. Rams' heads, ASAE 17, 7; also in a late writing of the name of the Ogdoad as a pun on Hmnw, Sethe, Amun, 37. For a sportive representation as eight ibises see Keimer, MDAIK 2, 139, pl. 34a. Human forms of the earlier period: Ramesses I at Karnak, LD IV, 21; cf. PM II², 44; later at Karnak, de Wit, Temple d'Opet, II, pl. 12b; Edfu, Chassinat, Edfou, IX, pl. 17; Deir el-Medîna, LD IV, pl. 28; Karnak, LD IV, pl. 30a.
 - 9 Chassinat, Edfou, IX, pl. 17, p. 66; Bénédite, loc. cit.
 - 10 See Sethe, Amun, pl. 1; Wb. v, 144; CT II, 1 ff.
 - ¹¹ Hornung, Amduat, text n. 613, pls. 887-8.
- ¹² See Sethe, *Amun*, pl. 1, pp. 74-8.

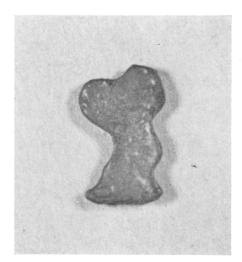
(except possibly for domestic purposes, which seems unlikely), and the lack of a dedicatory inscription leaves us undecided as to its possible votive character. It is just possible that it formed part of a three-dimensional tableau, the equivalent of the example in a Ptolemaic relief at Karnak, but for lack of supportive material, the question must be left open.

ROBYN A. GILLAM

¹ LD IV, pl. 29b. Some three-dimensional parallels, Hornemann, op. cit. 1313 (Michailidis collection, bronze), 1374 (Louvre n. 6204, gold, early Twenty-second Dynasty); see also CG 39.379, CCG 38001-39384, pl. 43.

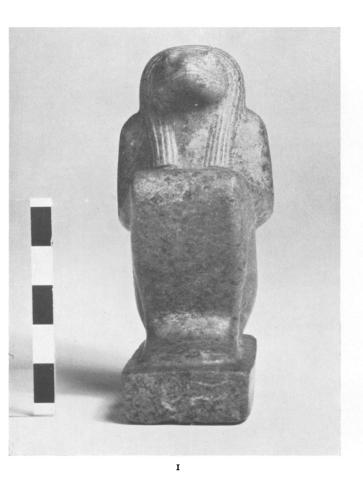


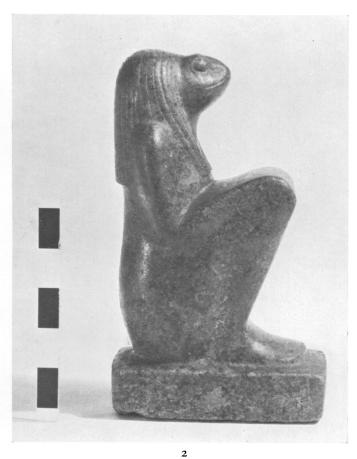
1. Bes amulet, front



2. Bes amulet, back

A BES AMULET FROM THE ROYAL TOMB OF AKHENATEN





A STATUETTE OF THE GOD KEK

Frühe Keramik aus Ägypten. By BEATE GEORGE. Medelhavsmuseet. Bulletin 10. 255×188 mm. Pp. 104. 112 black and white photographs. Stockholm, 1975. ISBN 917192273. Price SC 60.00.

This monograph consists of a short introduction followed by a catalogue of 'decorated ware' (to use Petrie's ware designation, as does the author) in the Medelhavsmuseet in Stockholm. The title is perhaps misleading since the aim of the monograph is not a survey of Predynastic pottery, but a publication of 155 examples of a single ware. In her introduction the author explains her selection of this ware for the interest of its painted decoration, and the opportunity given by the motifs used to study the Weltsicht of late Predynastic Egypt.

The introduction continues with a brief discussion of the chronological range of the pottery. Except for three examples from Mostagedda (Cat. nos. 81, 138, 148), all the vases are from private collections and unprovenanced, so a relative chronology has been established by applying Petrie's sequence-dating system. The classification which follows is based upon the character of the painted motifs, and these are arranged in four groups: spirals, patterns imitating stone, wavy lines, and figured decoration. For the latter see, in addition to the authorities cited by the author, P. E. Newberry, 'List of Vases with Cult-signs', LAAA 5 (1913), 137–42. Within these groups the pottery is arranged according to shape, the terminology being taken from Vandier's Manuel, 1, 332. Finally there is a short description of the fabric of the ware and some of the methods used in its manufacture and decoration. References are made to the ware's distribution, and to the evidence quoted by Brunton in Mostagedda concerning the original contents.

The catalogue entries consist of the standard data, that is, museum number, size, provenance, colour, condition, and full description of the shape and decoration with a note of the same or a similar type in Petrie's Prehistoric Egypt corpus and its appropriate sequence date. For each vase there are between one and three photographs.

The format, as well as the primacy given to decoration and shape, is reminiscent of the Corpus Vasorum Antiquorum and in contrast to recent publications of Egyptian ceramics. Illustration of each example in the case of a decorated ware which shows as much variation as this is most desirable, but the absence of line drawings is a defect. The decoration on rims, bases and handles is hardly visible, if at all, and the character of the rims and the inner profiles is lost. The outer profiles show varying degrees of distortion because the vases have not, in most cases, been photographed precisely level. Much of the descriptive portion of the catalogue could be as clearly expressed in a drawing, while leaving space for noting features such as tooling marks (Cat. no. 134), brush strokes (Cat. no. 122), and turning and finger marks on the interior, none of which show clearly on a photograph and would distract the eye from the painted decoration if incorporated into a drawing. A technical language for the description of pottery, long established in other fields of archaeology (see Anna O. Shepard, Ceramics for the Archaeologist), is being adopted in current publications (see Helen Jacquet, Les Ermitages Chrétiens du Désert d'Esna, III. Céramique et Objets (Cairo, 1972), and the forthcoming Keramik entry by Dorothea Arnold in the Lexikon der Ägyptologie). It is disappointing to note here the retention of a cumbersome, often ambiguous vocabulary, and a shape classification (the pottery is categorized as heart-shaped, spherical or elongated) which provides no analysis of what the shapes actually are or how they are related to one another.

Since most of the pottery came from private collections it would be useful to know what they were in each case, and to have a record of any numbers which the pots carried when they came into the museum. There are many examples of such objects which were acquired by collectors in return for financial support for excavations, and whose provenance can be established from the tomb or site numbers which they still bear. A helpful addition would have been a list of those sites and tomb groups in which the type occurs and the compilation of such a list is facilitated now by the existence of Elise Baumgartel's Petrie's Nagada Excavations: A Supplement, to which the author does not refer. A distribution list might have served as a control to

Petrie's sequence dates which are quoted in the entries without comment. No reference is made to Kaiser's chronology, which is based on a careful analysis of the horizontal stratigraphy at Armant, although his work is noted in the introduction to the catalogue. If we draw on Kaiser's study, it seems that some of the vessels (for example, 116, 118, and 131) may date from the transition period between Kaiser's Naqada III and the First Dynasty.

The limitations of the catalogue lie not simply in the format, but in the author's approach to her subject, which is to consider the motifs of decoration in a vacuum unrelated to the pottery on which they occur. The techniques of application, the quantitative and geographic distribution of the ware, function, and the relation between shape and decoration are some of the factors which may influence the interpretation of motifs. Moreover the technical description of the ware in the introduction is the weakest part of the monograph. Fabric, surface colour, surface treatment, and methods of manufacture are dealt with summarily and curiously without reference to Hans-Åke Nordström's detailed description of both the fabric and the ware group in 'Neolithic and A-Group sites', SJE 3 (1972), 54-5 and 66-7. One can only regret that the opportunity was not taken to make a more useful contribution to our understanding of Predynastic Egyptian pottery.

JANINE BOURRIAU

The Mastaba of Queen Mersyankh III, G7530-7540. By Dows Dunham and William Kelly Simpson. Based upon the excavations and recording of the late George Andrew Reisner and William Stevenson Smith, Museum of Fine Arts—Harvard University Expedition. Giza Mastabas, edited by W. K. Simpson, 1. 344×272 mm. Pp. v+26, col. frontis., 20 pls., map, plans, 16 figs. Boston, Museum of Fine Arts, 1974. Library of Congress C.C. No. 73-88232. Price £24.00.

This volume is the first in a series which will make accessible Reisner's unpublished Gîza tomb material. The decision has been taken, doubtless rightly, to publish a series of individual monographs on the mastabas, rather than to edit Reisner's bulky manuscript. The present volume is concerned with the tomb of Mersyankh (more familiarly Meresankh) III, daughter of Prince Kawab (son of Cheops), and wife of Chephren. Her mastaba lies in the great cemetery east of the Cheops Pyramid, not close to that great monument but several streets from it. Compared with some of the other mastabas in the same cemetery her tomb is not noticeably large, but contains features of great interest, quite apart from the exceptional state of preservation of its painted chambers. The role of the female noblesse of the Old Kingdom is emphasized to an unusual degree. From the architectural point of view the unique location of the tomb chapel (in the substructure rather than in the superstructure) and its series of rock-cut statues, are noteworthy.

It is sobering to recollect that, despite the number of inscribed and decorated mastabas of the Old Kingdom freed from the encroaching sand since the middle of the last century, comparatively few have received definitive treatment from the scholarly point of view. The volume under notice fulfils the four major desiderata of a tomb publication, even in these times of severe financial stringency: accurate facsimile line-drawings of the scenes and inscriptions, a selection of photographs to convey an impression of the style and quality of the reliefs (especially if these have not been caught adequately in the facsimiles), notes and plans of the salient architectural features, and a succinct commentary on the scenes and texts, with grammatical exposition where necessary. One cannot ask for more, except to see the completion of this admirable series as rapidly as possible (other volumes have since appeared).

Geoffrey T. Martin

The Fortress of Buhen. The Inscriptions. By H. S. SMITH, with assistance from †W. B. EMERY, B. J. KEMP, G. T. MARTIN, and D. B. O'CONNOR. Excavations at Buhen, directed by †Walter B. Emery, Vol. II. The Egypt Exploration Society, Forty-Eighth Excavation Memoir. 320×260 mm. Pp. xii +255, pls. 84. Egypt Exploration Society, London, 1976. ISSN 0307-5109. Price £39.00.

Sur la jaquette qui recouvre le volume un dessin montre, habilement reconstitué, un secteur caractéristique des massives murailles qui protégeaient la forteresse de Bouhen. C'étaient d'imposantes constructions de brique crue, équipées de remarquables ouvrages défensifs, dont on pouvait encore voir des vestiges il y a peu d'années, mais que, hélas! le Sadd el-'Aly—le Haut Barrage qui a formé le 'Lac Nasser'—a

recouvertes d'une épaisse masse liquide et, sans doute, fait fondre comme des morceaux de sucre dans un verre d'eau. Située sur la rive occidentale du Nil, à peu près à la hauteur de la ville soudanaise de Ouadi-Halfa (elle aussi submergée), la forteresse, dont la construction initiale remontait au début de la XIIe dynastie, était toujours restée visible depuis le fleuve, et des recherches archéologiques y furent effectuées déjà du temps de Champollion. En 1909-10 une fouille méthodique, et qui se voulait exhaustive, y fut conduite pour le compte de l'Université de Pennsylvanie par D. Randall-MacIver, mais en réalité il restait encore beaucoup à faire, et à trouver. Devant la menace de la disparition totale et définitive du site sous la montée des eaux qu'allait provoquer le Haut Barrage, l'Egypt Exploration Society, associée au programme de sauvetage des monuments de la Nubie organisé par l'UNESCO, réalisa, sous la direction du regretté Professeur Walter B. Emery, le dégagement et le relevé systématique de la forteresse, au cours de huit campagnes de fouilles qui se succédèrent sans interruption de 1957-8 à 1964-5.

C'est à la publication et à l'étude des inscriptions découvertes au cours de ces fouilles de la forteresse qu'est consacré le livre de H. S. Smith — qui a personnellement pris part aux campagnes de 1959-60, 1960-1 et 1964-5 — mais l'auteur a eu l'heureuse idée d'inclure dans son ouvrage, lorsqu'ils étaient inédits ou publiés d'une façon ne correspondant plus aux standards actuels de publication, les objets du Moyen Empire et de la Seconde Période Intermédiaire provenant de fouilles antérieures ou trouvés occasionnellement sur le site et maintenant conservés dans différents musées. On dispose ainsi — au moins pour les époques mentionnées — d'un véritable corpus des objets inscrits découverts à Bouhen, dont chacun est décrit et daté, les inscriptions qu'il porte étant traduites et minutieusement commentées.

Pages 242-55, sous le titre 'Main Index' (= Index H), on trouve une liste de tous les objets publiés dans l'ouvrage, classés soit par saisons de fouille, soit, lorsqu'il ne s'agit pas d'objets provenant des fouilles de l'Egypt Exploration Society, d'après les musées où ils sont conservés. Pour chacun des premiers l'index donne successivement: le numéro de catalogue ('Cat. No.'), c'est-à-dire le numéro attribué à l'objet par le fouilleur; le numéro de carroyage ('Grid No.') indiquant, en référant au plan du site joint au volume (pl. 82), la zone où l'objet a été trouvé; l'indication de la nature de l'objet; enfin, les références aux pages et aux planches du livre. Pour les objets provenant des fouilles antérieures, l'index (pp. 253-5) donne le nom des musées où ils se trouvent (sont cités les musées du Caire, de Florence, de Khartoûm, de Leipzig, d'Oxford, de Philadelphie, ainsi que le British Museum et le Louvre) avec le numéro de musée des objets, puis, comme pour le premier groupe, l'indication de la nature des objets et les références aux pages et aux planches du volume.

Les deux temples édifiés au Nouvel Empire dans la forteresse de Bouhen ayant été publiés antérieurement,2 leurs inscriptions, en dehors de celles de quelques fragments remployés provenant de ces temples, ne figurent pas dans le livre de Smith. Les inscriptions qui y sont publiées sont, à quelques exceptions près, celles de monuments civils, objets de dimensions souvent modestes, et assez fréquemment à l'état de fragments. Ce sont surtout des stèles de particuliers, de rares statues, quelques éléments architecturaux: linteaux ou montants de portes, des parties de divers reliefs — et aussi des objets mineurs tels que scarabées, bouchons et étiquettes de jarres, empreintes de sceaux, ostraca, ainsi que de petits fragments de papyrus hiératiques. L'auteur a groupé ces objets chronologiquement et consacré un chapitre à chaque catégorie représentée. On trouve ainsi, catalogués successivement, les monuments de pierre du Moyen Empire et de la Seconde Période Intermédiaire (chap. 2); les scarabées, sceaux et empreintes de sceaux de ces mêmes époques (chap. 3); les ostraca hiératiques de la Seconde Période Intermédiaire (chap. 4); les papyrus hiératiques du Moyen Empire (chap. 5); les stèles, linteaux, montants de portes et autres monuments de pierre du Nouvel Empire (chap. 8); les scarabées, sceaux et empreintes de sceaux du Nouvel Empire (chap. 9); les bouchons de jarres (chap. 10); les étiquettes de jarres en hiératique (chap. 11); les ostraca du Nouvel Empire (chap. 13); d'autres inscriptions du Nouvel Empire (chap. 14); et, pour finir, des ostraca démotiques, méroïtiques et autres (chap. 17). Un chapitre est aussi réservé aux stèles et statues du Moyen Empire et de la Seconde Période Intermédiaire provenant des fouilles faites antérieurement à Bouhen (chap. 6).

- ¹ D. Randall-MacIver and C. Leonard Woolley, *Buhen*, Text and Plates. University of Pennsylvania, Egyptian Department of the University Museum, Eckley B. Coxe Junior Expedition to Nubia, Vols. VII-VIII (Philadelphia, 1911).
- ² R.A. Caminos, *The New-Kingdom Temples of Buhen*, I-II. Egypt Exploration Society, Archaeological Survey of Egypt, 33rd and 34th Memoirs (London, 1974).

La quasi-totalité des objets du catalogue sont reproduits en dessin au trait (pls. 1-56) et pour bon nombre d'entre eux l'ouvrage fournit en outre des reproductions photographiques (pls. 57-81). Ces dernières sont malheureusement — signe de la dureté des temps — des clichés tramés qui, s'ils sont très suffisants pour montrer le style, la technique de sculpture et l'état de conservation des objets, ne permettent pas la vérification de petits détails. Les nombreux fragments de papyrus hiératiques du Moyen Empire (lettres, rapports, listes de personnel, comptes) sont tous reproduits photographiquement (pls. 61-8) et les plus importants d'entre eux sont en outre donnés en transcription hiéroglyphique (pls. 61 A-64 A). Les étiquettes de jarres en hiératique sont reproduites uniquement en transcription (pls. 50-1), les ostraca hiératiques en fac-similés et en transcription (pls. 52-3 et 52 A-53 A).

Les trois dernières planches du livre (pls. 82-4) reproduisent des plans de la forteresse qui doivent être par la suite également publiés dans le volume I des Excavations at Buhen, le rapport archéologique. Leur raison d'être, ici, est d'indiquer où ont été trouvés lors des fouilles les différents objets du catalogue. Le plan de l'ensemble du site (pl. 82) est carroyé en carrés de 30 m de côté, ceux de la forteresse intérieure (pl. 83 pour le Moyen Empire, pl. 84 pour le Nouvel Empire) sont divisés en groupes d'édifices. Les indications fournies par ces plans, qui sont insuffisantes (les carrés, pl. 82, sont relativement grands; les numéros des différentes pièces des édifices ne sont pas portés sur les pls. 83-4), sont heureusement complétées par les renseignements très précis et circonstanciés qui sont donnés dans le texte pour chaque objet.

Les inscriptions sont dans leur grande majorité — mais il y a d'heureuses exceptions — d'assez banales formules d'offrande ou d'adoration, des dédicaces, ou des textes similaires, et le plus souvent les difficultés que peut présenter leur interprétation sont dues soit (ce qui leur confère de l'intérêt) à des particularités paléographiques, notamment pour les monuments de la Seconde Période Intermédiaire, soit simplement au fait que ces inscriptions sont fragmentaires. Dans ce dernier cas, l'auteur a parfois été amené à adopter des interprétations que l'on peut hésiter à suivre.

Un exemple typique est fourni par la stèle N° 1893/176 de l'Ashmolean Museum d'Oxford (pl. 10, 2) où, pour O (1. 3), Smith propose de restituer 'I was one of the dependants (of the ruler of Kush)' (p. 53 n. 3 de la traduction); malheureusement, au lieu de cette intéressante affirmation, on a affaire à un banal cliché qui se retrouve sur deux stèles contemporaines d'Edfou: et ___ _ _ _ _ _ _ _ _ unique pour (?) ses proches'.5 — Autre cas: dans la lacune du début de la l. 1 du texte de la petite stèle N° 1358 (pl. 21, 1) il y avait sûrement, comme sur de nombreuses stèles votives semblables, "Fait par . . . (pour son Maître)', suivi du titre de Ouadjmosé, qui occupait un seul quadrat; la traduction '(The . . .) Wajmose to his lord' (p. 112) doit donc être modifiée en conséquence. — On peut également citer le fragment de montant de porte $m N^\circ$ 1470 (pl. 23, 3) sur lequel plusieurs signes sont inversés par rapport aux autres. Après 🚅 qui fait suite à la lacune initiale, les signes lus 🛱 🤟 ont été regardés par l'auteur (p. 116) comme étant les mots hswt m'(give) favours in (the west)', avec une graphie anormalement abrégée de *hswt* et une notation 'néo-égyptienne' (le fragment est ramesside) de m par \mathcal{L} . Une solution à mon avis meilleure consiste à admettre que 1. tout en étant tournés dans le même sens que 🛀 qui les précède, les signes lus 🖒 🧹 sont déjà en ordre inversé comme ceux qui les suivent, et que 2. le signe de l'homme, malgré sa ressemblance avec 🐧, est à lire 🐕 ('The work is careless' a noté Smith), ce qui amène à lire le texte: 🚉 🎖 🅍 🚉 = 🚉 '(afin qu')il me donne l'amenti en paix'. L'expression 'donner l'amenti (à quelqu'un)' est connue ailleurs et signifie quelque chose comme 'faire atteindre l'amenti', c'est-à-dire 'donner une sépulture (ou le repos, la vie éternelle...) dans la nécropole occidentale', etc.; autres exemples l'amenti d'une (= consécutif à une) belle vieillesse'.

³ ASAE 23 (1923), 183 (Caire JE 48229 = CGC *20817); cf. Janssen, De traditioneele Egypt. autobiografie vóór het Nieuwe Rijk, I-P-25.

⁴ Alliot, Tell Edfou (1933), 31 (7°) et pl. 15, 1; cf. BIFAO 37 (1937-8), 104 (14).

⁵ Dans les deux exemples, <u>h</u>rw est en parallélisme avec mhwt, 'famille'.

⁶ ZÄS 44 (1907-8), pl. 2, l. 14, et p. 32; cf. Roeder, Kulte, Orakel und Naturverehrung im alten Ägypten, 220.

⁷ Bruyère, Deir el Médineh (1948–1951), 30 (collationné).

Les noms de particuliers, de rois et de divinités qui figurent dans les inscriptions ont été classés dans une série d'index chronologiques qui séparent les noms du Moyen Empire et de la Seconde Période Intermédiaire de ceux du Nouvel Empire. On trouve ainsi, sous le titre 'Buhen Prosopography', la liste des noms de personnes antérieurs au Nouvel Empire (Index A) et celle des noms du Nouvel Empire (Index B); à la première liste il y a lieu d'ajouter les noms de personnes réunis p. 37 ('Indexes to the Papyri') qui se rencontrent dans les papyrus hiératiques du Moyen Empire. Les noms royaux sont groupés sous le titre 'Pharaoh Index — Buhen Town' et pareillement répartis en deux listes chronologiques (Index C et D). Pour le Moyen Empire et la Seconde Période Intermédiaire Smith a judicieusement séparé les attestations contemporaines du règne des rois de celles qui appartiennent à des époques postérieures et qui concernent principalement des monuments du culte des rois déifiés de la XIIe dynastie. La même division chronologique est employée pour les noms de divinités (Index E et F). Enfin, il y a aussi un index des titres de particuliers (Index G) mais qui couvre seulement le Moyen Empire et la Seconde Période Intermédiaire, les titres du Nouvel Empire étant traités séparément dans le chapitre 15: 'New Kingdom officials at Buhen'.

Le chapitre qui vient d'être mentionné est l'une des quatre études portant sur des sujets particuliers que Smith a intercalées entre les chapitres de son catalogue des inscriptions. Les trois autres traitent: de l'histoire du fort de Bouhen au Moyen Empire et à la Seconde Période Intermédiaire d'après les monuments inscrits (chap. 7), des denrées importées à Bouhen au Nouvel Empire (chap. 12), et de l'histoire de Bouhen au Nouvel Empire (chap. 16). Ces études, qui sont toutes bien documentées et traitées avec beaucoup de compétence, forment la partie la plus originale et la plus intéressante du livre, auquel elles ajoutent beaucoup. A la première de ces trois études, qui n'occupe pas moins de 25 pages, sont ajoutés quatre 'excursus' dans lesquels Smith a étudié (Excursus A) l'emploi des épithètes whm enh, mie hrw et nh imih à Bouhen pendant la Seconde Période Intermédiaire, (B) les graphies du nom Bwhn, 'Bouhen', depuis l'époque de Sésostris Ier jusqu'à la XVIIIe dynastie, (C) le culte des rois Sésostris Ier et Sésostris III déifiés à Bouhen durant la Seconde Période Intermédiaire, et enfin (D) la forme et l'arrangement du décor ('designs') des nombreuses stèles de cette même période trouvées à Bouhen. Le chapitre sur les denrées ou marchandises importées à Bouhen au Nouvel Empire est fondé sur l'étude des inscriptions des bouchons et des étiquettes de jarre trouvés sur le site (pls. 45-51); entre autres produits ces jarres avaient contenu du vin, du miel, de la viande, de la graisse, de l'huile et des poissons. Smith compare à ceux qui sont mentionnés à Malqata et à El-'Amarna les produits attestés à Bouhen, et il étudie la provenance des vins qui y étaient importés. C'est un très bon chapitre qui donne une idée de ce que devaient être les besoins du personnel de la forteresse.

Deux autres volumes doivent venir compléter la série des publications consacrées aux fouilles de la forteresse de Bouhen. L'un d'eux (vol. I) concernera l'archéologie du site, l'autre (vol. III) sera réservé à la ville de l'Ancien Empire. H. S. Smith est l'un des co-auteurs du volume I et c'est l'assurance que dans ce volume également on trouvera beaucoup de choses intéressantes.

J. J. Clère

Wirtschaftsgeschichte des alten Ägypten im 3. und 2. Jahrtausend vor Chr. Von Wolfgang Helck. Handbuch der Orientalistik, Erste Abteilung, 1. Band, 5. Abschnitt. 240×160 mm. Pp. viii +307. E. J. Brill, Leiden/Köln, 1975. ISBN 90 04 04269 5. Price G 120.

In Oriens Antiquus 1978 I had the opportunity of reviewing this monograph of Professor Helck. Because of its significance I shall here give further complementary remarks.

Innumerable texts from Ancient Egypt attest that religious foundations, of private people as well as of kings, must have played a considerable part in the economics of the time. Although the author does not deal with the subject in a particular chapter, he does not fail to treat it at length in various places. It had already been observed that private foundations during the Old Kingdom used to be in the hands of several funerary priests (hmw-ks). In the Middle Kingdom, however, it seems that a change took place inasmuch as there was

only one priest in charge of a foundation (pl. 169 f.). From the relevant texts (inscription of Df:-Hcpi in Siut; stela of Intf from Hermonthis = Lange, SPAW(1914), 991 ff., and Peet, LAAA, 81 ff.; Urk. VII, 29, 15 ff. from Beni-Hasan) it is obvious that this was the usual arrangement during the Middle Kingdom. The motivating factor for such an alteration might have been the disadvantage of appointing several priests to one and the same foundation; should these, for example, not act unanimously, the foundation might be unable to carry out its functions as stipulated by its originator. But the foundations developed further. From the New Kingdom onwards we do not hear any more about the said priests, probably not by chance (p. 254). Nevertheless, there existed in this period foundations entrusted to local temples. We can see the advantage of this change in the fact that foundations were no longer left in the hands of private priests, but placed in the charge of institutions such as temples. This new arrangement provided foundations with reasonably high security for their duration. For the sake of this security many foundations, from the New Kingdom onwards, were evidently entrusted to gods and temples. In other situations this security could also be obtained, in the reviewer's opinion, by attaching the foundation in some way to the concern of the king himself (in the Late Period to that of a local prince). The author stresses that fields dedicated to a foundation in such cases were fief, so that any disposal thereof would have been possible only with the consent of their lord. Anyway, we clearly see that the Egyptians took pains to ensure the continuation of their funerary foundations. As a matter of fact, they did not cease to develop them through the ages in order to improve their efficacy and prolong their duration (see 'Vom Stiftungswesen der Alten Ägypter', Das Altertum 20 (1974), 141 ff.). Regardless of all efforts foundations cannot survive eternally. As to Ancient Egypt we can safely assume that they had rather a short lifetime, those of kings being no exception (pp. 49 ff.; for the New Kingdom see also *BiOr* 33 (1976), 174).

A considerable branch of economics at all times must have been the maintenance of officials. To this subject the author devotes more than one chapter (pp. 56 ff., 249 ff.) and has also previously dealt with the subject in several studies. In the term pr-dt (of the Old Kingdom) one conventionally understands a funerary estate, i.e. an endowment of some kind (Wb. 1, 514, 5 = '(zumeist) die zum Unterhalt des Grabes gemachte Stiftung'; Wb. v, 510, 5 = 'Gut, Stiftung — besonders zum Unterhalt des Grabes'). As far as the reviewer is aware, Gardiner (Notes on Sinuhe, 77 n. 2) was the first to express grave doubts as to the accuracy of such a rendering. Accordingly, he gives in his Egyptian Grammar, 565 the meaning 'estate', which has been accepted also by Faulkner (Concise Dictionary, 90). In the New Kingdom, however, this term came to designate the royal tomb at Thebes (Černý, A Community of Workmen, 80). For the Old Kingdom, Grdseloff (ASAE 42 (1943), 45 f.) translated this term as maison privée or propriété foncière. In the book under discussion the author assumes that during the Old Kingdom a pr-dt constituted the main possessions of an official; it was property, including land and persons, given to an official as long as he was in the king's service; this property, initially not hereditary, could be taken from him and assigned to someone else; in some cases it could, with the authorization of the king, pass to his heirs; the official could also divert a part thereof for the purpose of his mortuary endowment (often called hwt-ks: cf. BiOr 27 (1970), 189) (pp. 59, 77). Here one might add to the references given one of the Gebelein papyri (from the Old Kingdom); it is concerned with a pr-dt consisting of two settlements, a considerable number of their inhabitants, men and women, bearing the title hm-nswt (Posener-Kriéger, RdÉ 27 (1975), 218 f.).

It seems that high officials had to support not only their households but also those of their subordinates such as scribes (p. 60). It is therefore not surprising if an official received rather substantial revenues. He might hold estates nominally, as the author puts it (cf. K. Goedecken, *Inschriften des Min*). This is the case when an official bears the title 'hqr' of such and such estate'. This means that the estate was partly allotted to him. But, when the same estate is marked afterwards as pr-dt, this indicates that it was then entirely assigned to him (p. 61). The phenomenon of an old-age scheme seems to have emerged only during the New Kingdom (pp. 249 ff.; a summary is given by the author in LA s.v. 'Altersversorgung').

In considering the procession of domains depicted in the tombs of the Old Kingdom, the author comes to the conclusion that these domains were not imaginary ones, but existent; the official in question was entitled to only a part of their revenues to be used for offerings for his tomb (p. 81). As far as msw nw dt and sn dt are concerned, the author maintains that the first term designates the descendants governing the mortuary endowment while the latter was used to define someone not belonging to the family proper of the official but in charge of the funerary foundation (pp. 89 f.). From this we assume that dt refers to a mortuary

endowment, a designation which does not disagree with the funerary aspect of the term pr-dt. In discussing this the author also looks into the mutual obligations of the mortuary priests, since one of them expected offerings for himself from his colleagues. This assumption recalls the reciprocal obligations laid upon the members of religious associations attested by Demotic documents from the Ptolemaic Period (cf. F. de Cenival, Associations religieuses (1972)).

Unlike high officials, groups of workmen in the service of the king/state used to receive their maintenance in natural products. In comparing their revenues (grain quantities), the author affirms that the workmen at Deir el-Medîna were better off, as they were specialists in their field (pp. 206 f.). It is, therefore, not surprising if their conception of legal life was relatively well developed. The gang of these workmen, engaged in the work on the king's tomb during the Ramesside Period, was called the 'crew' (tr ist). Recently, Černý (Community of Workmen, 101 f.) noted some features common to both the gang and a boat's crew which might suggest why a naval term was used for the former. To Černý the division of the gang into two 'sides', right and left, is further proof of the nautical origin of the term. In the book under review the author affirms similar applications of these naval terms for other organizations in the Old Kingdom such as pyramid towns, expeditions sent to quarries, and the mortuary priesthood (pp. 127 f.). It is noteworthy that expeditions sent to the Wadi Ḥammāmāt during the Middle Kingdom were differently organized. Unlike those to Sinai they used to be confined to military officials, sometimes to the vizier himself (pp. 187 f.). Members of expeditions to Sinai seem to have been examined by doctors (p. 186). That was the case of the workmen at Deir el-Medîna (Allam, Verfahrensrecht, 13).

In his study devoted to the decree of Pepi I on behalf of the pyramid town of King Snofru, Goedicke (Königliche Dokumente, 60 f.) noted that the hnty-š were the inhabitants of a pyramid town. They possessed land and received their revenues from the offerings destined for the cult of the king. In return, they had to maintain the cult of the deceased king. This conclusion is confirmed in the Wirtschaftsgeschichte, but the author adds further insights. He remarks that by the end of the Old Kingdom high officials and even viziers were described as hnty-š. To him the reasons why the position of a hnty-š became so attractive were: first, these people received an assured income; secondly, they, as well as their estates, were exempt from all obligations toward the state (taxes, compulsory works, etc.), especially when they were performing the cult of a deceased king (pp. 66 f., 142; further pp. 136, 141). This occurred at a time when the ordinary man was aspiring to greater freedom and individualism. At all events, the aim of the king was to provide his servants with assured revenues.

In a chapter devoted to compulsory works imposed by the state on its subjects during the New Kingdom, the author thinks that the state must at this time have made ample use of this kind of work, as was the case in the Old Kingdom and Middle Kingdom. To some extent, this may be true, though sources from the New Kingdom do not shed much light on the matter. The author refers (p. 228) to one isolated ostracon associated with the preparation of Senenmut's tomb; the text has the heading: 'Dividing the servitors (sdm-cs) of Senenmut...'. Comparing it with another ostracon, he concludes that sdm-cs might have been a designation for somebody obliged to carry out public works. However, the study recently published on this term (Černý, A Community of Workmen, 29) shows beyond any doubt that it was an exalted substitute for the humble 'man of the gang', a frequent designation of the free workman at Deir el-Medîna who lived only a little later than Senenmut.

In his discussion of the classes of Egyptian society during the Middle Kingdom, the author touches upon the desertion of farmers. Because of the compulsory works imposed upon them they began to desert their fields (p. 150). In the meantime G. Posener (L'enseignement loyaliste, 41; Annuaire du Collège de France, 72° année, 434; 'L'ἀναχώρησις dans l'Egypte pharaonique', Hommages à Cl. Préaux, 663 ff.) has shed more light on this point. The phenomenon turns out to be the same as that attested in the Graeco-Roman Period. It seems to have occurred again and again during the preceding ages, apparently because of the heavy taxes imposed on peasants.

In conclusion, the reviewer thinks that the book, highly interesting and stimulating as it is, will certainly call forth some criticism since the specialist would not be inclined to accept every detail or agree with every interpretation suggested. On the whole, however, Professor Helck has largely succeeded in producing an instructive handbook badly needed in the field. To him we are most grateful for the foundation he has laid for the history of economics in Pharaonic Egypt.

Schafik Allam

Ramesside Inscriptions, Historical and Biographical. By K. A. KITCHEN. Oxford, B. H. Blackwell Ltd. Vol. II, fasc. 7, 1976. Pp. 353-416. Price £1.50. Vol. II, fascs. 8-9, 1977. Pp. 417-80. Price 75p each. Vol. II, fascs. 10-12, 1979. Pp. 481-576. Price £1.25 each. Vol. III, fascs. 1-4, 1978. Pp. 1-128. Price £1.25 each. Vol. III, fasc. 5, 1979. Pp. 129-60. Price £1.25. Vol. V, fascs. 4-5, 1977. Pp. 193-256. Price 75p each.

Dr Kitchen continues his series of basic source material for the Ramesside Period with increasing vigour as this massive project draws inexorably to its completion. References to earlier reviews in this journal can be found in 7EA 64 (1978), 168. Six more fascicles enumerate the monuments of Ramesses II. Fascicle 7 completes his works of peace with the publication of the famous Quban stela. G. Kueny and J. Yoyotte, Grenoble, musée des Beaux-Arts. Collection égyptienne (Paris, 1979), 39-41, should be added to the bibliography of this stela on p. 353. The fascicle also deals with the burials of the sacred bulls and the royal jubilees, and begins the geographical series of the monuments of Ramesses II from western Asia and the east Delta. Fascicle 8 continues with the publication of objects from Tanis, probably originally from Pi-Ramesse. These are completed in fascicle 9 which includes the stelae dealing with the royal statue-cults. H. D. Schneider, OMRO 52 (1971), cites another stela in Leiden naming the statue Montemtawy that can be added to the dossier on p. 451, while BM 64641, to be published shortly, adds another stela naming Heqahequ whose dossier is on p. 455. This fascicle then completes the list of monuments in the Delta and the Libyan marches and begins those in the region of Heliopolis. No. 168 on p. 464 is now Cairo JE 36325, and has been recently published together with a similar base from Mendes, now Cairo JE 36326, in H. De Meulenaere and P. MacKay, Mendes II (Warminster, 1976), 193, nos. 18-19, and pl. 12. Fascicle 10 completes the publication of the objects from Heliopolis and deals with the monuments from Memphis, Middle and Upper Egypt including the Abydos Temple of Sethos I and part of that of Ramesses II. Fascicle 10 and part of 11 complete the publication of the latter temple including the festival calendar where there is a slight blemish on p. 525 which may obscure a reading of a number. Fascicle 12 finishes with monuments from Upper Egypt including inscriptions from the Great Hypostyle Hall at Karnak.

Volume III is designed to contain the monuments of the officials of Ramesses II. Fascicle 1 and part of 2 are required to detail the many monuments of the vizier Paser. No. 13 on p. 21 in fact comes from Mendes: see De Meulenaere and MacKay, op. cit. 196, no. 41, and pl. 17. Two additional minor monuments are BM 53064, a plaque with the names of Ramesses II and Paser, which can be added to the list on p. 34, and BM 35628, a faience stela of Paser to be published shortly. The remainder of fascicle 2 covers the monuments of the viziers Khay, Neferrenpet, Prahotpe A, and Prahotpe B. BM 36531, the Hapy canopic jar of Prahotpe A, should be added to his dossier on p. 52. Fascicle 3 completes the viziers, and begins the monuments of the viceroys of Kush. No. 9 on p. 72, a lintel of the viceroy Heqanakhte, has recently been published in photograph in A. Vila, La Prospection archéologique de la Vallée du Nil au sud de la Cataracte de Dal, Fasc. 7 (Paris, 1977), 27. Fascicle 4 completes the monuments of the viceroys and begins those of their subordinates which are finished off in fascicle 5. This last also contains the records of treasury officials and begins those of the mayors of Thebes. Vol. V, fascicles 4-5, deal with the festivals of the gods at Medinet Habu, the dated series of royal monuments of Ramesses III, and the beginning of the geographical series. By way of comparison, the geographical series of Ramesses II begins on p. 399 of his volume, while that of Ramesses III commences on p. 251, so there is no doubt as to which monarch was the more represented M. L. BIERBRIER and verbose.

Mendes II. By HERMAN DE MEULENAERE and PIERRE MACKAY. Edited by EMMA SWAN HALL and BERNARD V. BOTHMER. 320×235 mm. Pp. xxii+243, frontispiece, pls. 40. Warminster, Aris and Phillips Ltd., 1976. ISBN 0 85668 001 X. Price £28.00.

Presumably, every mission preparing to open a new excavation does a certain amount of preliminary research in order to ascertain what is known about the history of the chosen site not only in its heyday but also from the time of its decline or destruction until the moment when shovel is put to earth in order to uncover its remains, but it is only in recent years that excavators have seen the desirability of publishing

in extenso the material thus gathered together, as a preliminary volume to their excavation reports. Mendes II is such a volume and the amount of data accumulated as well as the interest of the information gleaned therefrom fully justifies the considerable effort which must have been required to bring it together.

The first section of the book presents summaries of the information to be found in Classical, Coptic, and Arabic literary sources concerning the twin cities of Mendes and Thmuis. The Classical authors mainly historians who retail what information was available to them as to the geography, religion, and mores of the towns—can be considered as direct sources, whatever we may think of their accuracy. The Coptic sources, on the contrary, are mainly indirect—the towns being mentioned only incidently, as in the case of Thmuis, the seat of a bishopric several of whose incumbents are listed among the dignitaries present at the various councils of the Church. As designations of administrative districts, the names of the two towns linger on into Islamic times and still survive in the name of a hamlet situated near the ancient ruins. One Arabic author, however, gives a vital piece of information which is imminent in Pierre Mackay's corrected translation of the Arabic text although it has not been underlined in the historical summary. Al-Kalkashandi, in two different places, describes the ruins of 'Tumay' which he apparently visited in person. In the first citation given on p. 6 he describes the ruins of the temple whose walls and roof were still standing and within which were 'huge tanks of granite, extraordinary affairs'. This cannot refer to the ram sarcophagi since these were not in the temple. In the second citation he speaks of 'doorways made from a single piece of granite nearly ten cubits high, standing on a foundation also of granite'. Both descriptions fit exceedingly well the naos which still exists and, although one speaks of 'tanks' and the other of 'doorways', both designations could conceivably have been applied to such a striking object as the great naos by a person ignorant of its real nature. In both cases the author speaks in the plural. Is it too audacious to deduce from Al-Kalkashandi's words that at the end of the fourteenth or beginning of the fifteenth century when he inspected the ruins of Mendes, at least two if not all four of the naoi were still standing? It is noteworthy, also, that Al-Kalkashandi speaks of 'ceiling blocks . . . immense stones remaining till now'. This appears to be in direct contradiction to Hansen's apparently well-founded opinion (expressed in his preliminary report, JARCE 6 (1967), 8) that the naoi stood in an open court. However, if we allow that in Al-Kalkashandi's time part of the structure which counterbalanced the naoi on the north side of the limestone platform, and whose existence Hansen deduces from construction lines discovered on the foundation stones at that spot, was still standing with its roof stones in place, the Arabic historian's statement becomes plausible. In any case by 1730, when the Sieur Granger visited the site, only one naos was visible, as at the present time, together with the foundations and scattered broken pieces of two others. Many later voyagers no longer even suspected the existence of the latter constructions.

A short chapter detailing exploration and excavation at the site made by various scholars since the middle of the last century closes this section of the book.

In the second section are collected and reproduced *in extenso* all the available accounts of visits to, and descriptions of, the site, beginning with those of early eighteenth-century voyagers and ending with observations made by contemporary Egyptologists resident in Cairo during the '50s and '60s before the imposition of restrictions on internal travel in Egypt put the Delta out of bounds. Much of the Material thus collected is necessarily repetitious, and many of the earlier authors are more interested in etymological and religious speculations than in descriptions of actual physical remains. None the less, some of the more perspicacious observers such as the Sieur Granger in 1730, Lord Valentia in 1806, and James Burton in 1828, contribute interesting descriptions and remarks which complete and help to interpret what is still visible at the present day. Certain of the authors cited (Burton, Ussing, Daressy, etc.) accompanied their remarks with invaluable drawings and sketch plans. All such illustrations have been reproduced with the text giving the reader a very lively idea of the state of the site at different periods. Finally, for the sake of completeness, relevant passages from a number of guidebooks are likewise reproduced.

The final section of the book includes a numbered list of objects known or presumed to have been found on the site of the two tells, as well as a short attempt to reconstruct the ancient history of the towns and to outline the cults particular to them, using as a basis the information gained from the above-mentioned objects and from other Pharaonic sources. The list of numbered monuments from the site (243 in all) is impressive, and could be extended. For instance, it seems illogical that uninscribed ram sarcophagi still visible on the site, as well as the great sarcophagus in which was found a fragment of an ushabti in the name

of King Neferites, should not be numbered (only the *inscribed* monuments *in situ* are numbered), whereas uninscribed ram sarcophagi which happen to be in the museum in Cairo *are* numbered (no. 164 and no. 165). Any study of the ram sarcophagi could not possibly ignore part of their number simply because they do not happen to be inscribed; and the sarcophagus of Neferites (if it be really his) illustrates one of the high points of the known history of Mendes, namely that this Pharaoh was not only born but also died, or at least was buried, in his native city. Every object, whether inscribed or not, has its place in the reconstruction of the historical panorama.

With very few exceptions, all the objects found prior to the beginning of excavation belong to the period subsequent to the end of the New Kingdom, a concrete witness to the extent and importance of the area in late dynastic times and thereafter. The principal of these is the 'Mendes stela' of Ptolemy II of which a complete new translation is given (in French). Among the earlier stelae a surprisingly large number (7 out of 18) are 'donation stelae', mainly of the Twenty-second to the Twenty-sixth Dynasties. The statuary too presents the same over-all picture, only four items antedating the Saïte Period. In view of the importance of the Old Kingdom tombs located at Mendes, one of which was found as far back as 1907 and a number of others during the recent excavations, it is surprising that so little material of the Middle and New Kingdoms has come to light. Does this signify a radical decline in status during the whole range of time between the Old Kingdom and the era of Ramesses II (possibly due in part at least to unfavourable climatic conditions), or was the expansion of the towns in the Late Period such that it entirely submerged the earlier remains which were largely reused elsewhere? Or did the site of the Middle and New Kingdom towns shift to a different area of the tell? Only further excavation can solve the problem.

One of the most depressing episodes in the recent history of the site is evoked in that part of the object register which records the Greek papyri from Thmuis, a small number of which is now scattered throughout the museums of Europe. These documents, the miserable remnants of a large library, were found in a Roman building at Thmuis, in a completely carbonized condition. With the techniques in use today, their extraction and unrolling might have been accomplished with a minimum of loss. In the absence of this specialized knowledge they were for the most part destroyed.

As many of the numbered objects as possible have been reproduced in photograph in the plates, those omitted being mainly objects whose present whereabouts are unknown. It would have been a useful addition to the object list if the plate references had been given for those objects which are illustrated. However, this might be considered as a lazy man's luxury. In general, the book is very well organized and easy to use, with all the necessary indexes and concordances to facilitate research. An excellent thought was the addition of a list of 'Ancient Egyptian Personal Names associated with Mendes', providing not only the names but also genealogies and titles—a kind of Bottin of those members of Mendesian society who left written evidence of their presence and activities. For those interested in prosopographical research it will be a great time-saver.

The historical summary, though based on all the available sources, illustrates vividly how meagre is, in fact, our knowledge of the history of this once extensive town, its rise and fall, and its importance in the general economy of the Delta region, even in the Late Period to which belong most of the douments found there. The interesting results already obtained during recent excavation campaigns are, therefore, all the more welcome in that they give promise of a considerable extension of our knowledge of the ancient city. A book of this kind is a good example of what can be accomplished by combining the archaeological and philological approaches in an effort to reconstruct the past.

Helen Jacquet-Gordon

Catalogue of Egyptian Antiquities in the British Museum, IV. Glass. By Cooney, J. D. 365×280 mm. Pp. xvi+180; 8 colour pls. (71 items); 560 half-tone text-figs. British Museum Publications Ltd., for the Trustees of the British Museum, London, 1976. ISBN 0 7141 0918 5. Price £40.00.

J. D. Cooney, as he tells us (p. ix), began recording the Egyptian glass in the British Museum in 1954 for a book entitled *The Glass of Dynastic Egypt*, and the invitation to compile this catalogue came to him much later. His intention, seemingly, has been that the books would complement each other and be used together, all discussion being in the one, while the other became a descriptive catalogue with little or no general

comment or explanation. Unfortunately the projected book has not been published and this catalogue must now be judged on its own, however much its author hoped that the two could be used together. But was such conjoint use ever practicable? Surely not: and it must always remain a major criticism of this catalogue that it is no more than a card-index in book form with hardly any introductory or explanatory text, except in regard to certain individual entries. In retrospect it seems a pity that the two publications were not planned as distinct entities, or, alternatively, were not amalgamated into a proper catalogue raisonné of the Egyptian glass in the British Museum with full introductory material and a running commentary. But the author did not choose to do either. Because of its genesis, therefore, this volume could not fail to be a disappointment. As Cooney himself says in his introduction, three major collections of Egyptian glass exist those in the Egyptian Museum, Cairo, the Metropolitan Museum of Art, New York, and the British Museum, London. Since neither the Cairo nor the New York collection yet boasts a published catalogue, this London catalogue by Cooney, a well-known Egyptologist, who had for long specialized in the study of ancient glass, was awaited with eager anticipation. Here was an opportunity not only to catalogue an extensive collection of Egyptian glass, but also to provide an up-to-date and authoritative account of the many varieties of glass vessels and objects found in Egypt from the earliest stray appearances of glass in the country during the Middle Kingdom down to the end of the Roman Period in the fourth or fifth century AD; for, as the author himself states, this collection is sufficiently comprehensive to enable us 'with only a few gaps, to reconstruct the history of this craft in Dynastic Egypt'—and, we might add, in Roman Egypt also, at least in broad outline. Sadly, the present volume falls short of this, and a wonderful opportunity has been missed. There are, it is true, individual catalogue entries for all objects wholly of glass now known to exist in the Department of Egyptian Antiquities, so that careful use of the book will give some idea of the extent and great variety of the collection, and for this students and scholars will be grateful. Yet each will have his criticisms to offer.

The arrangement of the chapters is indiscriminate (see below), so that similar things are not juxtaposed, and yet there is no cross-referencing. The catalogue entries are not all of equal quality or completeness. In particular the author has in no instance sought out and cited the British Museum year-month-day accession numbers, an exercise which would have provided him with further clarification of origin in many instances. These numbers are always essential tools for the researcher. To take just two related examples: the accession numbers for nos. 1048 and 1049 in the catalogue are 1842.7-28.597 and 580, revealing that both were bought from T. Burgon, a collector and faithful recorder, whose provenience 'Egypt' for these two can certainly be trusted. Burgon's writing, visible on no. 1048, is described simply as 'an early nineteenth-century script'.

An equally serious complaint must be made about the illustrations which, for a catalogue of this size and importance, are mostly inadequate both in quality and in quantity; nor are they properly listed, the half-tones not being listed at all and the list of coloured plates being summary only, with no mention of individual items. Out of 1,892 items no more than about 630 are illustrated—71 on the eight excellent colour-plates, the rest in half-tones of uneven quality and clarity, set in amongst the text. No item appears in more than one view, and scales, although they differ, are never stated. There are, regrettably, no linedrawings, surely an essential element in publishing a collection of this importance. The highly distinctive vessels of the New Kingdom (how few section-and-elevation drawings of these have ever been published!); the representative series of vessel fragments and manufacturing elements from the Eighteenth Dynasty glass-workshops at El-'Amarna (here, perhaps, was a chance to throw new light on the methods and results of glass-working that took place in this earliest known glass factory); and the very varied assortment of small objects and fragments of all dates—amulets, trinkets, game-pieces, inlays, fused mosaic elements, etc.—would all have merited good scale drawings arranged on a typological and chronological basis, so as to provide an over-all view of the great variety of Dynastic and Roman glass in this outstanding collection. We would gladly have sacrificed the eight coloured plates (good as they are) with their 70-odd items seemingly chosen at random to have, in their place, the requisite quantity of drawings.

The general index covers ancient proper names, types of object, and what they represent; there is also an index of proveniences. What is lacking is an index of 'Origins', i.e. of donors, collectors, previous owners, dealers, and sales, the preparation of which, incidentally, would have required frequent reference to the British Museum year-month-day accession registers. Nor can the idiosyncratic abbreviations of

bibliographic references be passed over in silence. Such references should be readily intelligible and should preferably include date of publication. The normal form now is author and date, e.g. 'Petrie, 1894' which all students will easily understand as 'Petrie, *Tell el Amarna*'; but if this be abandoned should we not substitute 'Petrie, *Amarna*', instead of, as Cooney prefers, 'PTA', with no date to help us? Other recondite references include 'MBM' for 'Masterpieces of Glass, The British Museum', 'GSW' for 'Petrie, Glass Stamps and Weights', and 'WBM' for 'Wallis Budge, The Mummy'.

Yet these are not the most serious criticisms that must be levelled at this catalogue. Pursuing our thoughts on typology and chronology, what can we say about a catalogue so ill arranged as this one? The book might have been laid out logically on two different lines: either by dividing the collection into three main chronological groups, (a) New Kingdom vessels and objects, (b) later Dynastic vessels and objects, and (c) vessels and objects of the Roman Period; or else by discussing the vessels first, from New Kingdom to Roman, and then the small objects, similarly, in separate chapters dealing, say, with trinkets and adornment, with inlay work, with the El-'Amarna and other factory remains, and so on. In either plan a strict chronological arrangement would be needed within each heading or sub-heading. Instead of order, however, we find here disorder.

The sixteen main chapters are arranged alphabetically according to their titles or main contents. Proceeding from 'Amulets' to 'Beads' (a misnomer, since the chapter is devoted almost entirely to rod-formed headpendants), and then to 'Cameo Glass' and 'Egyptian Blue', we come to a chapter headed 'Fragments', mostly but not entirely of vessels of various periods (but mainly New Kingdom) from El-'Amarna, Serabit el-Khadim, and elsewhere. These are hopelessly lost here, especially when not illustrated, and, since its contents have no unifying connection except as 'fragments', the chapter should not exist at all. Passing on we have 'Gaming Pieces', i.e. game-counters, an interesting group, of which, however, only two out of twenty-four are illustrated, followed by a small chapter with only six items headed 'Gold glass, painted and enamelled glass'. One of the six is the renowned jug bearing a cartouche of Tuthmosis III, the earliest known glass vessel decorated with enamel paint and one of the earliest extant glasses, which is totally lost here by being separated from its fellow New Kingdom vessels. The other five are Hellenistic or Roman, and are themselves also of prime importance, but all differ in their techniques. There is no particular reason why such disparate items should be brought together here instead of being listed in milieux where each would be more at home.

Chapters follow on 'Inlays' (Hieroglyphs, items of dress, parts of the body, etc.), 'Inscriptions' (four items only, one a fragment of a panel from El-'Amarna, which is lost here and should not have been separated from the other Amarna material), and 'Jewellery' (bracelets, ear-rings, and pendants, but only a few beads, the bulk of which are deliberately excluded from this catalogue; and why were the head-pendants and a few more beads in Chapter II above separated from their fellows here?). Next, at long last, on p. 99 we reach a chapter on 'Vessels', having hitherto seen only fragments, apart from the Tuthmosis III jug. Instead, however, of 'New Kingdom' vessels alphabetic order gives pride of place to 'Late' types, so that we have here seven core-formed examples of the fifth and fourth centuries BC, only two of which (1048–9) are surely from Egypt, and forty-two Roman blown glasses, at least ten of which are of Syrian manufacture and provenience.

The title of the next chapter, 'Major Finds', is again misleading since it includes three unrelated groups of fragments, which might with justice be called 'Special' finds but surely not 'Major' ones. The first group are fifty-four disjecta membra of the second century AD from the decoration of a naos in the great temple at Dendera; the second is a large group of 278 late Hellenistic or early Roman fragments of mosaic canes and slices, elements of inlay, etc., from what may have been a temporary workshop in the temenos at Gumaiyima, south-west of Tanis in the Delta; the third group contains twenty-one pieces of inlay and of ingots of the Twentieth Dynasty from Tell el-Yahudiya.

An important chapter on 'Manufacturing Elements' follows, far more important than its brevity and lack of illustrations (there are only two) suggest; for it contains some forty-five miscellaneous fragments of rods, crucibles, and unworked lumps of various dates (and sites) from the New Kingdom to Roman, as well as over 120 fragments of unworked glass, rods, samplings, etc. from the factory at El-'Amarna. What a mistake it was to divorce these El-'Amarna pieces from the vessel fragments from the same factory dealt with in Chapter V, entitled 'Fragments'! As Cooney himself says (p. 59, under no. 611), Petrie deliberately gave the

British Museum a representative selection of finds from the El-'Amarna factory in 1894. Surely it would have been proper to use this selection here to reassess this great eighty-year-old find, providing better illustrations and more extensive discussion of the individual pieces than Petrie had time and money to include in his 1894 book? The next chapter, 'Mosaic Glass', contains only cane-mosaic items and fragments, omitting banded glass, strip-mosaic, and other varieties which some would include under the general 'mosaic glass' label. There is not as much of this material, all late Hellenistic or early Roman, as might have been expected—just over 100 items, but there are some fine pieces, notably those shown in colour on pl. V.

And now, at length, in Chapter XV we reach the New Kingdom vessels, of which there are forty-eight (or forty-nine including the Tuthmosis III jug), mostly complete or nearly complete. They include very many of the well-known shapes and several fine individual pieces besides the Tuthmosis III jug, notably the vessel in the form of a *bulti*-fish from El-'Amarna and the beautifully simple, opaque light-blue kohlpot, the edges of its cover, rim, and base bordered with sheet gold. Yet Cooney's introduction to this fine array amounts to no more than half a page, and even then says less about these particular pieces than about New Kingdom glass-making in general.

The remaining chapters describe a mixed group of 11 small items of 'Sculpture', about 60 'Other Objects', and 50 'Addenda'—the last two, not surprisingly, abandoning the alphabetical sequence of chapter-headings.

The feeling of chaos engendered in the reader's mind by such flouting of logic, chronology, and typology is compounded within each chapter or section of a chapter by the objects being listed in the order of their departmental numbers, i.e. largely, although by no means invariably, in the order in which they entered the collection. And so, even within each section, typology, chronology, and even similarity are given no influence upon the order except when accident or the instinct of a registration clerk placed like together with like. This idiosyncratic arrangement is the author's and no editor could do anything to improve it, short of inviting him to replan it completely. Nor could an editor be expected to realize how incomplete and unhelpful, in many instances, the catalogue entries are. Much useful editorial work and checking was undoubtedly accomplished in the department before the text was submitted to British Museum Publications Ltd., but at that stage, even with fullest checking, it was not possible to produce a clear and helpful text from the existing typescript.

The catalogue entries also inevitably suffer from the virtual absence of any supporting textual discussion. The introductory material, both in the main introduction (scarcely more than a page long) and at the heads of chapters and sections, is meagre in the extreme. Although Cooney perhaps found himself inhibited from doing more at the heads of chapters by reason of his wayward planning of them, this cannot excuse his omission from his main introduction of at least a brief account of the history, typology, and technology of Egyptian glass in general and of that in the British Museum collection in particular. As it is, the less-tutored reader and researcher will have the utmost difficulty in finding his way round this book and in recognizing where the individual items and groups belong in the sequence of glass in Egypt, while even the most experienced will not find the going easy.

In a catalogue of this size containing glasses that represent such a variety of manufacturing techniques, more attention should have been given to describing and elucidating the techniques represented. Even the major ones—core-forming, casting, blowing, and free-hand modelling—are not described in detail, much less the many obscurer techniques. Indeed, the indications about the technique of individual items are often misguided—such as that the jug-amulet (no. 241) and a solid cylindrical pendant (no. 242) were 'pulled into shape on the end of a mandril', a most unlikely procedure; that the marvered blobs on a fragmentary lentoid flask (no. 1770) were 'dropped at irregular intervals from a small gather on a mandril', though how the dropping was effected is not explained; that the trailing on rim and body of a late Roman stemmed cup (no. 1090) was 'fused' (implying heating) to the vessel, instead of just being 'applied' or 'drawn on' when both trailing and body were in a viscous state; while no. 1749, which Cooney calls a circular bowl, is, in fact, probably another example of a tall-necked jar (cf., e.g., no. 1742), from which the neck has been broken away in antiquity, leaving at the top of the body a rough rim that has been ground smooth for reuse. Another technical misconception is that rod-formed pendants with red cores are not only Syrian (Phoenician) but were made at Al-Mina (nos. 301, 304, 307–13), and Phoenician, too, in the author's opinion, are sixth-fifth-century BC vessels with red cores (nos. 1048, 1065–6). The pendants are very

likely Phoenician (though not because of the red cores). It goes against all the evidence to believe that any core-formed vessels of that date were made in the Levant.

But when all is said, the plain fact is that the preparation of this catalogue was undertaken in the most adverse circumstances. It is not possible to produce a concerted catalogue of a major collection of this size and importance without 'living with it' for years rather than months. Short visits for card-indexing are not enough and it was a mistake to tackle the work on such a basis. Even so, and despite its many faults the catalogue does give a good indication of the richness of the collection, and its publication, although not a major contribution to glass studies, is nevertheless to be welcomed as providing a descriptive inventory of the Ancient Egyptian glass in the British Museum.

D. B. Harden

Catalogue of Egyptian Antiquities in the British Museum, III. Musical Instruments. By R. D. Anderson. Drawings by G. Huxtable. 365×280 mm. Pp. viii+87, figs. 150. British Museum Publications Ltd., for the Trustees of the British Museum, London, 1976. ISBN 07141 0919 3. Price £20.00.

The music of Ancient Egypt has held the attention both of scholars and of the general public ever since the first waves of enthusiasm for pharaonic antiquities in the early nineteenth century, and even seems to be embraced by the current ever-increasing European fascination with all kinds of Oriental music. Very few surviving ancient instruments in their present state could be described as beautiful objects, and the possibilities of authentic performance are minimal. Nevertheless, a wealth of depictions—notably tomb-paintings—of musicians and instruments survives. The history and origins of modern types of instrument are of the greatest interest. Such considerations have been able to influence musical taste. The oboe is generally reckoned a rustic instrument, and an oboist is regarded with suspicion if he produces too sophisticated a sound or displays too facile a technique, while (with greater historical justification) orchestral trumpet players are drilled to produce a crisp, military tone, which ironically is never now heard from military bands.

Egyptian musicology not long ago seemed dominated by the numerous publications of Hans Hickmann, who began his career, and remained all his life, a performing musician. However, since his sudden death in 1968, the subject has not stood still, and work is being done in many countries. Instruments are coming to light in excavations, and it is plain that the basic task of collecting the evidence of objects preserved in museums and of ancient representations is by no means done.

This catalogue advances our knowledge by providing a complete and systematic record of the musical instruments and models of instruments in the Department of Egyptian Antiquities of the British Museum. The author is another active musician, and he has made good use of his musical knowledge, although this is naturally not displayed to best advantage within the limitations of a catalogue.

The volume is the third in the Department's series of publications of objects that are essentially not inscribed material. It maintains the format and style of the earlier volumes, except for the dispersal of the plates (more drastic changes may be observed in the fourth volume, *Glass*, which bears the same copyright-date as the present volume). The book shows a high standard of presentation and meticulous editorial work.

The author's Introduction begins by reviewing the history of the British Museum collection of instruments and such provenances as are known. It is necessary to agree that the Hieroglyphic texts preserved on a few of the instruments are not 'of outstanding interest', and they are briefly noted and transcribed in the body of the catalogue. The greater part of the Introduction is an illustrated account of a number of well-known objects in the British Museum—statuettes, reliefs, etc.—that are of musical interest but do not fall within the scope of the catalogue itself. These six pages do not aim to be a study of Egyptian instruments, or a publication of the objects concerned, but their inclusion is welcome, as it is difficult to see where the musicological aspects of the pieces could better be discussed.

The layout of the catalogue itself resembles that of the preceding two volumes. Clappers, cymbals and crotals, bells, a rattle, sistra, flutes and reed instruments, lutes, and harps are dealt with in turn. The descriptions of the objects are kept commendably concise, and are nearly always very clear. The difficulties of working upon a collection the greater part of which is quite unprovenanced can readily be appreciated.

The photographs are interspersed through the letterpress of the catalogue, more or less closely accompanying the relevant entry, where they are easy to consult, and they are thus printed upon the same unglazed, but excellent, paper as the text. The contrast is not high, but the quality is generally good, and all the finest pieces are well served. The photographs, unlike the drawings, have no scales. Many of the smallest pieces seem to be illustrated at actual size, and this makes figures such as 49–51 and 53, which already lack contrast, of limited value. With two exceptions, only a single photograph is allotted to each object. In some cases, it is a pity that alternative views are not provided, and, in particular, that there is no photograph to give an idea of the nature and state of preservation of the engraved work shown in figs. 71–2.

The excellent drawings are introduced wherever desirable to explain constructional details or to bring out features of the decoration that cannot easily or consistently be shown in the photographs. In a few drawings, a colour key is used, identical (apart from some supplements that appear in fig. 147) to that in the second volume of this series. The results are not entirely happy, perhaps less successful than those originally achieved in Vol. II. In figs. 146–9, the use of the colour key conflicts to a varying extent with the representation of design-details, and can mislead the user. The recording of Egyptian objects that bear coloured designs presents unusual technical problems to the archaeological draughtsman. As, in addition, these objects must be expected to require the normal indications of texture etc., it is doubtful if a single drawing can carry such a weight of information.

The disciplined brevity of the catalogue entries means that the reader is, for example, rarely able to tell if the dates assigned to objects are guesses, or are fairly securely based on details of material and workmanship, or are more precisely determined. In the case of no. 48, the reader who follows up the reference given in connection with the provenance to Petrie's Nebesheh and Defenneh will soon see the archaeological evidence upon which, presumably, this rather nondescript bronze bell is assigned to the Ptolemaic Period. However, in the case of the pottery bell no. 45, the reader who similarly consults the reference given to Addison's Jebel Moya will be put to some trouble to understand the (very reasonable) date offered, 'after 1000 BC'. Even then he may well remain unaware of the controversy that has surrounded this site and its dating: see, for example, Addison's own remarks in Kush 4 (1956), 4–18; I. Hofmann has a general account of the site in Die Kulturen des Niltals von Aswan bis Sennar (1967), 37–57, and on p. 50 prefers to see the British Museum piece and its companion as cow bells, a view considered and rejected by Addison.

I am grateful to the Department of Egyptian Antiquities for the information that it is necessary to revise the provenance once given for the sistrum handle no. 82. The piece comes from Petrie's Serabit el-Khadim work in Sinai. It resembles no. 19 shown on pl. 151 in his Researches in Sinai (1906), but cannot be the same object. Apropos of Sinai and sistra, it may be worth mentioning here that the Hebrew article by S. Dar (entitled in the English contents 'An Egyptian sistrum from Tell el-Ḥir in Sinai') in Qadmoniot 8 (1975), 82, is, in effect, available in English as 'An Egyptian sistrum from Sinai', Tel Aviv 3 (1976), 79–80, as this is a slightly enlarged and rearranged translation with the same photographs (reversed): 'python' for 'cobra' is simply an easy mistranslation.

The author deserves hearty thanks for this thorough catalogue, and it is to be hoped he will find opportunities to pursue his studies of Egyptian music.

W. J. Tait

Ancient Art: The Norbert Schimmel Collection. Edited by Oscar White Muscarella. 265×240 mm. Pp. [338]. Many illus., some coloured. Mainz, Philipp von Zabern, 1974. Library of Congress C.C. No. 73-19219. Price Dm 98.

Mr Norbert Schimmel has always been most generous in giving serious students of ancient art access to his outstanding private collection, and it is fitting that this authoritative catalogue will make it known to a wider public. At the same time the volume is a magnificent specimen of book production, and one could hardly wish for finer photographic illustrations. Previously some of the material had been published in the Fogg Art Museum catalogue edited by Herbert Hoffmann (Mainz, 1964).

In the present publication specialists deal with the entire range of the collection, which embraces Classical, Near Eastern, and Egyptian art, the latter in the capable hands of Mr J. D. Cooney and comprising the

final ninety-one pages of the volume. Altogether 76 choice Egyptian objects, many formerly in the Omar Pasha Sultan collection, are succinctly described (counting the necklace terminals, no. 215, as two objects). In addition there are 25 well-known reliefs which originally formed part of the decoration of temple buildings at El-'Amarna. These latter have been exhibited in public, and have previously been published in a masterly catalogue by Cooney, Amarna reliefs from Hermopolis in American Collections (Brooklyn, 1965), reviewed in the pages of this Journal in 1966. Two (nos. 29 and 45) in that publication are not in the new catalogue.

There is such a wealth of artistic material in the present volume, ranging in date from the late Sixth Dynasty to the fourth century AD, that one can hardly do justice to it in a brief notice. The following points have occurred to the reviewer, dealt with in the order of the catalogue numbers:

- 184. The name and title are probably *imy-r r-pr Ḥny*. The badly-carved first sign of the name is perhaps or fig.; for the latter cf. PN, i, 242, 16.
- 201. On the princess Isis, daughter of Amenophis III, and objects naming her, see van de Walle, $Cd\vec{E}$ 43 (1968), 36-54. The *kohl*-tube is cited on p. 38.
- 202. The terminal of the handle of a walking-stick or cane? Cf. exx. from Tutankhamūn's tomb, likewise with the heads of foreigners, in Carter and Mace, Tomb of Tut.ankh. Amen, i, pls. 69-70.
 - 214. Not necessarily Ramesses IV on the basis of this common cartouche.
 - 217. The date is doubtless Ramesside on the basis of the wig type.
- 234. A recently excavated parallel from the Sacred Animal Necropolis at North Saqqara is now in the Fitzwilliam Museum, Cambridge, E.12.1971 (gift of the Egypt Exploration Society).
- 235. The loop suggests that bronzes of this sort were votives presented at temple shrines, and that they were there suspended in some way by the dedicant or petitioner.
 - 260. Read 'prognathous'.
 - 265. Barley, presumably, rather than wheat, owing to the long 'ears'.

GEOFFREY T. MARTIN

Fouilles de Kition, II. Objets égyptiens et égyptisants: scarabées, amulettes et figurines en pâte de verre et en faïence, vase plastique en faïence. Sites I et II, 1959-1975. Par G. CLERC, V. KARAGEORGHIS, E. LAGARCE, J. LECLANT. Republic of Cyprus, Ministry of Communications and Works, Department of Antiquities, Publications. Pp. viii+290, 32 pls., many figs. and illus., bibliogs. Cyprus, Department of Antiquities, 1976. Price not stated.

This volume deals with objects found in Kition, probably the biblical Kittim, situated in south-east Cyprus. They were excavated by the distinguished archaeologist V. Karageorghis, who writes a brief history of the site with details of the find-spots of the objects, which forms an introduction to the main body of the work. The scope of the latter is illustrated by the sub-title of the book.

It is a curious anomaly that some of the finest, most detailed, and closely contexted corpuses of small Egyptian objects have come from sites outside Egypt proper (Perachora is another of many examples), having escaped the depredations of the dealers and illicit diggers which used to be rife in the Nile Valley, more particularly in the last century. The wealth of contexted material in Egypt itself, undisturbed for the most part until the mania for things Egyptian set in during the early years of the nineteenth century, can only be imagined. All such small objects, from town-sites no less than cemeteries, are now disjecta membra dispersed throughout innumerable Egyptian collections: amulets, scarabs, shabtis, faience figurines, and the like.

The section on scarabs and cowroids in the present volume occupies pp. 21–116. Good photographs of the three fundamental aspects of the objects are provided, supplemented by line drawings, so that all the material for a specialist typological analysis is to hand. Parallels are cited, and each object is fully described. Interestingly two seal impressions also survive. Nine of the scarabs bear cartouches of Tuthmosis III and

one of Ramesses II, posthumous issues designed for amuletic or magical use. Many, perhaps most, of the scarabs and scaraboids appear to be of foreign manufacture, based on Egyptian originals for the most part. This very useful section is provided with a detailed bibliography on sigillographic material.

Amulets and figurines are dealt with on pp. 117-64, each item being fully catalogued. A rich and detailed documentation on amulets and on figurines of individual gods is provided: Isis-Ḥatḥor, Thoeris, Sekhmet, Ptaḥ-Pataikos, Nefertum, Bes, udjat-eyes, uraei, and papyrus-column amulets for instance. This is followed by a chapter dealing with the use and significance of all such material in Cypriote contexts of the first half of the first millennium BC. The final section deals exhaustively with a faience vase, in some ways the most interesting object dealt with in the report. It is in the form of a kneeling woman with a kalathos or basket on her head, holding in her hands an animal, perhaps a goat. The figure rests on a base, the front of which is ornamented with the head of a lion, which serves as a spout for liquid poured in from the top of the kalathos. On her back is a child, supported in a kind of sling or carrier. Not the least valuable part of the commentary is the detailed corpus of parallel material drawn from a number of museum collections, deriving both from Egypt itself and from foreign sites. For almost all of these vases photographic illustrations are provided.

One cannot hope to do justice to this important volume within the scope of a brief notice. It deserves to be on the shelves of every Egyptological library. The authors merit our warmest gratitude for providing such exhaustive documentation, which it would be impossible to cull from any other single source.

GEOFFREY T. MARTIN

Applications of Modern Sensing Techniques to Egyptology. By A. H. Moussa and L. T. Dolphin. 210×275 mm. Pp. xvii +173, 124 illustrations. Menlo Park, California, SRI International, 1977. No price given.

This book discusses the results of scientific investigations on a number of sites in Egypt, carried out by a joint Egyptian-American team during 1977. The theory behind each method is briefly explained, and then descriptions of their use on individual sites are given. The work shows very clearly the relative strengths and weaknesses of each system of investigation, a point which will be of value in helping future workers to choose methods appropriate to the site with which they are concerned. Magnetometry, for example, proved to be useful for detecting mud-brick structures buried at a shallow depth in sand, but it cannot locate deeper pits or tunnels. This was demonstrated by test surveys over known passages of the Baboon and Ibis Catacombs of Saqqâra, where the equipment failed to indicate the presence of the galleries. The researchers state as a useful general rule that magnetometry cannot detect voids if these are deeper than their own diameter.

The resistivity measurements were more successful than the magnetic surveys, giving clear indications of archaeological features such as boat-pits, pyramid passages and tomb-shafts. At Saqqâra, the Falcon Galleries proved to be detectable, and an extended survey west of the Sacred Animal Necropolis revealed distinct anomalies which might be caused by the animal galleries discovered in this area by Lepsius. By varying the space of the electrodes in the resistivity array it is possible to deduce the depth of buried features, and gain some idea of the presence of stratified remains. A problem which was encountered in taking the measurements was the high level of background readings caused by irregularities in the bedrock, loose fill and excavation debris, but this did not prevent the collection of a number of significant measurements showing the presence of buried structures. The high peak at 75 m along traverse 113 (p. 84, fig. 64) is probably caused by a side-passage of the South Ibis Galleries, but another high at about 155 m on traverse 115 may be due to a different set of galleries, possibly those of the sacred rams, which must lie somewhere in this area. It is worth noting that the latter anomaly is on the route between the temple of Isis-Mother-of-Apis and the Serapeum. The use of resistivity measurements on sites of the Saqqâra type, where brick walls and tunnels are covered by drift sand, promises valuable results.

Acoustic sounding, on the other hand, is not very useful on sand-covered sites, as the sand has a high damping effect on the transmitted signal. The acoustic sounder used at Saqqara would detect the surface

of the bedrock under the sand overburden, but would not reveal the presence of known tunnels beneath the rock. However, the technique works well in the solid bedrock itself, provided that the transmitter can be placed in close contact with the rock surface. Sound echoes in rock have a considerable range, allowing tomb-chambers and similar structures to be located by sounding from above or from already known underground chambers. The experiments carried out by the team showed that the acoustic sounder could 'see' the tomb of Tutankhamūn from the tomb of Ramesses VI and vice versa. Unexplained echoes were detected both in the Valley of the Kings and at Gîza, but to determine whether these represent man-made structures or natural features (such as faults or cracks in the bedrock) would involve boring through to the voids with a small-diameter drill. In rock which is as fissured as that of the Nile Valley, the echoes from natural features constitute a real drawback to an otherwise promising technique.

The joint research team has presented a concise account of the capabilities of scientific methods of investigation. It is now up to archaeologists and scientists to consult together to decide how to make best use of the techniques available. Sites chosen for such investigation must possess suitable conditions for the equipment to operate successfully, and must have the potential to yield significant new information. In the latter respect, a shift of attention away from the pyramids is desirable.

A. J. Spencer

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