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EDITORIAL FOREWORD

THE recent season's excavations in North Saqqâra have been of special significance for the Society's future plans, as Professor H. S. Smith makes clear in the following synopsis:

The Society's expedition to North Saqqâra started a new venture this season, in addition to the archaeological and textual work it is continuing to do in preparing the publication of the Sacred Animal Necropolis. This is a survey of the two great temple enclosures of the Late Period which lie partly on the cliff and partly in the valley, east of the Teti and Userkaf Pyramids. They were originally identified by Mariette in his pioneer excavations on the Serapeum Sacred Way, and a temple platform resting on a great stone *mastaba* of the early Old Kingdom was cleared by Quibell in 1905/6. But subsequently these sites have been largely neglected.

The principal results of this season's work will be three fine contoured site maps, the work of Mr. C. J. Davey of the Institute of Archaeology, London University. One is of the southern temple town, which comprised the cat burial catacombs and therefore probably the temple of Bastet. The second is of the northern temple town, one of the temples within which has been definitely identified as that of the embalmer god Anubis, since a temple relief of Ptolemy V Epiphanes worshipping before him was discovered. The third is of the area between the Serapeum and the lake of Abusîr, for inclusion in the report on the Sacred Animal Necropolis. These up-to-date maps cover most of the Late Period monuments at Saqqâra. To clear existing buildings for the survey, the Society undertook 22 test soundings. The walls, $8\frac{1}{2}$ m thick, of the northern enclosure were traced as far as possible round their half mile circumference, and a new gateway uncovered. A long section through the Anubis temple, expertly drawn and interpreted by Mr. D. G. Jeffreys, lately of University College London, proved that there were three phases of temple occupation, followed by a destruction level and a later re-settlement by a Christian community. The latest temple phase comprised a vast court with halls and sanctuaries to the west, and was decorated by Ptolemy V. The previous phase yielded a broken naophorous statue, which must be of Saïte-XXXth Dynasty date. The earliest phase is at a deep level, and must be investigated later. A more northerly temple platform the other side of the Serapeum Way, being nearer the catacombs of the dogs, perhaps also belongs to the Anubieion, as Greek documents call the temple quarter round the Anubis temple in which the embalmers lived. In the area round Quibell's temple platform, the Society planned, levelled, and drew sections of all the surviving remains, including the famous rooms by the temple which contained painted effigies of the dwarf god Bes. Evidence that such chambers were used by those wishing for divinely inspired dreams to sleep in is perhaps accumulating. It is noteworthy that both Stricker and Yoyotte, as well as Mariette himself, have suggested that this was the site of the Asklepieion, the temple of the god of healing Imhotep, identified by the Greeks with Asklepios. In the southern temple town, only the main walls ($11\frac{1}{2}$ m thick) and the great gate and road to Memphis were tested, but the general outline plan of this huge temple complex begins to be clearer.

This season the Society owes an even greater debt of gratitude than usual to Dr. Aly el-Khouly, the Director of Antiquities for Saqqâra and Memphis, for his help in obtaining permission to undertake the survey, and his constant co-operation. Mr. Said El-Fikey, the Inspector of North Saqqâra, once again joined in the work and was always giving valuable help. To Dr. Gamal Mukhtar,

the Head of the Antiquities Organization, Dr. Aḥmad El-Khadri, Director General, and Dr. Hishmet Messiha, the Society is once more indebted for their general oversight of the work and their understanding of the Society's aims in this co-operative venture. Mr. C. Hope (University College London and Wainwright Scholar, Oxford University) and Mrs. S. George (postgraduate student, Birmingham University) also joined the expedition for short periods.

Work has proceeded too in the Saqqâra tomb of Ḥoremḥeb, and Dr. G. T. Martin summarizes it thus:

Our work this season has been mainly underground. The shaft in the Great Courtyard (no. I) has been completely cleared, revealing burial-chambers on two levels, 8·0 and 17·0 metres. In the upper level there were originally four interments. The objects recovered here include two shabtis of a Ramesside princess, Beketanta, a magnificent gold ear-ring with an openwork design showing the king as a sphinx (possibly an heirloom of the 'Amarna period), a green stone heart scarab of Nineteenth-Dynasty date, inscribed for two persons, a blue-green glass inlay of a human face, and fragments of Mycenaean pottery, now reconstituted to form three vessels. These, together with the masses of New-Kingdom pottery from the tomb should prove of considerable interest, since the material is contexted and dated.

The main shaft (no. IV) of the tomb is located in the Second Courtyard. It has two suites of rooms, doubtless designed originally for Ḥoremḥeb and his wife. The rooms are approached along a corridor at the bottom of the shaft, which is some 8·0 metres deep. Much of the original blocking of the corridor is still in position, plastered with gypsum, and stamped in a number of places with the seal of the Necropolis, Anubis recumbent on a shrine, with nine bound captives below. The burial chamber on the west (the chamber extends beyond the perimeter of the superstructure) is the smaller of the two burial places, but is nonetheless of impressive proportions.

The main burial chamber awaits examination next year. It was entered at the very end of the present season, and is full of debris, as are all the approach rooms, some of which are carved and painted. It is hardly too much to say that this suite is 'royal' in conception. From the entrance corridor and adjacent rooms much pottery and many objects were recovered, including alabaster vessels, one inscribed for Amenophis III and Queen T'iy, the royal prenomen containing the hated 'Amen' element which was being erased in the 'Amarna period. A plaque of Ay, two stamped pottery handles of Ḥoremḥeb as king, fragments of pottery vessels with hieratic inscriptions naming Ḥoremḥeb as Royal Scribe, and a kneeling statue of an official, probably Ḥoremḥeb, may also be mentioned. Of particular interest are statue-fragments of Mutnodjmet, and an alabaster fragment with a funerary text found in the tomb seems to imply that the queen of Ḥoremḥeb was buried in the Saqqâra tomb prepared by her husband as a private individual. Much progress has been made with recording the reliefs, inscriptions, objects, and pottery, in preparation for a future study season. In addition work was begun on the repair and making-safe of the tomb, a project which is being financed with the aid of a generous grant from the Dutch government, as part of a cultural agreement between the Netherlands and Egypt.

In addition Dr. Martin represented the Society at the first International Congress of Egyptologists held in Cairo in September, 1976. He reports that it was a signal success. Among the resolutions adopted was a call for urgent priority to be given to excavations in the Delta. It was also decided to revive the International Association of Egyptologists.

In spite of current financial curbs the Society has been able to plan and inaugurate a new venture in the shape of an epigraphic campaign relating to unpublished tombs

of the Old Kingdom. Mr. W. V. Davies describes the initial phase of the work as follows:

The first season of the Society's new Saqqâra epigraphic project extended from October to December 1976. The staff consisted of Mr. W. V. Davies and Dr. A. J. Spencer of the British Museum and Dr. A. B. Lloyd of the University College of Swansea. We worked throughout in full collaboration with Dr. Aly El-Khouly, Chief Inspector of Saqqâra. The aim of the project is to plan and record a number of unpublished Old-Kingdom tombs in the Teti Pyramid Cemetery. The first season was mainly devoted to a group of small Sixth-Dynasty mastabas, six in number, which are situated to the north of the tombs of Mereruka and Kagemni. A highly encouraging start was made. The scenes and inscriptions on all, save one, were copied and traced, and their superstructures carefully planned. Work was also begun on the clearing, necessary for planning purposes, of their shafts and burial pits. We expect to conclude our work on this group next season, when we also hope to begin in earnest on the next stage of the project, the recording of the large mastaba of Nefer-seshem-Ptah in the 'Rue des Tombeaux', preliminary rubbings of a considerable portion of which have already been made.

Another valuable new contribution is the survey carried out at El- ϵ Amarna by Mr. Barry J. Kemp of Cambridge University, who writes of it in these terms:

Between January 25 and March 14, 1977, Barry J. Kemp carried out the first stage of a new survey at El- ϵ Amarna, accompanied by Mohammed Abd el-Aziz, Inspector of Antiquities. Its purposes are to establish a more detailed and accurate map of the site and to assess the potential for further excavation. For this season it was limited to the area between a point some way to the south of the southern boundary stelae and the smaller Aten temple in the central part of the city. The necessary surveying was done to enable a 1 : 5000 scale map of the whole area to be prepared, and for the city proper a separate map at a scale of 1 : 2500. Included in the work was an outline survey of the unpublished excavations of 1923-4. Apart from the southern part of the city proper, three separate sites were examined which call for particular note: Kôm el-Nana (the 'Roman camp' of older maps), which is in fact a further palace or suchlike of Akhenaten's reign; the workmen's village, where a small extra-mural settlement was found to exist; a second workmen's village built of rough stones, which was discovered just over 1 km further to the east. It is already abundantly clear that for the detailed study of built environment through excavation El- ϵ Amarna still possesses immense potential.

Professor T. W. Thacker, of the University of Durham, and Professor J. Martin Plumley, of the University of Cambridge, have recently vacated their chairs after fruitful periods of tenure. We wish them both many happy and productive years ahead. Inevitably their retirement has raised the questions that have become normal in the present climate of university life, and we fear that too often the approach is statistical rather than cultural. In Durham, happily, the decision has favoured our science, and Professor John R. Harris, who at present holds the chair of Egyptology in the University of Copenhagen, has been appointed Professor of Egyptology and Director of the Oriental Institute. In Cambridge the outcome has been less positive, the chair having now been converted into a Readership. At the time of writing no appointment has yet been made.

The death of Professor John A. Wilson, formerly Director of Chicago's Oriental Institute, has removed from the Egyptological scene an outstanding scholar and administrator. One of his former pupils, Professor Edward F. Wente, contributes the following appreciation:

On August 30, 1976, Professor John A. Wilson died quite unexpectedly at his home near Princeton, New Jersey. As a member of the original staff of Egyptologists on the Oriental Institute's Epigraphic Survey in Luxor, he was a major contributor to the accurate recording of the historical scenes and texts of the temple of Medinet Habu and, with Professor William F. Edgerton, shared in the superbly annotated translations of these records. Upon the death of Professor Breasted, he became Director of the Oriental Institute. During World War II Wilson was stationed in Washington, D.C., contributing his talents toward the common cause. The years after the war were highly productive ones for Wilson as professor at the University of Chicago. His translations of a wide spectrum of texts reveal his great sensitivity to the written word, both Egyptian and English. But he was also much concerned with broader problems of religious thought and the whys and wherefores in Egyptian history. Wilson possessed a great attachment to Egypt, and his later years witnessed vigorous participation in the campaign to save the Nubian monuments as well as published reflections on the history of American Egyptology. His publications mirror only a fraction of his vast knowledge, which perhaps only those who were his students can truly appreciate. Fortunately there are many of us who had the experience of learning our Egyptian from this gifted teacher.

More recent losses have included those of other distinguished scholars, among them Serge Sauneron and Dieter Mueller, both killed in tragic accidents; and Michel Malinine.

Mr. Alec N. Dakin reminds us that fifty years ago Gardiner's *Egyptian Grammar* was first published. It is a jubilee worth pondering. Progress made since then, and after the later editions, has come notably through the work of Elmar Edel and of H. J. Polotsky and his pupils. But Gardiner's achievement must still be admired.

FORGED DECORATION ON PREDYNASTIC POTS

By J. CROWFOOT PAYNE, A. KACZMARCZYK, and S. J. FLEMING

I. Suspected vessels and their decoration

By JOAN CROWFOOT PAYNE

IN 1934 Brunton¹ published 'Modern Painting on Predynastic Pots', collecting together five specimens, one in University College London,² one in Cairo Museum,³ the rest in private hands. On stylistic grounds he considered that the painted decoration was a recent addition to genuine pots. Lucas examined the pigment on two of Brunton's group and reported that it was readily soluble in water, whereas pigment on pots with genuine decoration is only very slightly soluble.

Recent study of the Predynastic pottery in the Ashmolean Museum suggests, also on stylistic grounds, that three specimens (A, B, and C below) are probably also genuine Pre- or Proto-Dynastic pots with forged decoration.

Three further pots, D and E in University College, and F in the Gulbenkian Museum Durham, are also suspected of having recently added decoration, D being one of Brunton's group.⁴

A. Ashmolean Museum 1933.843. From Upper Egypt. A. H. Sayce Bequest, 1933. (Fig. 1.)

Type W 19, *Prehistoric Egypt Corpus*. Hand-made, neck hand-turned (?). Buff gritty ware. Wavy handles on shoulders type E, *Prehistoric Egypt Corpus*. H. 29 cm, D. 16.5 cm.

The decoration is in light orange-red. A line of horned animals, of long-legged birds, and of hills stands *directly on* a wavy line; the animals have humped bodies, and crossed legs, features unknown in genuine decoration. The plant and the 'shrine' over which it grows are both abnormal in every detail.

B. Ashmolean Museum 1955.443. Bought at Luxor, 1912, said to come from Gebelein. Given by A. D. Passmore, 1955. (Fig. 2.)

Type 82g, *Corpus of Proto-Dynastic Pottery*. Hand-made, with hand-turned(?) neck. Gritty pinky-buff ware. H. 30.7 cm, D. 26 cm.

¹ *Annales du Service* 34 (1934), 149-57.

² University College 15343; Brunton, *op. cit.*, no. 2; W. M. F. Petrie, *Prehistoric Egypt*, pl. 21, D 46 K; W. M. F. Petrie, *Prehistoric Egypt Corpus*, pl. 34, D 46 K.

³ Cairo Museum Register no. 31865; Brunton, *op. cit.*, no. 5; J. E. Quibell, *Catalogue of Archaic Objects*, pl. 22, no. 11557.

⁴ For permission to publish these vessels, and for very kind help in securing details, we are grateful to Dr. D. M. Dixon, Curator, and Mrs. Barbara Adams, of the Department of Egyptology, University College, London, and to Mr. Rawson, Curator, and Dr. John Baines, of the Gulbenkian Museum of Oriental Art, Durham.

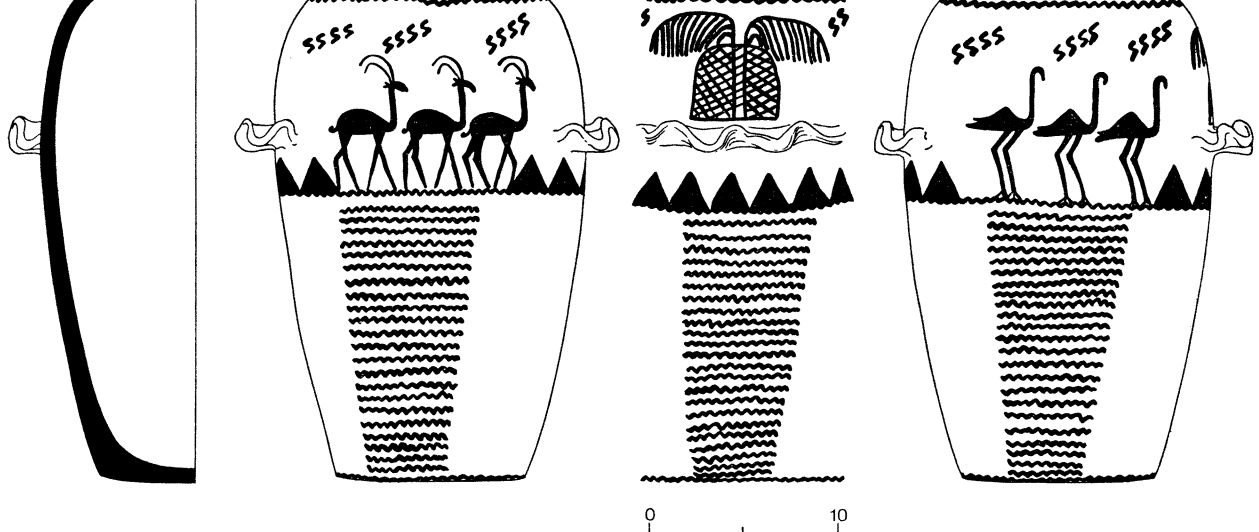


FIG. 1. Ashmolean Museum 1933.843

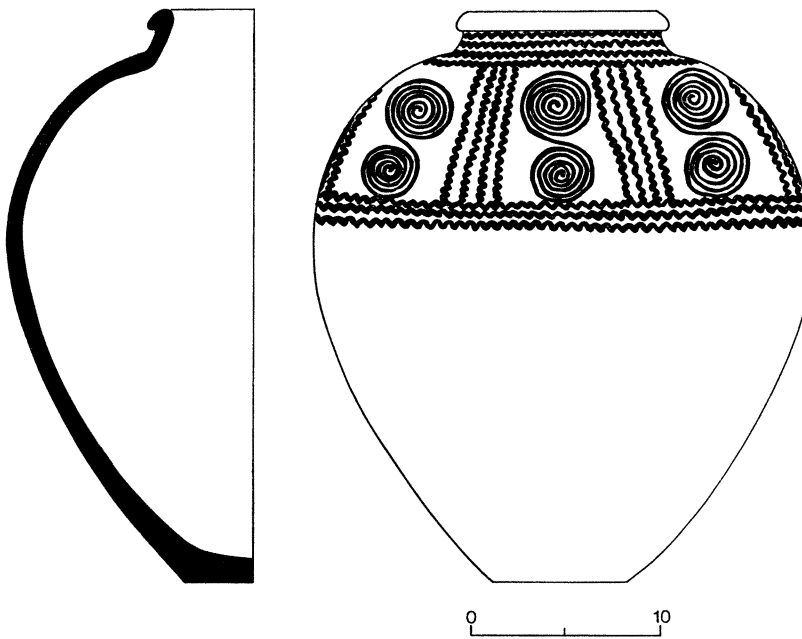


FIG. 2. Ashmolean Museum 1955.443

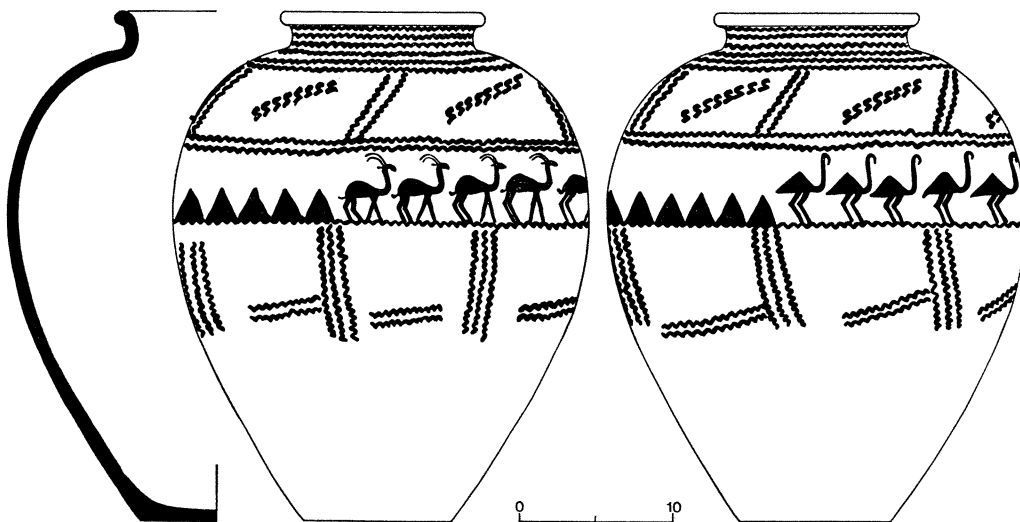


FIG. 3. Ashmolean Museum 1955.444

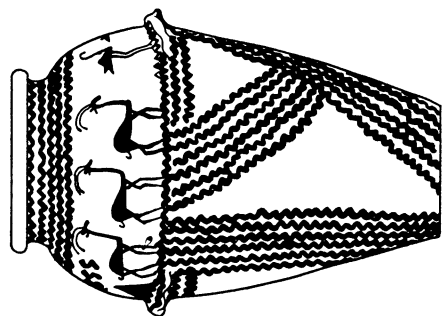
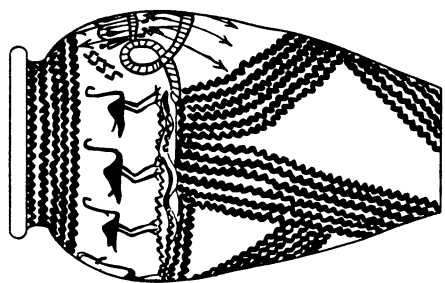
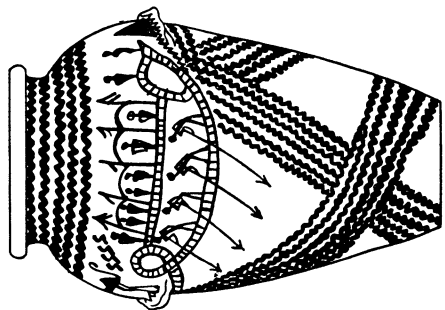
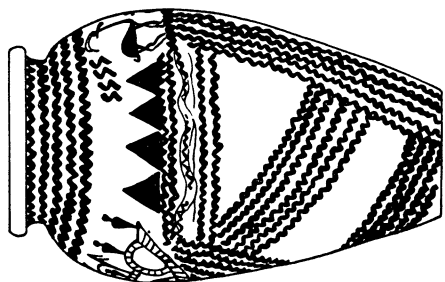
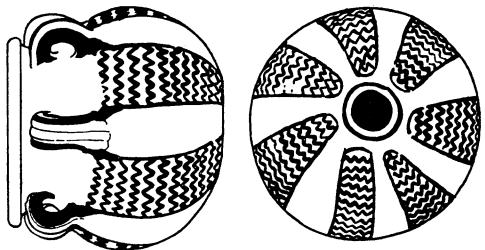


FIG. 4. University College 15343, 15804

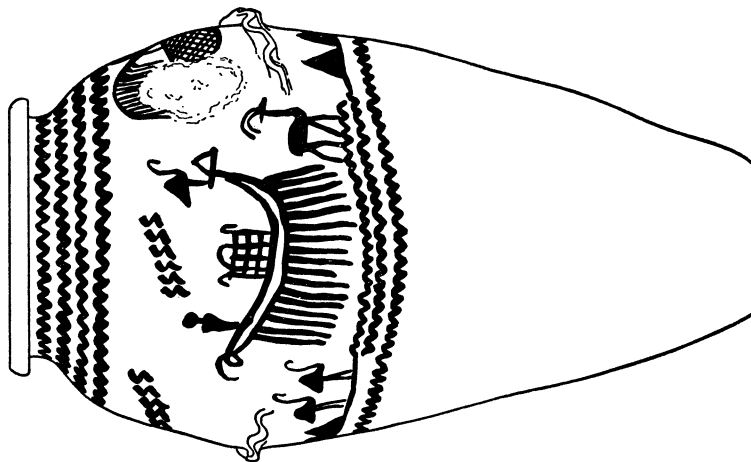
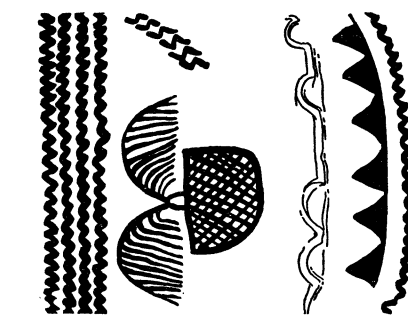
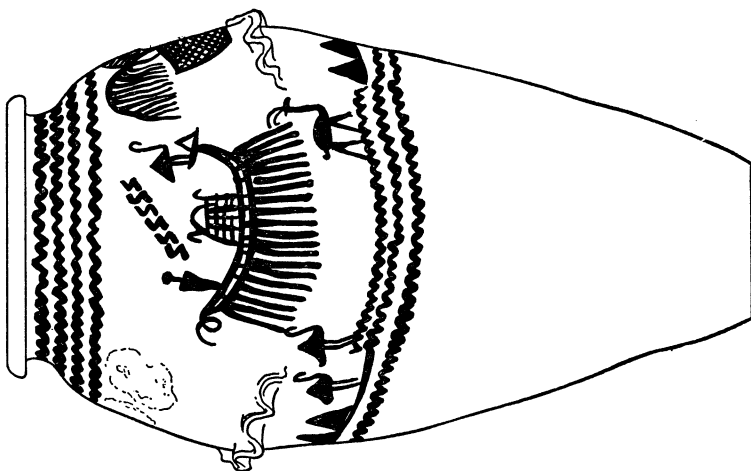


FIG. 5. Gulbenkian Museum, Wellcome A 7895

The decoration is in light red. Linked counter-clockwise spirals in pairs fill rectangular spaces outlined by wavy lines. Spirals are common on Predynastic pots, but they are always clockwise, never linked, and not arranged on the shoulder.

C. Ashmolean Museum 1955.444. Bought at Thebes, 1912. Given by A. D. Passmore, 1955. (Fig. 3.)

Type 92E, *Corpus of Proto-Dynastic Pottery*. Hand-made, neck hand-turned. Gritty buff ware. H. 33 cm, D. 27.5 cm.

The decoration is in light red-brown paint. The line of hills and of horned animals rests directly on a wavy line, and the animals have humped bodies and crossed legs, as in specimen A.

D. University College 15343.² Bought by Petrie between 1905 and 1910. (Fig. 4 left).

Type D 46 K, *Prehistoric Egypt Corpus*; pl. XXI, *Prehistoric Egypt*. Hand-made, neck hand-turned. Buff gritty ware. H. 16.9 cm, D. 10.9 cm.

The decoration is in orange-red. Again, horned animals with humped bodies and crossed legs, long-legged birds, and hills rest directly on wavy lines. The boat is unique in every detail.

E. University College 15804. Ex-MacGregor Collection, bought at Sotheby's, 1922, lot 1753. Said to come from Zawaideh. (Fig. 4 right.)

Type not identified, a squat jar, with seven small vertical handles joining neck and shoulder. Hand-made, gritty buff ware. H. 6.3 cm, D. 7.5 cm.

The decoration, in light red-brown, resembles that on many Predynastic pots: plain panels alternate with panels filled with horizontal wavy lines; but in this specimen the lines outlining the panels continue on to the base, and end in a circle surrounding a disc, features unknown in the Predynastic period.

F. Wellcome A7895, in Gulbenkian Museum, Durham. Provenance not known, ex-Wellcome Collection. (Fig. 5.)

Type W 14, *Prehistoric Egypt Corpus*. Hand-made, buff gritty ware. H. 29.5 cm, D. 17 cm.

The vessel is decorated in orange-red paint; two boats show several abnormal details; horned animals, long-legged birds, and hills rest on wavy or straight lines; the plants resemble only those on specimen A, and the 'shrine' below is unique.

The above vessels have a number of features in common. None is an excavated piece. Specimens B, C, and D are known to have been bought in Egypt between 1905 and 1912. (Three more of Brunton's pots, numbers 1, 3, and 4, were bought at Luxor, number 4 about 1910.) Vessels A-D and F are all normal Pre- or Proto-Dynastic types which are usually found undecorated. In the case of the later types, B and C, only very simple linear decoration would be normal. There would thus be no difficulty in acquiring plain genuine vessels of these types ready for embellishment. The pigment on all the suspected pieces has an unusually orange tinge. Various features of the

decoration are abnormal, and these features are repetitive. Horned animals are shown with strange humpy bodies and crossed legs, and features such as lines of hills, horned animals, or long-legged birds are shown standing directly on a wavy line (on A, C, and D, and also on Brunton's 1 and 4). Multiple brushes, so commonly used in Predynastic decoration, are used on none of these specimens.

On grounds of style, therefore, it is concluded that the above specimens all bear forged decoration, and further that in all probability A, C, D, and F, and all Brunton's specimens except number 5, were painted by the same hand. It is likely that other examples of work by this forger exist, both in museums and in private collections. Vessel E (and probably Brunton's number 5) cannot be dated archaeologically, and both fabric and decoration are suspect.

In order to compare the pigment on these vessels with that from pots known to be genuine, samples were taken from the suspected vessels and from the following genuine specimens:

G. Ashmolean Museum 1895.595. From Naqada, grave 1268, Petrie's 1895 Excavation. Given by Petrie and the Egyptian Research Account, 1895.

Type as D 40 T, *Prehistoric Egypt Corpus*; pl. LXVI, 3, *Naqada & Ballas*. Neck hand-turned, pink ware, decoration in dull red. H. 9.1 cm, D. 7.6 cm.

H. Ashmolean Museum 1895.596. From Naqada, Petrie's 1895 Excavation. Given by Petrie and the Egyptian Research Account, 1895.

Sherd, type as D 67 S, *Prehistoric Egypt Corpus*. Neck hand-turned (?), buff ware, decoration in dull red.

I. Ashmolean Museum 1895.627. From Naqada, grave 178, Petrie's 1895 Excavation. Given by Petrie and the Egyptian Research Account, 1895.

Sherd, light buff ware. Decoration in dull red, small spirals, cf. D 67 R, *Prehistoric Egypt Corpus*.

J. Ashmolean Museum E.3972. From Hu, Petrie's 1898-9 Excavation. Given by the Egypt Exploration Fund, 1899.

Sherd, buff ware. Decoration in dull red, spirals, cross-hatched rim, cf. D. 67 c, *Prehistoric Egypt Corpus*.

K. Ashmolean Museum 1961.387A. Probably from Hierakonpolis, Quibell and Green's 1897-8 Excavation.

Sherd, type D 67 c, *Prehistoric Egypt Corpus*. Neck hand-turned, buff ware, decoration in dull red.

L. University College 6306. Provenance and source unknown.

Type D 41 c, *Prehistoric Egypt Corpus*; pl. XIX, *Prehistoric Egypt*. Neck hand-turned, gritty buff ware. Decoration in dull red; the details of the 'cabins' on the boats are unique; in other respects the decoration is normal. H. 6.0 cm, D. 2.8 cm.

II. Investigation of Pigment

By ALEX KACZMARCZYK

The pigment of genuine vases and that of suspected modern forged decorations was analysed by X-ray fluorescence. The pigment in both cases consisted primarily of iron oxide with occasional traces of manganese dioxide (pyrolusite). The only detectable difference between the genuine and suspect pigments was in the iron-calcium ratio. The genuine specimens all had values above 1, whereas the suspect decorations yielded ratios below 0.4. The range of values among the genuine specimens was greater than among the forgeries, but the values were all well above 1. Although the absolute iron and calcium content of pigments *in situ* was often very different from vase to vase, and also differed significantly from values obtained with powders scraped from the surface, the ratio of the two elements was usually the same for pigment *in situ* as for scrapings of the same spot. The powdered scrapings were analysed in a paraffin matrix. The equipment used in this work has been described by E. T. Hall, F. Schweitzer, and P. A. Toller in *Archaeometry*, vol. 5, no. 1, pp. 53-78 (1973).

The analytical data are presented below.

| Vase no. | Fe/Ca ratio | Vase no. | Fe/Ca ratio |
|-----------------------|----------------|------------------------|----------------|
| A. Ash. Mus. 1933.843 | 0.29 | G. Ash. Mus. 1895.595 | 1.2 |
| B. Ash. Mus. 1955.443 | 0.21 | H. Ash. Mus. 1895.596 | 1.2 |
| C. Ash. Mus. 1955.444 | 0.12 | I. Ash. Mus. 1895.627 | 1.3 |
| D. U.C. 15343 | 0.33 | J. Ash. Mus. E.3972 | 1.4 |
| E. U.C. 15804 | 0.32 | K. Ash. Mus. 1961.387A | 1.4 |
| F. Wellcome A7895 | 0.36 | L. U.C. 6306 | 1.5 |

III. Thermoluminescence dating of the fabrics

By STUART J. FLEMING

All materials contain at least traces of radioactivity (such as uranium and thorium) which release nuclear energy during their radioactive decay. This is true of the clay fabric of pottery itself and of the soil and other burial media in which the ceramic spends its archaeological life. Crystalline minerals included in the pottery fabric (like quartz and feldspar) absorb this nuclear energy, and store a fraction of it, by electron trapping in the region of crystal flaws and impurity sites. A subsequent heating up to 500 °C causes a release of this stored energy in the form of light, termed thermoluminescence (TL).

Raw materials destined for use in pottery-making will have stored vast quantities of TL energy following continuous radiation exposure during their geological history. However, kiln firing (presumed to be in excess of 600 °C) is more than adequate to cause complete erasure of all this geologically accrued TL. Thus a time zero has been

set in the pottery's stored energy level. Today the TL we measure records the reaccumulation of energy in archaeological times (Fig. 6).

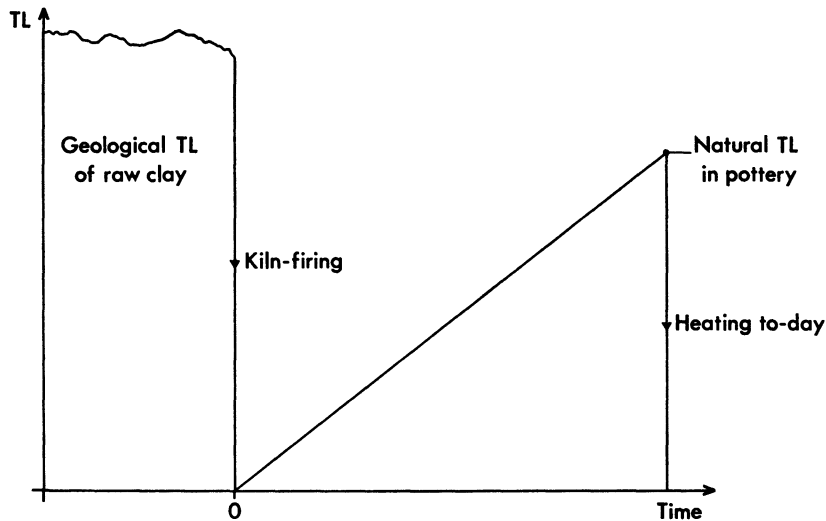


FIG. 6

It is true there is appreciable variation in sensitivity of pottery minerals in response to nuclear radiation, as it depends on the mineral type and the concentration of impurities it contains, plus the firing and cooling conditions in original production. But this can be calibrated in the laboratory by evaluation of the amount of TL induced by an artificial radioactive source of known strength. With this factor taken into account, the criterion for authenticity judgement using this method becomes apparent. The modern ware yields only a small fraction of the TL observed from its genuine counterpart as little time has passed since the kiln firing. In practice the weaker light output is scarcely distinguishable above background signal of the detection system, so no accurate date can be attached to fraudulent material. However art historians are very well aware of many of the documented eras of forgery, so some intelligent guesses can be made.

| Museum Number | Vessel Age B.P. |
|------------------------------|-----------------|
| A. Ashmolean Museum 1933.843 | 5010 ± 730 |
| B. Ashmolean Museum 1955.443 | 4970 ± 840 |
| C. Ashmolean Museum 1955.444 | 5020 ± 860 |
| | <i>or</i> |
| | less than 220 |
| D. University College 15343 | 4970 ± 830 |
| | <i>or</i> |
| | less than 470 |
| E. University College 15804 | less than 90? |

Three vessels referred to in the table above followed standard TL behaviour: two were confirmed to be authentic (A, B), while one (E) appears to be of modern origin.

The conventional notion of TL dating may break down if a ceramic experiences a reheating episode some time after its date of manufacture. We need not concern ourselves with the inevitable refiring that a cooking vessel would undergo in usage: though it is true the TL 'time-zero' would have been re-set at each meal, the over-all practical lifetime of such a vessel (perhaps fifteen years at most) introduces only a very minor error in TL age determination when the subsequent archaeological burial period amounts to about five millennia. However, some natural or man-made disasters such as the burning-down of a temple, either by forest fire or as an act of war, can lead to an erroneous dating result.

Deliberate modern day refiring of an ancient vessel, in order to integrate a newly painted motif to the old surface, adds yet another dimension to these considerations. We must regard this as an act of forgery. A major problem is created for art historians by this treatment. Both vessel-shape and decoration are parameters routinely used in the detection of cultural cross-links between civilizations: nervous rejection of an unusual motif as spurious might be placing unjustifiable limits on the scope of designs that flourished in a particular era.

A TL study of specimens C and D indicates that they are authentic Pre- or Proto-Dynastic vessels, both intentionally refired in recent times. The natural TL output in each case was unusual in that the signal at around 350 °C in the laboratory heating cycle was virtually negligible while that at about 450 °C and above was strong. Indeed, dependent upon which of these two regions is chosen for age determination, dates of either 'less than 220 years' or '5020±860 years' for vessel C (Ashmolean Museum 1955.444) could be estimated! For specimen D (University College 15343) these dates read 'less than 470 years' or '4970±830 years'.

It was possible to simulate extremely successfully the observed natural TL measurements through a procedure of laboratory irradiation *plus* an artificial heat treatment of 280 °C for about three minutes. This temperature can be taken as the practical upper limit for the heating used by the forger: 40 °C more in the experimental analysis caused near-complete signal erasure, wiping out any signs of a previous irradiation exposure. Though it was not possible to test the notion I would expect the temperature/time balance could be juggled to allow a firing as low as about 200 °C (for about half a day) to have been employed in practice, without the TL characteristics of the fabric lying outside experimental observation, but not less than that. Of course only the forger could provide us with the full answer now.

EXCAVATIONS AT THE MEMPHITE TOMB OF HOREMHEB, 1976: PRELIMINARY REPORT

By GEOFFREY T. MARTIN

THE excavations this year opened on January 6, 1976, and work went on without interruption until March 31. The staff comprised Dr. G. T. Martin (University College London, Field Director), Dr. H. D. Schneider (National Museum of Antiquities, Leiden), Mr. K. J. Frazer, M.C. (surveyor), Mr. C. J. Eyre (Merton College, Oxford, photographer), Mr. M. J. Raven, Mr. R. van Walsem (Leiden University). Once again we enjoyed the help and co-operation of the Egyptian Antiquities Department, especially of H.E. Dr. Gamal Mukhtar, Dr. Aly el-Khouly, Mr. Said el-Fiky, and Mr. Abdel Fattah Fayed. The hospitality of Dr. and Mrs. F. Leemhuis (Netherlands Institute, Cairo) is also warmly acknowledged.

This year three main tasks have been successfully carried out: (1) the excavation of Chapels A and B; (2) the excavation of the western half of the tomb; (3) the clearance of the Forecourt to the east of the tomb. In this area a number of interesting blocks of Ramesside date and sundry small finds were excavated, but any extension of the work would involve the risk of partially exposing another large monument. In addition to the above tasks work was begun in the burial shaft in the NW. corner of the Great Courtyard, and in two shafts discovered this season, flanking the main chapel (D). Both these latter shafts contain intrusive burials of the Late Period or Coptic Period. A valuable architectural study by Mr. Frazer seems to show that the Great Courtyard had been extended eastwards to enlarge the tomb. Paving-stones on the east side of the court and blocks in the east face of the pylon were usurped from the Djoser pyramid enclosure. Some of the Old-Kingdom blocks found last year, reused as building material in the pylon, are reminiscent of scenes decorating the causeway of Unas, and may yet prove to come from that monument; others come from the tomb of a high official, Minnofer, as mentioned in the previous report.

The top of an inscribed column found *in situ* to the west of the excavations of last season raised hopes that a second courtyard would be found, and such has proved to be the case. Reasons of economy again preclude more than the briefest of descriptions of the architecture, reliefs, and finds of this year, and the many historical and other problems to which they give rise. The full extent of the excavated monument is shown in pl. I, 1, and the plan in the accompanying Fig. 1.

Chapels A and B¹ proved to have been used as dwellings, probably by anchorites from the neighbouring monastery of Apa Jeremias, in the Christian Period. Chapel B, in addition to a statue-group (see below) yielded a small stela of great interest, depicting

¹ Excavated under the supervision of Dr. Schneider.

The MEMPHITE TOMB
of HOREMHEB



500

490

480

470

790

800

810

820

830

840

850

- REFERENCE
- 1 Forecourt
 - 2 First Courtyard
 - 3 Statue Room
 - 4 Second Courtyard
 - Chapels A, B, C, D & E
 - Shafts i - iv

SCALE: 0 1 2 3 4 5 10 15
Metres

T-Hor 6
1876
KJF

FIG. I

ḤoremḤeb and a lady seated before a funerary-priest, who is making a libation (pl. I, 2). Part of the title of ḤoremḤeb, *imy-r mšc (wr) n nb tswy*, has been deliberately chiselled out, and a uraeus appears to have been added to his brow. The top part of the stela, and the name of the lady, are broken away.

The Second Courtyard is paved with limestone flags, and as in the Great Court a runnel, this time on the south side, was provided to drain off rain water. The reliefs in the court fall into three main groups. On the north wall are blocks illustrating episodes in the Memphite funerary service, including the breaking of pottery vessels, a ritual which is shown in a vivid manner in this series of reliefs (pl. I, 3).² The extravagant attitudes of the mourners are also noteworthy. The sequence of funerary scenes is interrupted by a rectangular panel showing ḤoremḤeb in the dress of a high court official, adoring Osiris. The uraeus has been carefully added, and there is a hymn to the deity above. Originally there were four such panels in position, mounted on low footings, two on the north and two on the south sides of the court. Those from the south have been in the British Museum³ since the last century; the counterpart to the one discovered this year remains to be found. Adjacent to the panel is a block showing part of a procession of offering-bearers moving westwards in the direction of the main chapel. It is identical in style to reliefs found last year in the Great Courtyard. The funerary scenes are resumed on the north side of the east wall. Next are scenes showing the interiors of buildings, quite different in style from the preceding blocks and reminiscent of certain *genre* scenes in the private tombs at El-ʿAmarna. The decoration of the Saqqâra tomb of ḤoremḤeb was probably begun very soon after the end of the ʿAmarna Period, as I have suggested elsewhere,⁴ and part at least of the decoration may have been the work of craftsmen trained in the ʿAmarna school, who moved north to the Memphite area after the abandonment of the city of Akhenaten.

The entrance to the Statue-room is now reached, the doorjambs inscribed with the titles and epithets of the tomb-owner which, together with the texts found last year, will be of value in reconstructing the career of ḤoremḤeb under Tutʿankhamūn and, presumably, under Ay.⁵ The career of ḤoremḤeb was primarily that of a soldier, a role emphasized in the decoration of the tomb. There are unfinished chariot-scenes in the Great Courtyard, and a block found loose there last year seems to show a military encampment. As we shall see, whole walls of the Second Court were taken up with scenes showing ḤoremḤeb, doubtless in his capacity as Commander-in-Chief and Regent, receiving chieftains and representatives of foreign nations and captives (pl. I, 4).

The south side of the east wall shows rows of Asiatics and Africans (pl. II, 1-2) being led, or in some cases forcibly dragged, into the presence of ḤoremḤeb, who is

² For a discussion of the breaking of pots in this ceremony see L. Borchardt, *ZÄS* 64 (1929), 12-16. The number of reliefs discussed in this important article can now be augmented.

³ BM 550, 552, R. Hari, *Horemheb*, 70, 89 ff., with fig. 27.

⁴ *ILN* 6936 (Jul. 1976), 61.

⁵ The status of ḤoremḤeb *vis-à-vis* Ay during the reign of Tutʿankhamūn is a problem. As regent ḤoremḤeb presumably out-ranked Ay, though doubtless Ay enjoyed a special status because of his links with the royal family. The position of ḤoremḤeb during the four-year reign of Ay will need examination in the light of the new historical material from the Memphite tomb. Cf. the valuable article of A. R. Schulman, *JARCE* 4 (1965), 55-68, esp. pp. 58-61.

shown on a large scale to the right. His figure can be completed by the much-damaged Zizinia Block,⁶ the present location of which is unknown. The text on this block, published by Wiedemann,⁷ now assumes added importance, and must refer to military events in which Horemheb played the key role, episodes of which he depicted on the adjacent tomb-scenes. The workmanship of these scenes is of the highest order. The review of the foreigners, who in these scenes are not fettered, takes place in the presence of royal officials and courtiers, of whom six are depicted, some in an unusual billowing dress (pl. II, 3);⁸ regrettably their names are not given. Further along an African chieftain is being dragged into the Presence, doubtless to force him to throw himself in the dust in front of Horemheb (pl. II, 4). The gifted artist who carved this scene shows the chieftain maintaining a dignified, even haughty, mien under trying circumstances. Another extraordinary scene shows a Nubian being hit under the jaw by a soldier (pl. III, 1). Other gestures, punitive or admonitory, are shown in these unique reliefs, and give added point to the phrase 'vile Kush', common in historical texts of the Eighteenth Dynasty, as well as throwing new light on the attitude of the Egyptians of this period to foreigners and captives.⁹ The Egyptians in these scenes are shown on a smaller scale than the foreigners, either to show that the Egyptian guards were young recruits¹⁰ or to emphasize a real physical differentiation in the stature of the races. In any event the artistic device is effective, since it stresses the superiority, military or otherwise, of the Egyptians. Scribes are documenting the events, and although the scene is uninscribed they are doubtless meant to be recording the names, rank, and country or tribal name of the various captives or hostages. Behind Horemheb is a group of seated Nubians (pl. III, 2) guarded by Egyptian soldiers. The carving of this scene is truly remarkable. A celebrated block in Bologna¹¹ fits on the wall, immediately above. On the extreme right of the wall is a relief showing charioteers. Here the artist has varied a scene, common in the 'Amarna Period and which might otherwise be regarded as hackneyed, by depicting a charioteer or groom leaning with both hands over the flank of one of the horses.

The south wall of the Second Court has two groups of scenes. On the left Horemheb is shown seated, with a priest offering incense. Behind the tomb-owner is a scribe, perhaps the same Army Scribe Ramose whose name figures on a relief found last season. On a register below butchers are shown cutting up oxen for the funerary meal. The carving of this part of the wall is slovenly, the lack of expertise being disguised by the lavish use of paint. The main part of the wall survives only in the lowest course,

⁶ Hari, *op. cit.*, 64-8, with fig. 13; Wilson, *ANET*² 251 (b).

⁷ *PSBA* 11 (1888-9), 424-5.

⁸ Cf. an example on the stela of the *imy-r ssmt* Ry, Berlin 7290, though the parallel is not exact.

⁹ Cf. the description of the treatment meted out to the seven Asiatic chieftains by Amenophis II, Gardiner, *Egypt of the Pharaohs*, 199-200, and the representations of battles and their aftermath shown on reliefs, chariots, and certain objects.

¹⁰ One of the titles of Horemheb was *imy-r nfrw n nb tawy* which occurs, for instance, on one of the statue-emplacements in the Second Court.

¹¹ Bologna 1887, Hari, *op. cit.*, 70 ff., with fig. 14 and pl. 10; Bologna, Museo Civico, *L'Egitto antico; catalogo a cura di Silvio Curto*, 2nd ed. (Bologna, 1961), 81 ff., with pl. 32. On the Horemheb reliefs in Bologna see now S. Curto, E. Fiora, and L. Follo, *Il Carrobbio* 1 (1975), 73-91. They are also treated by Curto and Fiora in the recent exhibition catalogue, *Pelagio Palagi, artista e collezionista* (Bologna, 1976), 379 ff.

but a famous series of blocks which have been in the Leiden Museum¹² since the early part of the nineteenth century fit above. On the far right of the wall the King and Queen, doubtless Tutankhamūn and Ankhesenamūn, were shown seated on thrones under a baldaquin. An usher or official hurries down the ramp of the throne to the forecourt of the palace where ḤoremḤeb, newly decorated with the Collars of Honour, is shown amidst a throng of courtiers. Behind him are rows of Asiatic prisoners, their hands manacled and with ropes round their necks. Part of a block (pl. III, 3) found loose in the debris belongs to this scene, and it is hardly too much to say that it is one of the finest relief carvings to have survived from this period of Egyptian history. The heads in the lower register are particularly worthy of note, and the paint too is fresh and well-preserved.

Most of the west wall of the court has disappeared; likewise the walls of the main funerary chapel (D), in a central position on the west side. This chapel is square in plan, indicating perhaps that the walls originally supported a small brick pyramid. No trace of a pyramidion, however, has been discovered so far. The bases for two columns are in position in the remains of the floor. A loose block from the debris of the Second Court shows ḤoremḤeb in the Fields of Iaru, and fits above a well-known scene from the tomb now in the Museo Civico, Bologna.¹³ As in the Bologna blocks, the uraeus has been added. From parallels¹⁴ it is probable that these scenes originally came from the inner walls of the chapel, the remaining lower courses of which were found by us to have been covered by a rubbish dump of the Coptic Period. This dump contained domestic refuse as well as quantities of well-preserved textiles and some Coptic papyrus fragments. If the date of the latter can be established with some precision we shall in turn have a date for the textiles. A mud-brick hut on the NW. side of the courtyard seems to have been the temporary quarters of Coptic masons, whose task it was to strip the reliefs for reuse, some doubtless being utilized, together with blocks from other New-Kingdom tombs, in the Monastery of Apa Jeremias near by.¹⁵ The hut appears to mask the entrance to a shaft, which from its size is probably that of the principal burial-chamber of the tomb. Both side-chapels (C and E) flanking the main chapel originally had vaulted roofs, and were used as *ossuaria* in the Late Period or Coptic Period. Most of the burials were greatly disturbed. Chapel E was probably the original location of a round-topped stela, now in Leningrad.¹⁶

Two statue-emplacements, similar to those excavated last year in the Statue-room, are in position in the Second Court. The foundations of a third are also apparent. A fine double-statue (pl. III, 4) was found overturned in the main chapel; a duplicate,¹⁷ with

¹² Leiden H.III.OOOO, H.III.PPPP = Hari's 'paroi A', Hari, *op. cit.*, 70, 100 ff., with pl. 16 and figs. 30, 31.

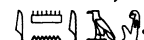
¹³ Bologna 1885, Hari, *op. cit.*, 70, 76 ff., with fig. 20.

¹⁴ For example the chapel of the tomb of PaatonemḤeb in Leiden, *PM* III, 191.

¹⁵ For such New-Kingdom blocks see *PM* III, 178-9.

¹⁶ Leningrad 1061, Hari, *op. cit.*, 70, 96 ff., with pl. 15 and fig. 29. A coloured photo of the stela has recently been published in N. Landa and I. Lapis, *Egyptian antiquities in the Hermitage*; ed. B. Piotrovsky (Leningrad, 1974), no. 44.

¹⁷ Mr. T. G. H. James has drawn my attention to an uninscribed statue-group in the British Museum (no. 36) from the Anastasi Collection which, allowing for surface deterioration since its discovery in the early

both heads missing, was found reused as building material¹⁸ in a cross-wall of the Coptic Period in Chapel B. A female head and torso, much mutilated, but originally a magnificent sculpture and from yet another pair-statue, was found in the debris of the courtyard. Two of the columns¹⁹ in the courtyard are inscribed for females. The inscriptions are much damaged by weathering, but one of the ladies commemorated bore, among others, the title 'Chantress of Amūn'. Her name appears to be . The probability thus arises of Ḥoremḥeb's marriage before his accession to the throne, with intriguing possibilities of family links with the following dynasty. There are four shafts in the tomb itself, and another in the Forecourt. The complete excavation of these next season may give vital clues to Ḥoremḥeb's origin and family background, about which very little is at present known. The evidence for Ḥoremḥeb's marriage prior to his accession, based on the presence of women named or depicted in his Memphite tomb, can be summarized as follows:

1. A relief on the south wall of the Great Courtyard, which must originally have shown Ḥoremḥeb facing right, with his wife (?) behind him. Only the lowest course of blocks survives.
2. An uninscribed double-statue from the main chapel, D.
3. A similar statue-group in Chapel B.
4. A female torso and head from a third group, found in the Second Court.
5. A relief on the north thickness of the entrance to the main chapel, which must originally have shown Ḥoremḥeb and his wife (?) emerging from their chapel into the courtyard.
6. Two columns in the Second Court, inscribed for females.
7. Stela of Ḥoremḥeb and his wife (?), found in Chapel B.

None of this evidence is at the moment decisive, since it could be argued that the mother or another female relative of Ḥoremḥeb is shown in all cases, but on balance I think the clues favour a wife, perhaps not the Mutnodmet he is thought to have married at his accession.

By the end of the coming season of excavations work will have been completed on the copying in facsimile of all the surviving scenes, inscriptions, and fragments in the tomb, and most of the blocks in the museums will have been similarly dealt with. One of the surprising results of the excavations is the variety of artistic styles apparent in the reliefs, which raises the possibility of hitherto unsuspected blocks from the tomb being in the museum collections. Much progress has also been made with the catalogue of

years of the last century, is very similar to the two dyads from the Memphite tomb, and might just prove to derive from that monument. It is, however, usually assigned to Thebes, see *PM* 1², pt. 2, 790, to which add A. Scharff, *Wesenunterschiede ägyptischer und vorderasiatischer Kunst* (Leipzig, 1943), 25, 53, with pl. 16.

¹⁸ The unwieldy sculpture was no deterrent to the builder. For another apparent instance of the reuse of statuary in this way see M. Benson and J. Gourlay, *The Temple of Mut in Asher* (London, 1899), 60-1.

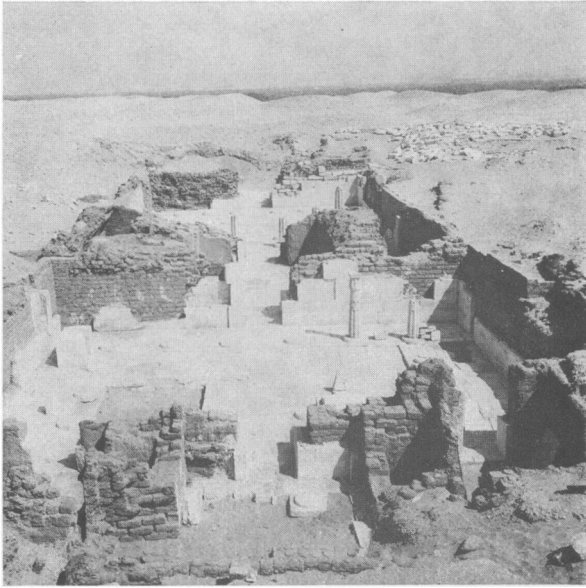
¹⁹ One column survives to its true height of 2.22 m from base to abacus. This is also the true height of the walls and reliefs, from the pavement to the underside of the ceiling of the original colonnades. This measurement will be of importance in the final reconstruction and incorporation of stray blocks and fragments in the scenes in the Second Court.

objects, intrusive for the most part, in the debris of the tomb,²⁰ and with the mass of pottery ranging from the late Eighteenth Dynasty to the Coptic Period found during the course of the work.

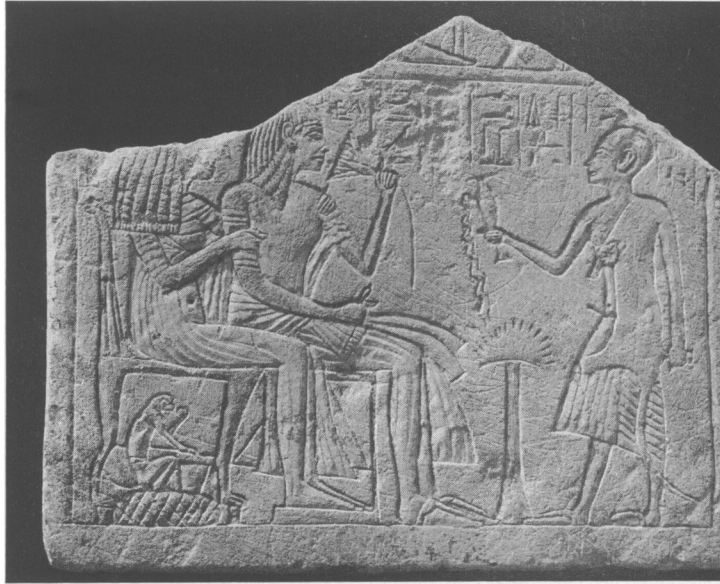
²⁰ One of the most intriguing of the small finds is a drop-bead, crudely inscribed with the name of the obscure King Khababash. His name was read by Dr. Schneider.

Postscript

Since the above report was written I have discovered that the lower portion of a shattered block found during the first season of excavations in 1975, *in situ* on the north side of the west wall of the Great Courtyard, represents the remains of the 'Hymn to Rē', copied by E. de Rougé, *Inscriptions hiéroglyphiques* (Paris, 1877), pls. CIV–CVI, and discussed by Hari, *op. cit.*, 70, 98 ff. Evidently when de Rougé saw it the block was largely intact. It was later deliberately destroyed, perhaps at the same time that adjacent columns were broken in order to hack out certain panels. One of these latter was found by us in the Great Courtyard in 1975, four others were removed in the nineteenth century to the Cairo Museum (*JdE* 11332–11334, Hari, *op. cit.*, 85 ff., with pls. 12–13, and figs. 22–25). Concerning these panels a note in the *Journal d'Entrée* of the Cairo Museum reads: 'Trois fragments détachés des colonnes qui ornaient le tombeau d'un Général nommé Horus. Par une circonstance inexplicquée ce fonctionnaire porte plusieurs [fois] l'uraeus sur le front'. An added note remarks that 'Il y a en réalité quatre de ces fragments'. The panels are mentioned in the literature as early as 1864, see A. Mariette, *Notice des principaux monuments* (Alexandria, 1864), 251, nos. 74–77.



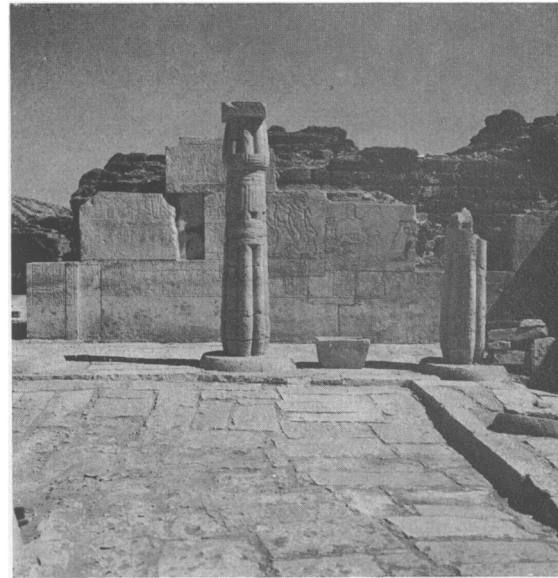
1. The tomb, looking east



2. Stela of Horemheb and his wife (?). From Chapel B



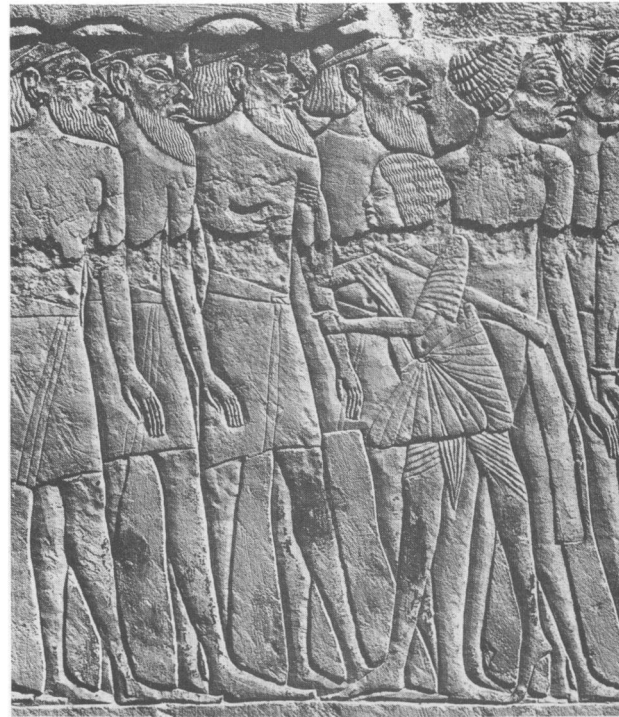
3. Scene showing part of the Memphite funerary ritual.
From north wall of Second Court



4. South-east corner of Second Court



1. Nubians parading before Horemheb. From east wall of Second Court



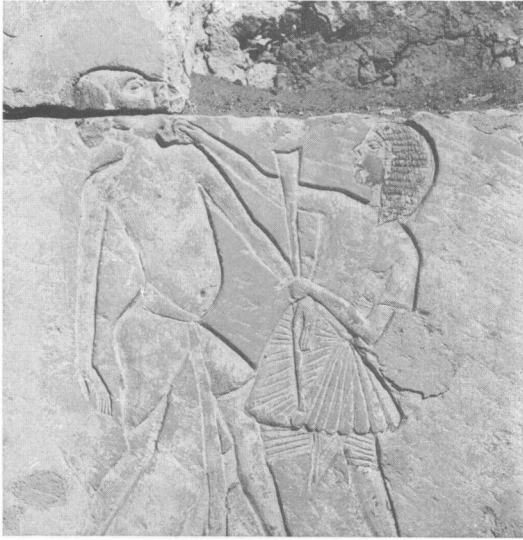
2. Asiatics and Nubians in the presence of Horemheb. wall of Second Court



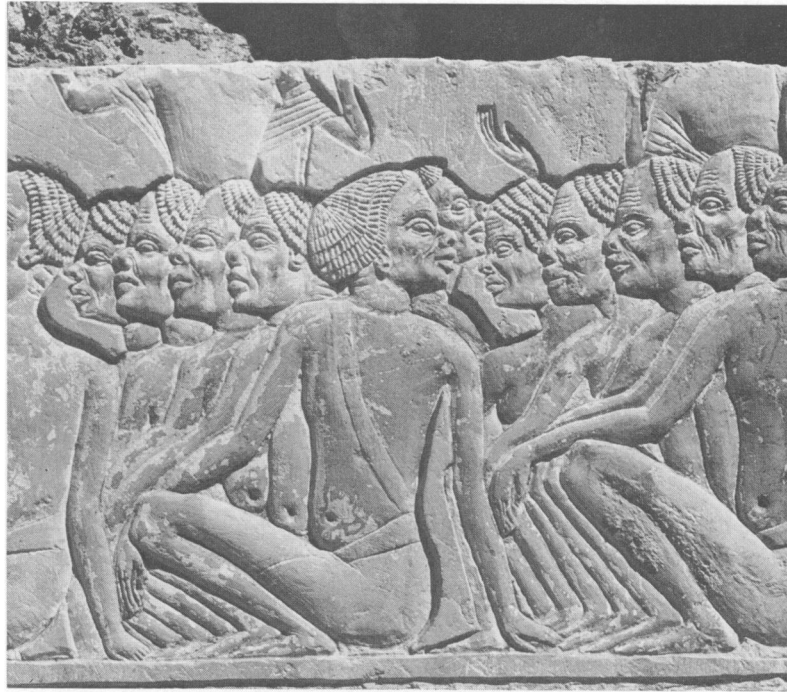
3. Courtiers. From east wall of Second Court



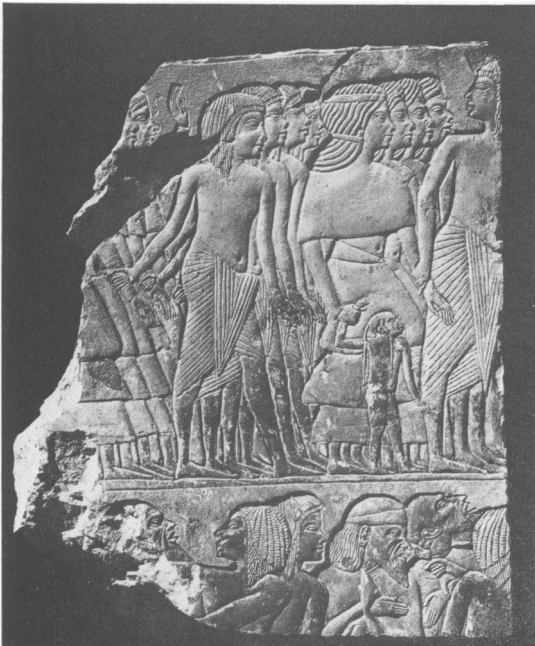
4. Scene from east wall of Second Court



1. A scene of chastisement. From east wall of Second Court



2. A group of Nubians. From east wall of Second Court



3. Male and female Asiatic prisoners. Relief originally from south wall of Second Court. Ht. 68.0 cm



4. Horemheb and his wife (?). Statue-group from Chapel D. Ht. 1.07 m

THE SACRED ANIMAL NECROPOLIS, NORTH SAQQÂRA: 1975/6

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

1. Introductory

THE Society's expedition started work at Saqqâra on September 30, 1975. The staff comprised Professor H. S. Smith, Mrs. H. F. Smith, K. J. Frazer (surveyor), W. J. Tait (papyrologist), D. G. Jeffreys (excavation assistant), and J. D. Ray (epigraphist), who joined the expedition in December. The Chairman of the Society's Committee, Professor E. G. Turner, and Mrs. L. Turner visited the site in December for a fortnight, much to the profit and pleasure of all.

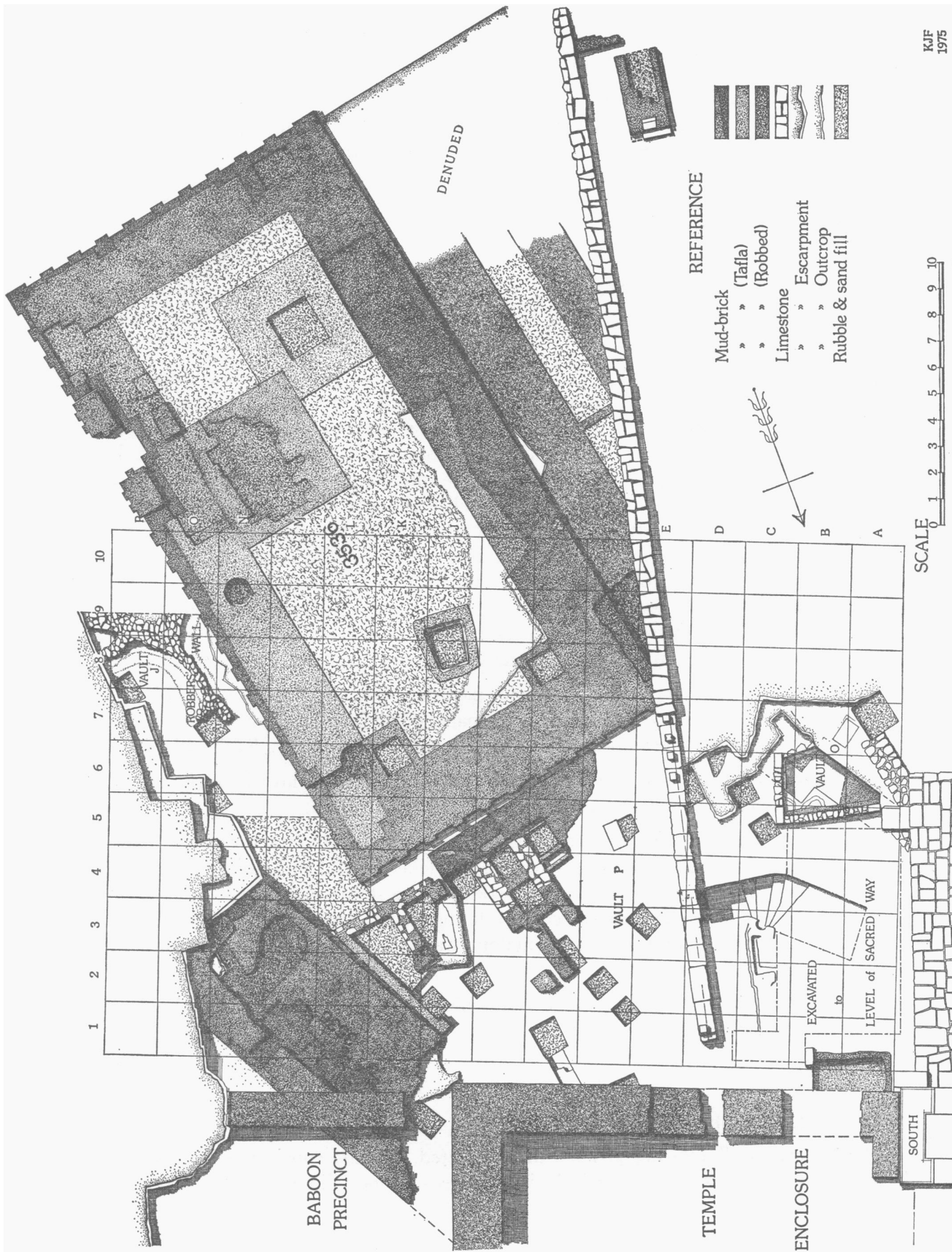
The aims were: (1) to complete excavation of the temple complex by investigation of Sector 9 (Smith, Frazer, Jeffreys); (2) to prepare drawings and descriptions of the temple complex for the final archaeological report (Smith, Frazer, Mrs. Smith); (3) to complete philological work upon demotic literary papyri (Tait, Smith); (4) to prepare transcripts of demotic ostraca (Ray); (5) to complete philological work on Greek papyri and ostraca (Turner). These tasks were carried through with the valuable and courteous assistance of the Egyptian Government Antiquities Service. The Society is especially grateful to Dr. Gamal Mukhtar, Head of the Antiquities Organization, and to the late Dr. Maḥmud Ḥamdi, Director General, whose sudden death early this year all his colleagues sincerely mourn. Dr. Aly el-Khouly, director of antiquities for Memphis and Saqqâra, and Mr. Said el-Fiki, inspector of antiquities for North Saqqâra, who participated in the daily conduct of the work, were of constant help in all possible ways.

In seasons 1971/3 G. T. Martin completed the excavation of Sector 7, begun by the late W. B. Emery in 1969/70. He had exposed a light freestone wall east of the Sacred Way leading from Sector 7 to the South Gate of the Main Temple Enclosure. In 1974/5 further clearance revealed that at its north end a series of stone pillars replaced the wall. To investigate this a grid measuring 20 m N.-S. by 30 m E.-W. was laid down south of the Temple Enclosure and east of the Sacred Way in an area named Sector 9. Later, the work was extended southwards, and a trench excavated to connect it with Sector 7. D. G. Jeffreys has written sections 2-4 and 6-7 of this report; section 8 is joint work.

2. The mastabas and rock tombs of the Old Kingdom

The earliest structures recovered were mastabas and rock-cut tombs of the Archaic and Old-Kingdom necropolis. They comprise:

1. Two rock-cut chambers in Squares N-O 5/6, O-P 8/9 (Fig. 1). They are cut in the upper face of the escarpment, and resemble in technique those further to the north



REFERENCE



- Mud-brick (Täfla) (Robbed)
- Limestone
- Escarpment
- Rubble & sand fill



BABOON
PRECINCT

TEMPLE
ENCLOSURE

TEMPLE

SOUTH

DENUDED

10
9
8
7
6
5
4
3
2
1

VAULT J
TOBBERS WALL

VAULT P

EXCAVATED
to
LEVEL of SACRED WAY

VAULT

E

D

C

B

A

3930

behind the Temple Enclosure. The cliff edge is badly eroded at this point, and where the cutting of the chambers had further weakened the rock seams the ceilings had collapsed altogether. The better preserved of the two, that to the south (Vault J), had clearly been a simple rectangular vault. In the centre of each chamber a shaft had been sunk; these had obviously been robbed, and, like others in this Sector, were not cleared.

2. To the north in Squares L-N 1/4, a mastaba of mud- and *tafla*-brick (Tomb 3535). This contains a small cruciform chapel at its south-west corner, and a second adjoining chapel with two or more panelled niches. The tomb runs under the South Wall of the Baboon Precinct.
3. To the south-west of Tomb 3535 on a slightly different alignment, a larger mastaba (Tomb 3536). This structure has been preserved to a height of 2.5 m (maximum). The exteriors of the north, south and east walls are decorated with a simple recessed panel motif, while the west wall is plain. The core of the mastaba is of *tafla*-brick, but a skin-wall forming the panelling is of fine mud-brick. The east façade showed a large niche at its southern end, and a small niche at its northern end. The two main burial shafts are situated approximately west of the niches; two subsidiary shafts are situated in the northern corners of the mastaba. The south-eastern corner had been extensively robbed for bricks, and hollows had been carved out on the western side, perhaps to form workmen's shelters during the construction of the Temple Enclosure. Two pits inside the east wall are not datable, but may have been silos associated with the beginning of the Christian occupation.
4. A complex of subsidiary tomb shafts with partition walls of *tafla*-brick, sunk in the angle between Tombs 3535 and 3536. A panelled niche in one wall shows that miniature mastabas covered some of these, but they have been eroded by wind.
5. To the west of this complex, a small chamber tomb cut just below the rock surface. In its western compartment were remains of an infant burial.
6. West of the later 'pillared wall', an irregular courtyard cut into the rock gave on to a small chapel or niche on its south-western side (Vault O). A limestone slab set into the floor of the niche may have been a pedestal for a statue. A robbed shaft behind the niche may have been associated. Its dating depends upon the masonry techniques and upon sherds of Old-Kingdom ware (Class A₁) recovered from the rubble fill of the courtyard.
7. Other unassociated tomb-shafts, two of which were broken into when Vault P was constructed, and a third by a subterranean robbers' passage into the Falcon Catacomb.

3. The 'pillared wall', the Late-Period rock tomb and the caches

The 'pillared wall' (pl. IV, 1) was fully excavated. Its base consists of horizontally laid limestone slabs set on irregularly laid courses of local limestone, bonded with

gypsum mortar. The slabs originally formed a basement for sixteen free-standing limestone pillars of square section, of which five remained *in situ*, at intervals of approximately 45 cm. A setting line for the mason's use runs the length of the basement, under the centre of which ran a channel, perhaps a drain for rain water. The southern pillar abuts against a roughly mortared wall, cleared by G. T. Martin in 1971/3, which certainly belongs to the same feature and building phase. The sequence, however, is not clear; the respective dimensions of the basement slabs may suggest that the pillared section was begun from the north to meet the rough wall, already in existence. Both sections contain fragments of limestone offering tables, evidently from the Temple Precinct; one such, recovered from the north end of the basement in 1974/5, bore a demotic dedication to Isis, Mother of Apis. The construction of the wall and pillars therefore postdated the earliest burials of the Mother of Apis,¹ and most probably the destruction of these. A rough mud-plaster pavement bedded on sand followed the bedrock contour down the slope from the foot of the 'pillared wall' to the edge of the Sacred Way, and was bounded on the north by a brick supporting wall which met the foundations of the South Gate. Almost certainly, therefore, the 'pillared wall' and the Sacred Way belong to the same building phase. No building was discovered in direct association with the 'pillared wall'. Presumably, therefore, it was an enclosure wall, screening the Sacred Way and the precinct of Sector 7 from the east, with a pillared portico forming an ornamental feature and allowing controlled access to the South Gate of the temple.²

In Squares A-C 5/6 a small rectangular building is founded upon the second phase of brick rubble fill of the courtyard of Vault O, that contains reused Old-Kingdom blocks. The floor is mud-plastered, as are the stone walls and a low bench running along the inside of the north wall. Access appears to have been from the Sacred Way on the east. The level of the floor and position of the building suggest that it was a gatekeeper's or watchman's lodge, controlling access both through the 'pillared portico' and through the South Gate of the Temple Enclosure.

Cut into the rock scarp beneath the west face of the 'pillared portico' was the entrance to a rock tomb (Vault P); see pl. IV, 2. A curving rock-cut staircase led down from the west to the chamber, cutting through an Old-Kingdom shaft, at the foot of which was found a double burial of a female and small infant; this burial must have been made subsequent to the cutting of the stairway. The chamber was roughly square in plan with a sarcophagus chamber on the south. Its east wall had been breached by robbers, who had made a tunnel by way of various Old-Kingdom tomb chambers into the Falcon Catacomb; the tomb chamber itself turned out to be that previously designated as chamber 4/2 of the Falcon Catacomb. This robbery was further attested by a low retaining wall of bricks across the entrance, and by a deliberate filling of the stair well with sand, sherds of large amphorae, and large stone blocks, from among which ten of

¹ H. S. Smith, 'Dates of the obsequies of the Mother of Apis' in *Rev. Ég.* 24, 176 ff.

² The suggestion that the pillared wall is at least partly decorative is supported by the fact that it begins in a direct line with the north façade of Tomb 3536 as approached by the causeway from Sector 7. Thus the continuous stretch of wall screens the remains of the mastaba while the pillared section gives on to the almost entirely eroded tomb shaft complex (see 2.4).

the pillars from the wall were retrieved. They have been restored to their original positions.

No artefacts associated with any burial in the tomb were recovered, and it was completely empty; the masonry was left in a crude state, and it is very doubtful whether it was ever finished or occupied. The tool marks in the tomb, and in the unfinished cutting for a stair shaft near by, indicate the use of iron-clad picks or adzes. For this reason the tomb is ascribed to the Late Period; it must, however, on stratigraphic evidence have antedated the Sacred Way and the 'pillared wall' above it. The robbing of the chamber, on pottery evidence, cannot antedate the Christian period, by which time the 'pillared wall' had fallen into ruin.

Along the outside of the Temple Enclosure, several caches of bronze figurines of deities and *situlae* were found (see 5 below).

4. The despoliation and the Christian dumps

A deposit of windblown sand sealed the Old-Kingdom structures east of the 'pillared wall' and the Late-Period features west of it. This in turn was covered by a series of tiplines. The earliest of these comprised a compacted layer of brickdust containing a high proportion of whole and broken mud-bricks. The distribution of this stratum showed that it was deposited progressively from the north-eastern corner of the Sector. We take this layer to be material from the Baboon Precinct deposited prior to the Christian rebuilding in the area. There is evidence of robbery and destruction of existing structures preceding the Christian occupation and perhaps partly contemporary with it. Part of this damage is attributable to the construction of the Temple Enclosure, for instance the cutting away of the north-western corner of Tomb 3535. But the robbery of Vault J, during which retaining walls were built round the tomb entrance, is dated to the third to fourth centuries A.D. by the high proportion of Roman and Christian pottery and objects in and around the tomb shaft; and the same is true of the intrusion into Vault P.

Above the brickdust layer, a sequence of strata of wind-deposited brick dust and sand and of deliberately dumped brick rubble and organic material represents the later Christian occupation. The uppermost stratum, particularly west of the 'pillared wall', comprised the debris of ropes, basketry and reed matting; from this layer came numerous fragments of papyrus inscribed in Greek hands, provisionally assigned by Turner to the third to fourth centuries A.D. Demotic ostraca from much earlier times, including one from the Archive of Ḥor of the second century B.C., were recovered from the dumped material, together with many artefacts cleared from the temple precinct during the Christian occupation. The presence of these tends to confirm that there was a period of extensive destruction after the temples had fallen into disuse.

5. The objects and inscriptions

The head and torso of a limestone funerary statue of a man, badly eroded by exposure to wind, and small inscribed fragments from tomb reliefs were the only finds of Old-

Kingdom date: none were *in situ*. Fragments of relief from a temple of Ramesses II were also recovered, but evidently came from elsewhere.

The caches found outside the south wall of the Temple Enclosure were similar in nature to those found in the previous seasons, and date to the period of use of the temples. Cache i (Square K 3) yielded two small *situlae*, figurines of Osiris and Thoth the Baboon, and a miniature offering table of bronze, with a small green stone figure of a baboon. Cache ii (Square H 4) produced fourteen bronze *situlae*. Cache iii (Square F 7) comprised a bronze Osiris and a fragment of a bronze base(?) with a damaged royal inscription. In Cache iv (Square L 3) were two bronze figurines of Osiris. Cache vi (Square G 1) contained a fine bronze *situla* (ht. 26.5 cm) cast in one piece with a four-legged stand; the scenes are of the usual character. It is uninscribed, and may be of fourth-century date. With it were a small *situla* and two miniature bronze figures of Osiris. Caches v, vii, and viii contained only small bronze *situlae* and broken objects. The finest piece of this period, found out of context, was part of a wooden panel, perhaps from a *naos*, delicately carved in raised relief with the head and shoulders of a Pharaoh, possibly of the Saite Dynasty (pl. IV, 3). A small limestone *cippus* of Horus and a broken limestone herm appear to be the first objects of their types recorded from the site. A stela bearing parts of three lines of Carian inscription was recovered, also portions of two Mother of Apis stelae. The Demotic ostraca included one piece inscribed with the name of a man Alexandros son of . . . Pediese, and written by a scribe named *Hštrpny*, an interesting combination of names of Egyptian, Persian and Macedonian origin.

From the Christian levels came fragments of Greek letters and business documents on papyrus, of the third to fourth centuries A.D., eighteen of which were registered. They suggest a date in the fourth century A.D. for the beginning of the Christian occupation of the temple site. A large quantity of glass, all irretrievably broken, from the tipped material included one moulded mask in dark blue glass representing a figure from Comedy, broken from the body of the vase, see pl. IV, 4. Fragments of basketry, sandals, loom-weights, tools, corroded copper coins and toilet objects illustrated the daily life of the Christian community.

6. The Pottery

Very little of the pottery found during the 1975-6 season was from undisturbed contexts. The Old-Kingdom wares had been removed from their original positions during subsequent disturbances; the Late-Period wares were mostly found among the Christian layers, and originally came from the temple site. Similarly, Christian wares had been discarded over the whole site during and immediately following the Christian occupation.

Of the Old-Kingdom wares, A1 and A4 were both found: A1 was the commoner, chiefly in closed forms including several intact specimens of the familiar narrow-necked storage jar. Ware A4 is represented by one form, a large shallow dish, handmade and finished on a wheel. It was found complete in connection with an improvised hearth

among the Old-Kingdom material removed during the cutting of the stairway to Vault P.

Of the Late-Period pottery, the Christian dump and robbers' fill of Vault P yielded many sherds of the common 'Animal Necropolis Ware' (G1) and the white ware (H5) among others.

The Christian wares were the best represented. Many sherds and a few intact and nearly complete examples of the Roman/Coptic amphora ware (J3) and medium-coarse bichrome painted ware (J5, 6) were found; also, in the later Christian levels, many fragments of the fine 'African Red Slip' ('Imitation Sigillata', K1) with stamped, impressed decoration. Most examples were of the fourth century A.D. forms (122) and (332).

One ware as yet unrecorded in the North Saqqâra corpus was found among the surface material in T2: a fine white ware made with a soft paste, represented by only one form, a thin-walled straight-sided cup or small bowl. This ware was certainly an import to the site.

Finally, several rim and shoulder sherds of amphorae of the Christian imported ware (L1), made in Alexandria, were found, almost all of which carried red ink inscriptions in cursive Greek.

7. Sector 7. Trench T2 and the Christian burials

An east-west trench (T2), 2 m wide, was laid out, extending from the east side of the Late Period wall through the centre of the Christian cemetery to the buildings of Sector 7. Its purpose was to examine the stratigraphy and to determine whether there were any remains of a causeway or enclosure wall to the east of Sector 7. Two adjacent tomb shafts cut into the bedrock and a rock-cut panelled niche indicated the existence of an Old-Kingdom mastaba, of which the brickwork had been completely weathered away, 12 m from the 'pillared wall'.

Immediately above the Old-Kingdom remains lay a sealing layer of wind-deposited sand containing light inclusions of brick dust. Above this, two successive terraces of compacted rubble *tafla* had been laid, each with a surface of stamped mud plaster, levelling the natural gradient of the bedrock. This terracing was quite solid and contained few artefacts, but the scanty pottery evidence from it suggests a Late-Period date. It may conceivably be connected with the large terraces to the north and west in Sector 7.

Through this terracing, burials of the Christian period had been cut. These included some already excavated during an earlier season, but most were disturbed. The burials conform to the pattern of those in the rest of the cemetery: a simple unlined cavity, the corpse laid full length on a palmwood plank with the head pointing westwards, the body either bound in strips of coarse sacking or covered with reed matting. Occasionally the same cavity had been used for a second interment (Graves 29c, d). Crude superstructures of brick or stone were raised over most burials; in some cases a single superstructure represented two or more burials.

The section T2 yielded no trace either of the South Sacred Way or of any other road into Sector 7.

8. Sector 9. Summary of the stratification

The sequence of the Old-Kingdom structures on the site seems to have been:

1. The mastabas 3535 and 3536, which should be assigned to the Third Dynasty on the basis of their architecture;
2. The shafts subsidiary to them;
3. The rock-cut chamber and shaft tombs (Vault J and its neighbour), and in all probability the courtyard and niche tomb (Vault O); though there are no strict criteria for their date, these should belong to the late Old Kingdom.

The Middle- and New-Kingdom periods are represented only by the sand fill which accumulated between the denudation of the mastabas and the construction of the Late-Period features. This fill is substantially deeper on the west of the sector, where the gradient forms a natural trap for sand carried by the prevailing westerly winds.

The earliest Late-Period construction was Vault P, which must have antedated the building of the 'pillared wall', as the foundation level of this wall was above the accumulated fill in the stair-well to the Vault. The 'pillared wall' and the Sacred Way should belong to the same constructional phase, since a mud-plaster pavement with revetment connects them. By inference, the watchman's hut belongs with them, as the Sacred Way leads through the South Gate and connects with the causeways to the temple shrines. On the evidence of architectural elements inscribed with the cartouches of Nectanebo II, the erection of these features is assigned to the mid-fourth century B.C.

An enclosure of low brick revetment walls above the mud-plaster pavement west of the 'pillared wall' may belong towards the end of the occupation of the temple site. Between the abandonment of the temples and the beginning of the Christian occupation, wind-blown sand accumulated; the depth of this deposit confirms evidence from other parts of the temple enclosure that the interval was considerable, perhaps from the first to fourth centuries A.D.

The tiplines of the Christian Period apparently testify to the clearance of the Baboon Precinct for rebuilding. West of the 'pillared wall', the earlier Christian strata were broken through by the robbers of Vault P. This robbery presumably therefore took place late in the Christian occupation. The latest Christian deposits, confined to Squares A-D 2/5, lie over robbers' fill, which included the pillars thrown down from the wall. Above these strata was a dump of matting, rope, and organic materials, probably deposited at the end of the Christian occupation or during post-Christian ransacking of the site. Above this, an accumulation of drift sand indicated lack of any later activity.

9. Clearance in Vault A.II

In 1974/5 the vaults in the rock behind Sanctuary A within the Temple Enclosure had been partially cleared, and shown to have been Old-Kingdom chambers, though the presence of brick walling indicated later reuse. In them had been found a mass of cow-bones, evidently from the plundering of Mother of Apis burials. As these were at

some distance from the main catacomb, the question was raised whether further Mother of Apis vaults, perhaps of the early period, might yet await discovery in the scarp below Sanctuary A. A deep shaft in Vault A.II offered a chance of testing this, but was then too dangerous for descent.

After restoration works carried out this season in co-operation with the architects of the Antiquities Service, descent of the shaft revealed only a robbed and empty Old-Kingdom tomb chamber on the west at a depth of 12 m. From this chamber there was a break-through into a second robbed Old-Kingdom chamber on the north, with its own shaft, but it was clear that neither shaft had been used by robbers to obtain access to Mother of Apis burials. However, the north wall of Vault A.II itself had been broken through into another rock-tomb (Vault D.IV). The entrance of this was near to that of Vault D.I, whence a robbers' passage led into Vault 3 of the main Mother of Apis Catacomb, so that it is probable that the presence of cow-bones in Vaults A.I and A.II and Sanctuary A, room 3, were the results of robberies carried out by this route. Present evidence concerning these robberies suggests that they took place after the desertion of the temple complex but before the Christian reoccupation of the site.

10. State of Work in the Sacred Animal Necropolis

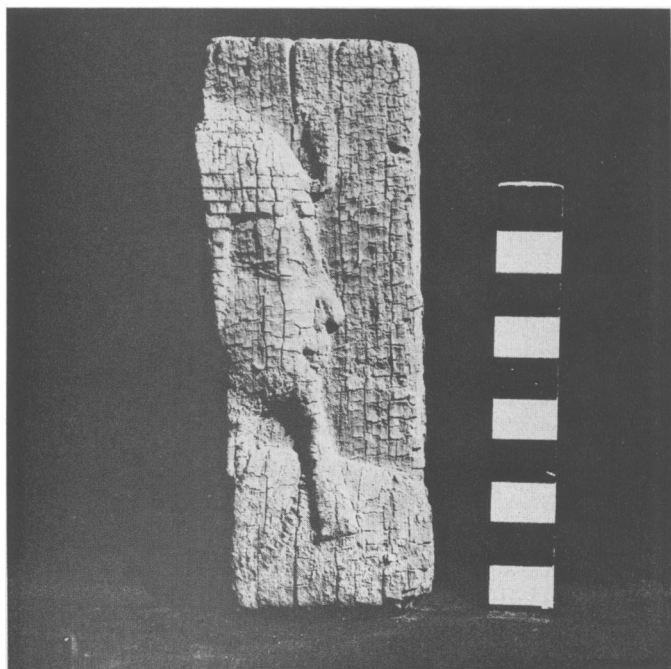
This season's work brings to an end the investigation of the temple enclosure and catacombs found by W. B. Emery, and their environs. Final archaeological reports and publications of the objects and documents found since 1964 are in preparation, but will require much further work both on and off the site. The Sacred Animal Necropolis and the temple towns of the first millennium B.C. at Saqqâra are, however, far from exhausted, and North Saqqâra can make many further fascinating contributions to the history of Memphis and its cults. The Society hopes to combine new investigations with its commitment to the publication of Professor Emery's work.



1. The 'pillared wall' seen from the west with the South Gate and Sacred Way in the foreground



2. Entrance to the Late-Period rock-tomb (Vault P) beneath the west face of the 'pillared wall'



3. Wooden panel, showing head and shoulders of a Pharaoh in bas-relief



4. Blue glass mask from vessel representing a figure from Comedy

QASR IBRÎM, 1976

By J. MARTIN PLUMLEY, W. Y. ADAMS, and ELIZABETH CROWFOOT

I. *Introduction*

By J. MARTIN PLUMLEY

EXCAVATIONS under the direction of Professor Plumley began on January 21 and ended on March 11. The staff included Mrs. G. A. Plumley, Dr. Janet E. Bottomley (University of Cambridge), Miss Elizabeth Crowfoot, Professor W. Y. Adams (University of Kentucky), Mrs. N. Adams, Messrs. Ernest and Edward Adams, Dr. M. Marciniak and Dr. P. Gartkiewicz (Polish Centre of Mediterranean Archaeology in Cairo), Mr. R. Anderson (University of Cambridge), Mr. R. Allen (University of Kentucky), Mr. N. F. M. Plumley (University of Sheffield), and Mr. P. Dunlea Jones. Dr. Violet MacDermot (University of Oxford) joined the expedition during February. Sir Laurence Kirwan was a guest of the expedition during February.

Mrs. Plumley supervised the domestic arrangements and was responsible for the drawing of the finds. Dr. Bottomley was in charge of the medical needs of the expedition and, assisted by Dr. MacDermot, carried out most of the photographic recording. Miss Crowfoot, with the help of Mrs. Adams, examined and recorded the textile finds. Professor Adams and Mr. Allen directed the work on the two main areas of excavation. Dr. Marciniak was responsible for recording in the field all the finds. Dr. Gartkiewicz undertook a detailed survey of the Cathedral and assisted Mr. Dunlea Jones, who was responsible for recording and drawing the site plans. Mr. Anderson carried out the major part of the epigraphic recording as well as giving general assistance in the field. Mr. N. F. M. Plumley acted as a site supervisor, helped in the daily pottery identification and count, and supervised the equipment. Messrs. Ernest and Edward Adams assisted in a number of ways in the field and with the pottery.

The Antiquities Service was represented by Mr. Gawdat Gabra Abdel Sayid. Fifty workmen from Quft, under the command of Reis Ismail Khalil, assisted in the work. The expedition was accommodated on the houseboats *Zoser* and *Gerf Hussein*, and the barge *Medhat*. The tug *Seti* stood by in case of emergency.

By reason of its isolation and distance from Aswân work at Qasr Ibrîm, though amply rewarding, has always presented problems to the excavator. In 1976 these were no less troublesome than in previous seasons. In order to begin work as soon as possible the Director and Mrs. Plumley, accompanied by Dr. Bottomley, left England on December 26, flying to Genoa to accompany all the expedition stores and equipment by sea to Alexandria. The other members of the staff joined them in Cairo early in January. Delay in departing for Aswân was caused by the discovery that neither

of the two houseboats put at the disposal of the expedition was equipped, since all the furniture and contents had been removed to furnish the rest-houses for the staff engaged on moving the temples of Philae. Thanks to preliminary work in Aswân by Professor Adams and the efforts of the ladies of the expedition in Cairo it proved possible to equip both houseboats with the necessary minimum of furniture, kitchen equipment, and bedding. The furnishing of the houseboats, a major expense, was accepted by the Antiquities Service in lieu of the usual rent.

An unforeseen delay in Aswân was caused by the need to recruit a new Reis and workmen since the expedition's former Reis, Bashir Mahmoud, who had worked with the expedition on three previous seasons, was unexpectedly not available. Eventually Reis Ismail Khalil and fifty workmen from Quft, a few of whom had worked previously at Qaşr Ibrîm, were engaged for the season.

The expedition left Aswân on January 18 and arrived at the site on the 21st. The rate of progress across the lake is now dictated by weather conditions. Frequent high winds make navigation extremely dangerous at times. The pattern of the weather in Nubia has greatly changed. Shortly after the expedition's arrival at Qaşr Ibrîm torrential rain fell for several hours during the night, an almost unknown occurrence in the past in this part of Nubia. High winds and bitterly cold weather made work difficult in the first half of the season. Communications remain very difficult and the delivery of stores and mail is always uncertain, raising serious problems for the day-to-day running of the expedition.

Qaşr Ibrîm has now become an island, separated from the mainland by a stretch of water about 50 metres wide. Though this isolation has tended to reduce the populations of the less desirable inhabitants, snakes and scorpions, it has made conditions less pleasant for the workmen, who are confined for two months to a very restricted area. It has also resulted in problems of anchorage. Due to the prevailing wind the boats can now be moored only in one place and this in the immediate vicinity of the excavations, with the result that there is a constant intrusion of dust into all living quarters.

Notwithstanding all these difficulties the Director is able to report another successful season aided in no small measure by the help of various friends in Egypt. The thanks of the Society are due in particular to Dr. Gamal Mukhtar and Dr. Adry who again gave all possible help to the expedition and who arranged for the houseboats to be placed at the disposal of the expedition. As in the past the expedition is indebted to Mr. Abdin Siam for his help at Aswân. Mr. Gawdat Gabra Abdel Sayid, the Antiquities Inspector on the site, did much to facilitate the work of the expedition. To him the Director on behalf of the staff would wish to express his and their appreciation. The representatives of Thos. Cook & Son Ltd. in Alexandria, Cairo, and Aswân again afforded their assistance in forwarding the work of the expedition.

In previous Reports it has been noted that the cost of mounting an expedition to Nubia has tended to increase. The 1976 season was unhappily no exception, for costs have risen very steeply. Without additional funds over and above those available from the Society it would not have been possible to have achieved as much as was achieved at Qaşr Ibrîm in 1976. Once again, through the kind offices of Professor Michalowski,

generous help was forthcoming from the Polish Centre for Mediterranean Archaeology in Cairo. And special mention must be made of the financial assistance from the Smithsonian Institute in the United States. The Institute's support of Professor Adams's participation in the season's work was a major contribution to the success which was achieved.

The main areas chosen for excavation lay in the south-west sector of the site, comprising the areas to the south and west of the Temple Church and bounded on the north by the Podium and extending to the great bastion, alongside of which are the remains of the South Gate, excavated in 1969. This work entailed the removal of the remaining Bosnian houses and underlying Christian structures. It was also decided to investigate further the X-Group houses which had been uncovered in 1972 and 1974 and to examine again the Taharqa Temple complex. In order to use the labour force and available time most effectively the area was divided into two parts, one under the control of Professor Adams and the other under Mr. Allen. In addition to his description of the work in the X-Group area Professor Adams has also provided short reports on the fortifications and the pottery. The section on the textiles has been written by Miss Crowfoot. The report on the West Piazza and some remarks on the finds are by the Director.

II. *X-Group Remains*

By W. Y. ADAMS

In 1976, as in the two preceding campaigns, a major part of the season's effort was devoted to the excavation of X-Group houses in the south-western portion of the site. These are, apart from the Bosnian structures, by far the most extensive and best-preserved habitation remains at Qasr Ibrīm, and their size and structure contrasts markedly with anything previously known from the X-Group period. The houses so far investigated (see Figs. A and B) are grouped in tight, contiguous clusters along a network of intersecting streets or passages, giving an over-all impression of urban planning which is quite unexpected in this supposedly barbarian period. For this reason it has seemed desirable to investigate in considerable detail the plan and characteristics of the X-Group habitation complex—an objective which now seems doubly worthwhile since we have textual evidence to suggest that Qasr Ibrīm was a royal capital (see below).

The excavations of 1972 and 1974 uncovered six X-Group houses, in two lines of three facing each other across the narrow Tavern Street (Fig. A). All but one of these are essentially comparable in size and design: they are stoutly built square buildings, apparently two storeys high, with an interior stairway leading from the lower to the upper floor. These structures have been designated as 'X-Group unit houses'.¹ All of them appear on stratigraphic grounds to have been built at or near the beginning of the X-Group period. Large sub-floor storage magazines, roofed over with timbers and matting, are a feature of nearly all the X-Group houses excavated before 1976.

¹ For more extended description see Plumley and Adams in *JEA* 60 (1974), 215.

Fig. A

Early X-Group

Not to Scale

(X Level)

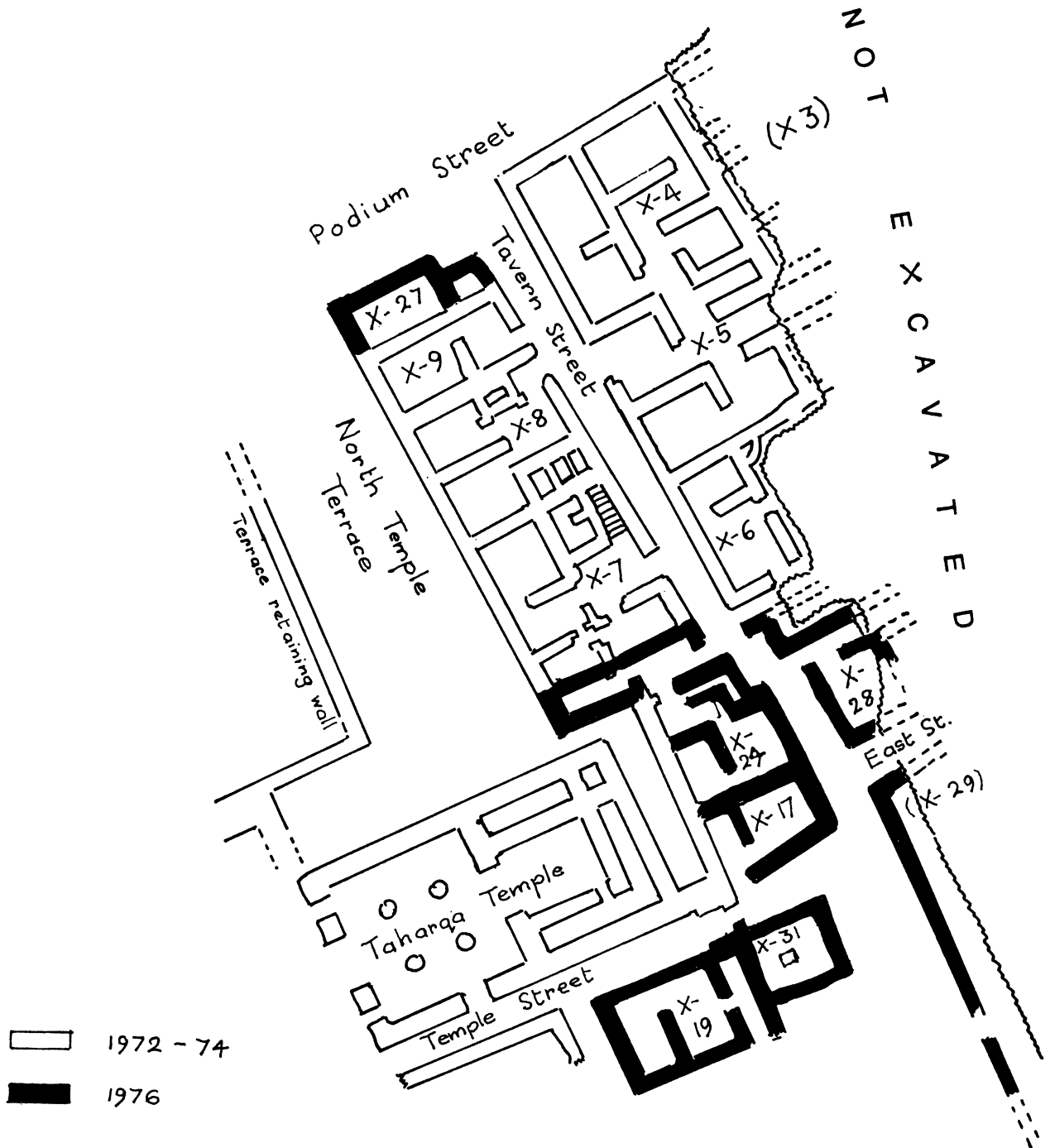


FIG. A

Fig. B

Later X-Group

Not to Scale

(X2 Level)

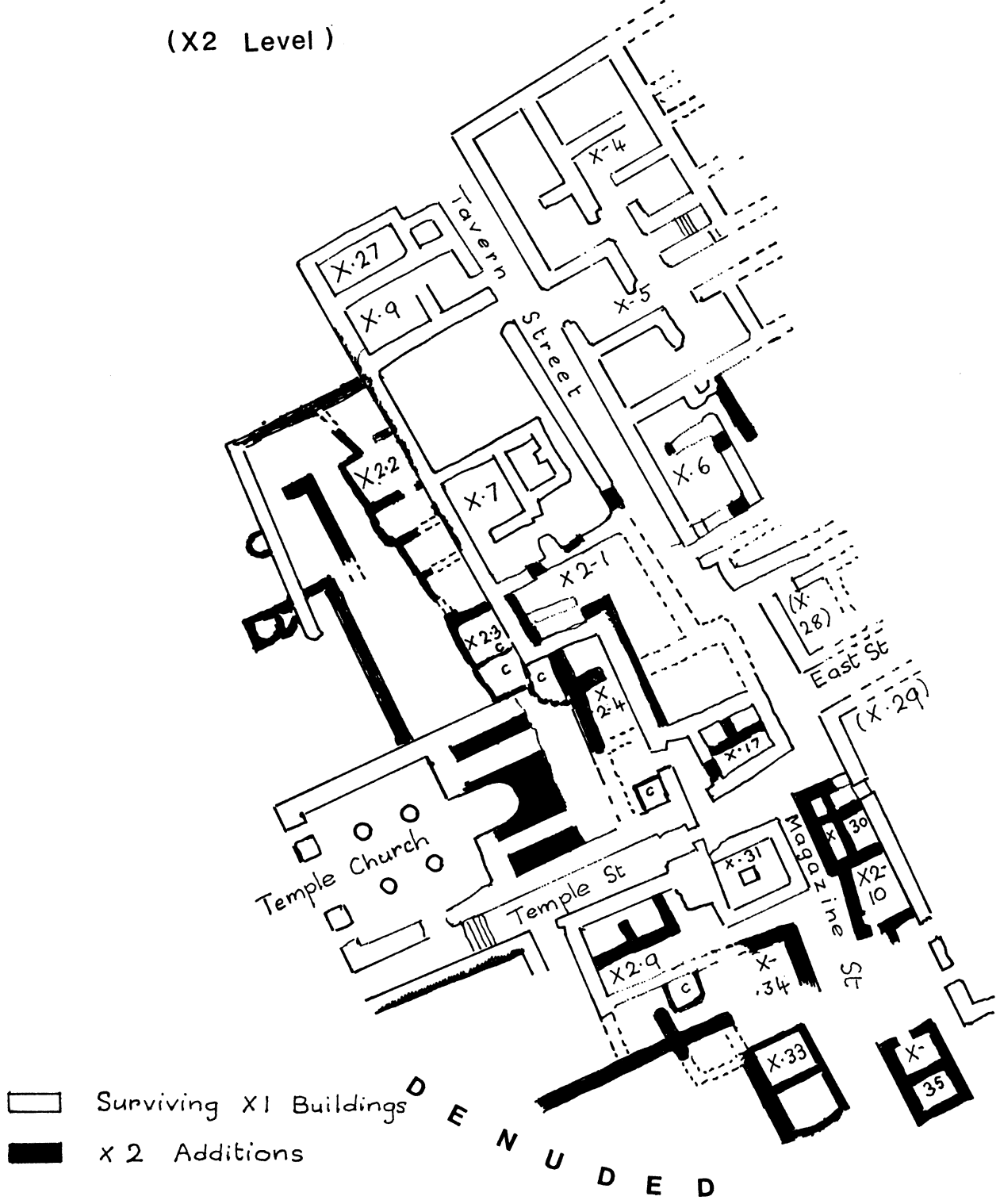


FIG. B

D

Six additional early X-Group houses were discovered and/or excavated in 1976 (shown in black in Fig. A). They are contiguous with the previously excavated houses, and exhibit many of the same features of construction, but as it happens none of them exactly reproduces the 'unit house' plan common to most of the previously known X-Group structures. *House X-24* comes closest in this respect, being more or less comparable to the 'unit houses' in size and having an interior stairway leading presumably to a second storey. The house has, however, a very odd and irregular outline (Fig. A), the result of its having been adapted from the remains of two older, previously separate houses. *House X-17*, which adjoins *House X-24* to the south, is likewise built upon the remains of an older building which may be of Meroitic age. Although comprising only two rooms, the X-Group house, nevertheless, had a stairway leading either to a second storey or to the roof. The refuse fill in this house yielded the season's outstanding artefactual find, a large bronze basin with lion-head handles (pl. V, 1).

House X-27, at the north end of Tavern Street, also has only two rooms, as has the house which adjoins it to the south (*House X-9*, excavated in 1974). It is possible, however, that these two originally comprised a single dwelling, their separation being the result of a remodelling in later X-Group times. *House X-27* as found had no lateral entrances; its two rooms must have been essentially storage structures entered from above, like many of the buildings of the later X-Group period (described below).

House X-19 is in many ways the most interesting of the buildings excavated in 1976, both from the standpoint of its structure and of its contents. Unlike its neighbours it stands apart from any adjoining house (except for the presumed offering chamber *X-31*, which will be described in a moment), but it is adjoined by the monumental stone gateway and passage ('Temple Street') which once gave access to the Taharqa Temple from the east. The house as originally constructed consisted of an entrance passage, a stairway, and two large rooms. The entire area beneath the floor in the largest room was occupied by two storage magazines, the only such features found within any of the houses excavated in 1976. At some time after the original building these magazines were filled with refuse so as to provide a solid flooring (but without removing their original timber and cane roofs, which we found nearly intact). A partition was then run all the way across the room, dividing it into two much smaller chambers. The adjoining room to the west was likewise divided in two by an added partition. Finally, late in the X-Group period the entire house was rebuilt on a somewhat different plan, preserving only the north and west walls of the older building (see Fig. B, *House X2-9*).

The group of papyrus letters which constitutes the season's most dramatic find (see Textual Finds, below) was found on the floor in the largest room in *House X-19*, near the base of the west wall. Their deposition does not date from the earliest occupation of the house, but from a time after the room had been divided by a cross-partition, but before this in turn had been reinforced with an added buttress. This, together with ceramic evidence, allows a dating of the manuscript finds sometime around the second half of the fifth century A.D.

'*House*' *X-31*, adjoining *House X-19* to the east, is not properly a house but an open,

unroofed area surrounded by a low retaining wall. This enclosure was found to contain more than forty complete pottery vessels of all kinds and sizes (pl. V, 3), despite the fact that it was unroofed and was evidently not designed for safe storage in the same way as were many other X-Group structures. The fact that the room adjoins the monumental stone gateway (cf. *JEA* 61, pl. VII, 2) leading into Temple Street, and presumably into the temple itself (cf. Fig. A), suggests the possibility that it may have been a repository for offerings left by the temple gate.

Two other early X-Group houses, X-28 and X-29, were discovered but not excavated in 1976. They lie to the south of the previously excavated buildings along the east side of Tavern Street, carrying on the line of the street nearly to the southern limit of the Qaşr İbrîm citadel. An intersecting street (provisionally named East Street) separates House X-28 from X-29.

Like the buildings investigated in earlier seasons, the X-Group houses excavated this year were filled, as high as the walls themselves were preserved, with a dense accumulation of midden deposit. This refuse yielded the usual abundance of artefacts and even some whole pots, apparently casually discarded by their owners. Typically, each house exhibited a succession of occupation levels as well as architectural modifications over time.² House X-17 had four distinct floor levels, House X-19 had three, and Houses X-24 and X-31 had two each.

The buildings thus far described, and shown in Fig. A, are all assignable to the earlier part of the X-Group period, probably corresponding to the fifth century A.D. Our excavations, particularly in 1974 and 1976, have disclosed quite a different pattern of development in the later X-Group period (cf. Fig. B, on which additions of the later period are shown in black). Construction which can be dated after A.D. 500 is primarily of two sorts: small, rather flimsy storage structures which were built against the outside walls of the older houses (cf. X2-2, X2-3, X2-4, X2-10, etc.),³ and internal modifications within the older houses which had the effect of converting their ground-floor rooms into cellars, by the blocking of exterior doors and the addition of new partitions (cf. X-6, X-7, X-17, X2-1, and X2-9). In part this development may have been in response to the accumulation of refuse in the streets to such a degree that original ground-floor doorways were no longer usable. It seems possible too, however, that there was a change in the pattern of usage of the citadel area, from a combined residential and storage function to a more exclusively storage function.

Throughout the area excavated in 1976 we found, as in the adjacent area investigated in 1974, that there had been almost no further building after the end of the X-Group period. When they had been largely filled with rubbish, the remaining upper portions

² Cf. Plumley and Adams in *JEA* 60 (1974), 215-17.

³ The system of house numbering employed at Qaşr İbrîm may require a word of explanation here. All buildings are given a number as well as a letter, or letter-and-number, prefix identifying the period in which they were first built. Houses dating from the earlier part of the X-Group period have the prefix X-; those from the later X-Group have the prefix X2-. Buildings which later underwent substantial modification are renumbered to indicate the period of their rebuilding; thus House X-19 of the early X-Group period becomes House X2-9 in the later period. If they remained in use without substantial modification, however, they continue to carry the original prefix. See also Plumley and Adams in *JEA* 60 (1974), 214-15 n. 3.

of the X-Group houses were deliberately dismantled, and the whole area became an open piazza surrounding the Temple-Church. In Late Christian times, after A.D. 1200, there was, however, some reuse of the old X-Group houses for subterranean storage. In several cases accumulated refuse was dug out, damaged walls were repaired and heightened, and new roofs of timber and palm-leaf ribs were installed. Specific traces of this activity were found in Houses X-30, X-33, X-35, X₂₋₁, and X₂₋₄.

The exact relationship between the X-Group village and the old Taharqa Temple which lay just to the west of it remains for the moment uncertain. We know that the temple was built in Napatan times, was extensively repaired and enlarged in Meroitic times, and was converted to a church at the very beginning of the Christian period, but the use of the building in X-Group times has not actually been demonstrated. A good deal can, however, be inferred from the spatial arrangements surrounding the temple. It is clear from Fig. A that in early X-Group times a deliberate effort was made to avoid encroaching on the temple precinct—witness the alignment of the west wall of Houses X-7 and X-24 (which may in fact be built directly upon the stump of an older temenos wall). This suggests that the temple was still considered sacred ground, even if not actually in use. The construction of an ornamental stone gateway at the east end of Temple Street (Cf. *JEA* 61, pl. VII, 2), which undoubtedly dates from early X-Group times, also argues for the continuing importance of the building.

The situation in later X-Group times is much less clear. The eastern end of the temple had by now fallen into ruin; the original brick walls were much denuded, and they and the surrounding area were actually buried out of sight in a deep accumulation of refuse. Before the end of the X-Group period a storage structure (X₂₋₄, Fig. B) was built directly over the area formerly occupied by the east temple wall, and additional structures (X₂₋₃) were built adjoining the north wall. By this time, too, refuse had accumulated to a depth of more than one metre in Temple Street.

It seems evident that the area once occupied by the east end of the Taharqa Temple was no longer treated as hallowed ground in late X-Group times. On the other hand, there is no evidence of X-Group encroachment in the more westerly parts of the building—unless the X-Group intrusions were all taken out again at the time of its conversion into a church. In view of these circumstances we have to consider the very real possibility that the conversion (which put the whole eastern end of the building out of commission; see Fig. B) had already taken place in what we are conventionally calling late X-Group times. Our excavations of 1972 and 1974 have demonstrated that the filling material which was inserted behind the church apse at the time of its construction consisted exclusively of X-Group material, without any admixture of Christian potsherds.⁴ In 1976 we discovered also that the floor surface in Temple Street which connects with the earliest *church* floor within the building is overlain by X-Group and not by Christian sherds. In other words, the conversion of the building from temple to church definitely took place before X-Group pottery gave way to Christian pottery in Nubia. Of course we do not yet know precisely when the ceramic transition (which was rapid but not instantaneous) took place; it was not necessarily at the

⁴ See Plumley and Adams in *JEA* 60 (1974), 231.

precise moment when the new faith was adopted by the Nubians. We are nevertheless reinforced in the belief that the Temple-Church may represent one of the very earliest Christian buildings south of Philae.

III. *The Fortification Walls*

By W. Y. ADAMS

Investigation of the fortress girdle wall was not an intentional part of the 1976 excavation programme at Qaşr Ibrım. However, the collapse of several sections of the wall since the previous campaign (the result of undermining due to wave action), together with our own preliminary excavations, allowed us to make a number of important observations and deductions. While it is obvious that the original fortification of the site goes back at least to Meroitic times (witness especially the character of the now-destroyed East Gate),⁵ it also became clear in 1976 that the bulk of the fortification wall which is visible today is the work of the Bosnian era, dating probably from the sixteenth or seventeenth century. This includes, specifically, the projecting bastions at the southern and western extremities of the site.

Between the two episodes of fortification there is now evidence to suggest that the site was partly or largely unwalled—either because the original Meroitic walls were unfinished or because they were subsequently destroyed. Thus, we found that both the southern and western margins of the site had been subject to slope erosion which had carried away parts of the X-Group and Christian houses, and had caused others to slump outward (cf. Fig. C). This would not have been possible if there had been an intact retaining wall around the citadel, such as was built by the Bosnians.

At least in Late Christian times we infer that the citadel at Qaşr Ibrım was a level-topped platform terminated on its western and southern sides by a steep, eroded slope, with perhaps just the denuded stump of the original Meroitic wall at the base of the slope. The Bosnians built the original girdle wall back up to, or probably above, its original height, filling in the space behind it with loose refuse and ash which contrasts markedly with the densely compacted Christian deposits underlying (Fig. C). In order to provide stability for the wall, palm logs were inserted into it at frequent intervals, which served to tie the wall itself to the refuse fill behind it. These tie-timbers, the ends of which can readily be seen from the outside, are the particular hallmark of Bosnian construction in the girdle wall.

We do not know that the Meroitic stone walls adjoining the East and South Gates were themselves the oldest fortifications at Qaşr Ibrım. Our excavations in the south-west corner of the site in 1976 revealed evidence of a massive, very denuded brick wall which may be even older. The date of its construction remains for the moment entirely conjectural.

Fig. C presents a purely hypothetical and schematic cross-section of the western face of the citadel, to illustrate the relationship between the (presumed) original

⁵ Best illustrated in *Illustrated London News*, July 11, 1964, 53, fig. 15.

Fig. C

SCHEMATIC

PROFILE.

WEST SIDE OF SITE

(Not to scale)

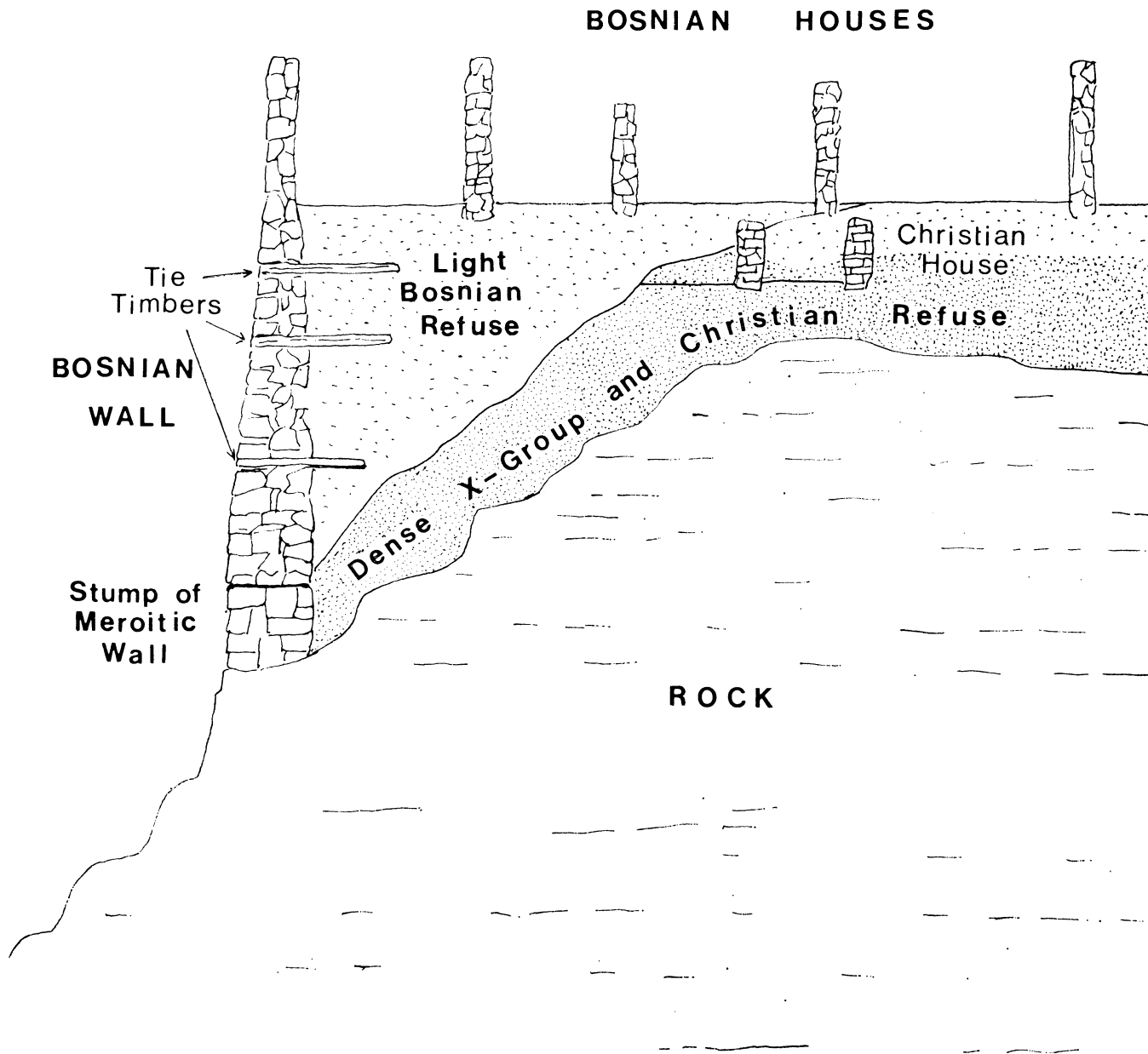


FIG. C

Meroïtic girdle wall, the eroded slope of post-Meroïtic times, and the Bosnian rebuilding. It is not based on actual measurements or on structures encountered in any given place.

IV. Pottery

By W. Y. ADAMS

The 1976 excavations yielded more than 160 complete and nearly complete pottery vessels. As usual, most of these came from the X-Group refuse deposits. In addition, as in every season since 1972, we saved, cleaned, examined, and tallied every potsherd found in the excavations—a total of more than 100,000 sherds in all. Sherds were identified as belonging to one or another of the 105 known Nubian and Egyptian pottery wares; the number of sherds of each ware was recorded for each excavation unit.⁶ Since the dates of manufacture of most Nubian and Egyptian wares are known, this procedure allowed a much more precise dating of deposits and buildings than would have been possible on stratigraphic grounds alone.

For the most part the pottery examined in 1976 contained few surprises. We did, however, observe that all of the nuances of vessel form and decoration which are thought of as typically X-Group occur at Qasr Ibrîm only in pottery of the later X-Group period. In the earlier deposits (which have actually yielded the great bulk of our collections) we find only pottery in the undifferentiated (and largely undecorated) Roman Egyptian tradition, which is certainly ancestral to the X-Group but lacks most of its distinctive features.⁷ If Qasr Ibrîm is typical of Nubia as a whole in this respect, then we shall certainly have to assign the great majority of known X-Group sites to the sixth rather than to the fifth century. There is, however, a possibility that in this, as in so many other respects, Qasr Ibrîm is not typical. It is clear at all events that pottery is beginning to furnish a key to the internal chronological ordering of the X-Group remains that has heretofore been lacking.

In deposits underlying the X-Group, we continue to find very little of the elaborate Meroïtic decorated pottery that we should have expected. Instead we have for the most part undecorated utility wares which are unfamiliar from earlier excavations, and which we shall have to learn to recognize as we go along. Many of these embody materials other than the common Nile mud used in Nubian pottery; they look more like imports than like local products.⁸ Whether we are getting into early Meroïtic deposits of a kind which have not previously been encountered in Lower Nubia, or

⁶ The method of pottery analysis which is employed at Qasr Ibrîm has been described in some detail by Adams in *Kush* 15 (1972), 1-50, and in Raymond *et. al.*, eds., *Primitive Art and Technology* (Calgary, 1975), 81-91. A comprehensive explanation of the field methodology of pottery analysis will appear in *Ceramic Industries of Medieval Nubia (Memoirs of the Archaeological Survey of Sudanese Nubia, vols. 1-11)*, in preparation.

⁷ For examples see especially Mond and Myers, *The Bucheum (Egypt Exploration Society Memoir 41, 1934)*, III, pls. 79-80, 136-9.

⁸ Cf. Plumley and Adams in *JEA* 60 (1974), 227.

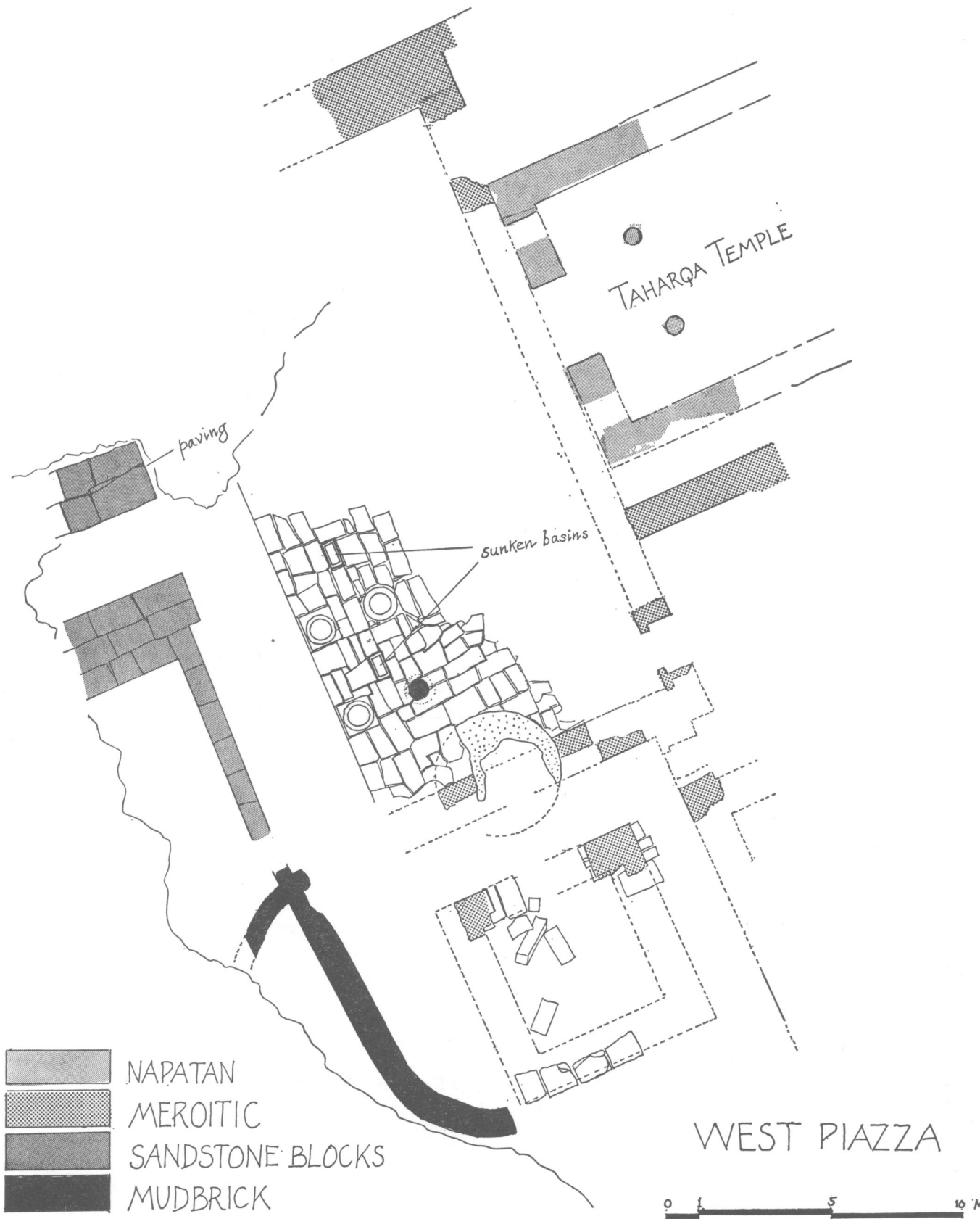


FIG. D

whether the people of Qasr Ibrim in later Meroitic times were using pottery different from that of their neighbours, is a question that can be answered only by further excavation.

V. *The West Piazza*

By J. MARTIN PLUMLEY

This area was to the west of the Temple Church as far as the line of the fortification walls and bounded on the north by the excavated Podium area and on the south by the south bastion wall flanked by the South Gate. The southern half of the area was covered with the remains of the Bosnian structures 152-6, 174, and 176-9. The greater part of the northern area was an open space apart from the remains of a Late Christian house overlooking the Podium. Excavation was to confirm that since the Late Meroitic Period this sector of the site had remained an open space, first serving as a western piazza to the Temple Church and later dug into to contain a series of storage pits.

During the dismantling of the Bosnian walls a number of pieces of carved stonework were recovered. Most of these were originally associated with the Napatan Period and are further evidence that Taharqa's building was of some size and not merely a small shrine. At some time prior to the arrival of the Bosnian garrison in A.D. 1528 and the erection of their stone houses, part of the southern end of the Piazza had been used for a number of intrusive Late Christian burials. Two red bricks whitewashed and bearing the names Ⲛⲓⲛⲓⲛ and Ⲛⲓⲛⲓⲛ were found in this area. Possibly they may have originated from a tomb superstructure or from the Temple Church. The Bosnian structures built over this area yielded very little in the way of finds other than scraps of paper inscribed in Arabic, broken pipe bowls, fragments of cloth, and the occasional wooden peg or key. On the Piazza there was very little evidence of building in the Christian period except for some very limited Early Christian occupation immediately in front of the west end of the Temple Church.

The removal of the thick layer of deposit underlying the surface of the West Piazza revealed an extension of pavement to the west of the Temple area and the foundations of earlier structures. See Fig. D. The extension of the pavement contained four massive column bases, the stump of one column still being *in situ* (pl. V, 4). Unlike the columns in the Taharqa Temple, the surviving column stump shows no evidence for decoration, and all four columns, to judge from their bases, must have been much larger than those in the Taharqa Temple. Some fragments of painted plaster found nearby revealed that this was the means used for decoration in lieu of carving. Two rectangular basins, sunk into the pavement, were found close to the bases. The impression at present is that the columns may have supported a portico giving access to the Temple and approached from the South Gate. The sunken basins may have been intended for ritual washing of the feet before entering the Temple. That this area of the Temple is later than the building of Taharqa is indicated by the finding of a block containing the *prenomen*

of the Pharaoh built into the west face of the platform upon which the column bases are situated. A similar block containing the name of Taharqa was found in 1974 built into the foundations of the sanctuary of the Temple (cf. *JEA* 61, 16).

A short distance to the west of the platform lie massive sandstone foundations, resembling in shape the letter L (pl. VI, 1). Since in the time available it did not prove possible to excavate the whole of this structure, it is not easy to conclude what kind of building once stood here. It might be seen as the foundation for a pylon and adjoining wall, but there seems scarcely enough room westwards to the line of the fortification wall for a second pylon and wall. It is possible that what has been uncovered may have been the south half of a massive gateway and that further excavation will reveal the evidence for the northern half. Certainly trial pits in the north section of the West Piazza have revealed the presence of stone walling and paving below the unexcavated deposit.

Excavation of the southern end of the structure provided the greatest surprise, in that the clearing operations revealed a section of semi-circular wall, constructed in mud brick and strengthened with large pieces of projecting rough stone, turning eastwards (pl. VI, 2). Indications were also found that a second parallel wall exists here. As yet it is not possible to determine either the date or purpose of this unique structure. One possibility is that it may form part of an early fortification system. A foundation deposit was found against the inner face of the semicircular wall. This comprises two small iron spear heads, two iron probes(?), and five small wooden tablets, three covered with gold leaf and two with thin sheets of silver secured to the wood with miniature nails. Unfortunately none of the objects is so inscribed as to enable a date for the wall to be established. However, there are faint signs on the silver sheeting which suggest that they may have been inscribed originally with ink. A short line of faint indentations on one silver sheeting may possibly represent the Greek ending—*IOC*.

It had been hoped that the 1976 Expedition might succeed in establishing the relationship of the Podium to the recently discovered Meroitic structures. In the event this did not prove possible for the north section of the West remains to be excavated down to the level of the Podium and until this is done the question of the relationship must remain unanswered.

VI. *Artefactual Finds*

By J. MARTIN PLUMLEY

As the records of previous seasons at Qaṣr Ibrīm show, a variety of artefactual finds can be expected on this remarkably rich site. In 1976 the number of finds was smaller than in previous years due to the fact that one of the two main areas chosen for excavation was largely found to be open spaces rather than a residential locality. Though fewer, the objects found in 1976 continued to show a variety of shapes, sizes, materials, and purposes. In this preliminary report a few only of these finds can be mentioned.

The examples of stonework ranged from the Napatan Period down to the end of the Christian Period. The Napatan examples are almost entirely fragments from temple

building. Most bear the names or titles of Taharqa, further confirmation that the building erected on the site by this Pharaoh must have been of considerable size. A slab, cracked in several places, bearing the Horus-Name, the *pre-nomen* and *nomen* of Taharqa and mentioning Horus of Miṣam, was found reversed in the paved floor of the South Sacristy of the Cathedral (pl. VI, 3). The lower portion of a standing figure carved out of black granite and bearing the titles of Ramesses III was found to the west of the Temple complex (pl. VI, 4 and fig. E). The plinth supporting the lower portion of a seated figure of the same Pharaoh was found near the same area in 1974 (*JEA* 61, pl. X, 3).

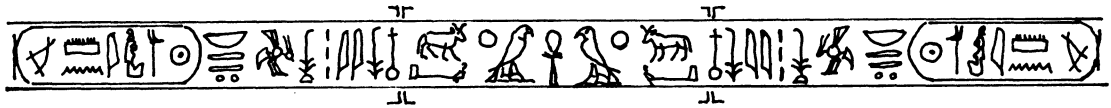


FIG. E

Undoubtedly the most remarkable object found in 1976 was the fine ornamental brass basin which came from level 3 of a room in an X-Group house, X-17 (pl. V, 1). In diameter 21.5 cm and with an over-all height of 10.5 cm, the basin is supported on three ridged square feet. Through loops created by the bodies of two young lion-cubs springing from the tops of two moulded lion heads, soldered to the face of the basin, run two solid ring handles (pl. V, 2). The basin, which is almost pristine in condition, is similar in style and workmanship to objects found in the royal burials at Ballana and Qustal. Associated with the basin was a copper frying-pan, 21.5 cm in diameter, and also in a perfect state of preservation (pl. VIII, 1). Other metal objects discovered, some well-preserved, included needles, knives, sickles, nails, and coins. The coins were found in the Temple complex area, not far from the place of the find of coins in 1974 (cf. *JEA* 61, 16), but unlike that find were in a poor state of preservation. There is no doubt that metal objects, unless deeply buried, are now tending to become subject to corrosion as a result of the increasing humidity in Nubia. It is noticeable that very few coins have been found outside the Temple complex area. This strengthens the conclusion that money always played a very minor part in the economy of Nubia and that a barter trade was institutional.

Leather objects include belts, harness, containers, possibly parts of quivers, pieces of clothing, sandals, and shoes. Some examples are finely tooled in a variety of designs. Woodwork is represented in various carved pieces. Some are clearly legs from beds, which, known as *angrib*, are widely in use in the Sudan today. Basketry is represented by a number of fine examples of this craft (pl. VIII, 2). Palm fibre is almost invariably used and the styles and techniques which can be traced from the Late Meroitic period onwards are still reflected in modern examples from the Nile Valley.

As has been observed in previous Reports it is possible that Qasr Ibrīm may have been, at least up to the end of the Christian period, an important centre for manufacturing crafts. It is difficult to account otherwise for the large number of spinning and weaving implements which have been found on the site. It is perhaps of some

significance that Abu Salih in his account of Qaşr Ibrîm mentions that after his capture of the fortress in 1173 Shams Ed Dowla removed from the place a very large quantity of cotton which he sold in Qus (cf. Abu Salih, 'The Churches and Monasteries of Egypt', *Trans. Evetts*, p. 267). Various other objects such as small knives, needles, etc. might have been associated with the manufacture of articles in wood, leather, and palm fibre.

VII. *Textual Finds*

By J. MARTIN PLUMLEY

Representative inscribed material from the Meroïtic Period down to the final phase of the occupation of the site was found in the 1976 season. Materials used included papyrus, parchment, paper, leather, wood, and potsherd. The cursive Meroïtic script appears on papyrus, ostraca and small rectangular wooden tablets (pl. VII, 3). The finding of a number of these wooden tablets in other seasons at Qaşr Ibrîm suggests that their use might have been widespread in Meroïtic times to supplement papyrus. The Coptic fragments on papyrus and parchment, less often on paper, represent a period of time from the fifth century at the latest down to the tenth or possibly the eleventh century. Much of the content of the Coptic is clearly ecclesiastical. It is more difficult to assess the earliest date for the Medieval Nubian fragments, for much of the writing is similar to that used in the dated twelfth-century documents found in 1974 and the thirteenth- to fifteenth-century documents discovered in 1964. A small amount of Greek was found, mostly on parchment and apparently ecclesiastical in content. Arabic, sometimes associated with Medieval Nubian, is represented in a large number of fragments. A number of complete Arabic documents, however, were discovered under the floor of a Bosnian structure, 171. These can be dated to the last quarter of the seventeenth century and are similar in style to documents from the 17th and 18th archive found in 1966.

The most important textual find was discovered in the house X-19 on the floor of what had been a storeroom under the main structure (cf. fig. A). Close by on the floor lay three large amphorae of white ware, obviously imports (pl. VII, 4). Two were complete, one broken into several fragments. Two of the amphorae were sealed at the mouths and two were inscribed on the neck and shoulders. The writing is semi-cursive Greek, containing the Christian monogram *XMI* and what appear to be a series of numbers. On the floor up against the west wall four papyrus scrolls were found, wrapped together in a tight bundle (pl. VIII 1). It proved possible to unroll all four documents at Qaşr Ibrîm and to photograph and copy their contents. The largest of the scrolls, written in a good cursive hand but in a most barbarous rendering of Greek, is the subject of a separate article in this number of the *Journal* (cf. pp. 159 ff.). It is a letter from Phonen, the King of the Blemmyes, to Abouni, the King of the Nobatae, and among other matters mentions Silko, known otherwise by his triumphal inscription in the Temple of Kalabsha. Though the scroll is not dated, the style of

writing suggests a mid fifth-century date for its composition. This is important evidence for fixing the date of Silko who has hitherto been assumed by some to have reigned in the following century. Reference to Mr. Skeat's article will reveal some of the problems presented by this most important text, not least the difficulty of providing a continuous translation. While it is very probable that the letter was dictated in the Blemmyan tongue to a scribe whose knowledge of Greek was deficient, it is also possible that the Blemmyan ruler dictated himself the kind of lingua franca Greek then generally understood in Nubia. No doubt, if we had some of the letters which are mentioned as having been exchanged between the two monarchs, some of the problems of interpretation would be greatly eased.

The other three letters are written in Sa'idic Coptic. All from separate writers are Christian documents written to the same person, Tantani, who bears the rank of a phylarch. He was clearly a person of some importance, for in one of the documents from a Byzantine official he is described as 'The lord of those who belong to Nouba'. Tantani could well be a Nubian name. It is tempting to see in him one of the officials appointed by Silko after his final victory over the Blemmyes. Certainly the form of the handwriting of one of the Coptic scrolls is very similar to a Greek hand of the fifth century. The largest of the Coptic scrolls bears at the top the words $\tau\epsilon\rho\alpha\lambda\eta\eta\iota$ $\bar{\eta}\nu\epsilon\pi\iota\sigma\tau\omicron\lambda\eta$ which would indicate that it is a translation from a Greek original. Though the scrolls have been found at Qaşr Ibrîm it is by no means certain that Qaşr Ibrîm was the place of their original reception. In the case of the communications to Tantani, if, as seems probable, they are later in date than the letter of the King of the Blemmyes, it is not impossible that he may have been resident at Qaşr Ibrîm as the appointed representative of Silko. If the evidence of Olympiodorus, who visited Nubia early in the fifth century, is to be believed, one would have expected the King of the Blemmyes to have been resident at Qaşr Ibrîm rather than the King of the Nobatae. If the King of the Blemmyes was residing at Qaşr Ibrîm, it is possible that the letter was never sent, was found later at Qaşr Ibrîm, and passed into the archives of Tantani after the final defeat of the Blemmyes by Silko. On the other hand, it may be that the King of the Nobatae was residing at Ibrîm, had formerly been under the suzerainty of the Blemmyes, but had gained a measure of independence prior to Silko's move against the Blemmyes. Very possibly further elucidation of the documents will show that the situation then was far more complicated than a straight conflict between the Blemmyes on one side and Silko on the other.

VIII. *Textile Finds from Qaşr Ibrîm: A Preliminary Note*

By ELISABETH CROWFOOT

Excavations of the fortress city of Qaşr Ibrîm have already yielded probably the largest collection of textile remains found on any late Egyptian site, representing all periods of occupation from c. 250 B.C. to A.D. 1811.

Apart from burials of ecclesiastical dignitaries found in the 1964–6 seasons⁹ and a few shrouded Late Christian interments the textiles come entirely from domestic debris, from occupation levels in houses and the contents of refuse pits. The techniques represented include tabby weaves, some with coloured checks, stripes and bands, extended tabbies (basket, half-basket, and weaves with self-stripes of multiple wefts), tapestry (pl. VIII, 2), various types of piles, weft float patterns or embroidery, a variety of twills, double weaves, brocade, satin, tablet weave, fringes in open-work, plaits, knitting, and netting.

The Late Meroitic material is almost entirely of undyed cotton, originally white. The emphasis is on texture—all types of extended tabby, including fabrics with heavy ribs, sometimes of as many as twenty threads thrown together, and simple pile, over-all or in geometric patterns, and fringes with lattice patterns in open-work technique of which samples were found at Meroë.¹⁰ The only colour decoration is in blue cotton, a few fine tapestry patterns, and some rather coarse embroidery, suns or flowers, bunches of durra and *ankhs*, and in one case the Meroitic face which has been found also on pottery. Two garments are identifiable, a sort of cod-piece, fastened around the waist and between the legs with strings, and fragments from kilts, in one case with a curved lower edge shaped during the weaving so that the fringe could be worked directly on the warp ends.

The introduction of wool indicates the gradual assimilation of a nomadic people with their sheep. Its first use is decorative, darker blue threads in bands, tapestry, and lattices. Hesitation to use it for general weaving may have been because the fibre was considered weaker, or because its harshness was unpleasant to skins used only to cotton. Late Meroitic samples show successive stages of experiment—first a tabby weave with cotton warp and weft threads formed of cotton and wool fibres spun together; then a half-basket weave in which one of the two wefts is cotton, one wool, followed by another in which both wefts are wool, and finally a tabby with cotton warp and wool weft; after which it was presumably accepted as a fibre that could be used on its own. The X-Group woollens include a number of coloured and banded textiles, often in naturally pigmented shades of brown, buff, and black, from blankets or cloaks such as those used as shrouds at Melik el-Nasir and Ambikol.¹¹

Among over 4,500 fabrics examined to date¹² about 90 per cent at all periods are tabby or tabby-based weaves. The presence of fine-quality veils and small groups of high-class imports suggests the periods of prosperity. Wool fragments with similar purple tapestry symbols to those found at Dura-Europos¹³ indicate Roman contacts in the late X-Group material. Egypt is the source for Coptic double weaves,¹⁴ fabrics with

⁹ J. Martin Plumley, 'Qaṣr Ibrīm 1963–1964', *JEA* 50 (1964), 3, 4; id. 'Qaṣr Ibrīm 1966', *JEA* 52 (1966), 11.

¹⁰ F. Ll. Griffith and G. M. Crowfoot, 'On the Early Use of Cotton in the Nile Valley', *JEA* 20 (1934), 10, 11.

¹¹ Khartoum Museum, Accession nos. 22814, 22815, 22885.

¹² The considerable quantity of textiles from the 1974 excavations is not yet available for study.

¹³ R. Pfister and Louisa Bellinger, *The Excavations at Dura-Europos*, Final Report IV, Pt. II, 'The Textiles', (Yale, 1945) 10, 11, figs. 3–5, pls. 10–13.

¹⁴ G. M. Crowfoot and Joyce Griffiths, 'Coptic Textiles in Two-faced Weave with Pattern in Reverse', *JEA* 25 (1939), 40–7.

flax warp and cotton weft from Fostat, and silk tapestries; whereas the source of glazed cloth with Kufic inscriptions, embroidered in red silk, used as shrouds in Early Christian burials, may be Mesopotamian.¹⁵ The tiny fragments of silk tabby, satin and brocade, printed cottons, and threadbare pile carpet scraps from both Christian and Bosnian levels may come from Iran or Syria. Twill weaves again are rare and obviously imported—a few woollen and cotton three- and four-shed examples from Late Christian areas, and fine glazed eight-shed pillow-covers from Bosnian levels.

The Christian burials of the eleventh to the twelfth centuries and that of Bishop Timotheos, A.D. 1372,¹⁶ have given complete patterns of dalmatics, trousers, and an impressive travelling cloak. Apart from these and the Meroïtic remains, the only garments retrieved are Late Christian and Bosnian caps, and babies' dresses cut from other garments. Patched and repatched tunic remains, scraps of belts, girths and rugs, layers of assorted rags tacked together perhaps for saddlecloths, dolls' dresses (pl. VIII, 2), children's balls, pen-wipers, bottle stoppers, hobbles for animals, and stained bandages, give a picture of domestic textiles in the last stages of use and reuse.

When the field-work was concluded on March 11 the larger part of the staff and the workmen began their journey to Aswân, leaving Professor and Mrs. Adams and their two sons and Mr. R. Allen on the houseboat *Gerf Hussein* to await the return of one of the available tugs from Aswân. During this period Professor Adams and Mr. Allen were able to check on various aspects of the past two months work and to write up field notes at leisure, a distinct advantage in dealing with the complexities which this intensively occupied site with its many superimposed structures has always raised for the excavator.

Owing to problems of transport it did not prove possible to take the season's finds to Cairo for a division. The finds were therefore put into store in the Aswân Museum together with the finds from the previous season. It is hoped to arrange for a division later in the year when the finds of both seasons can be transported to Cairo.

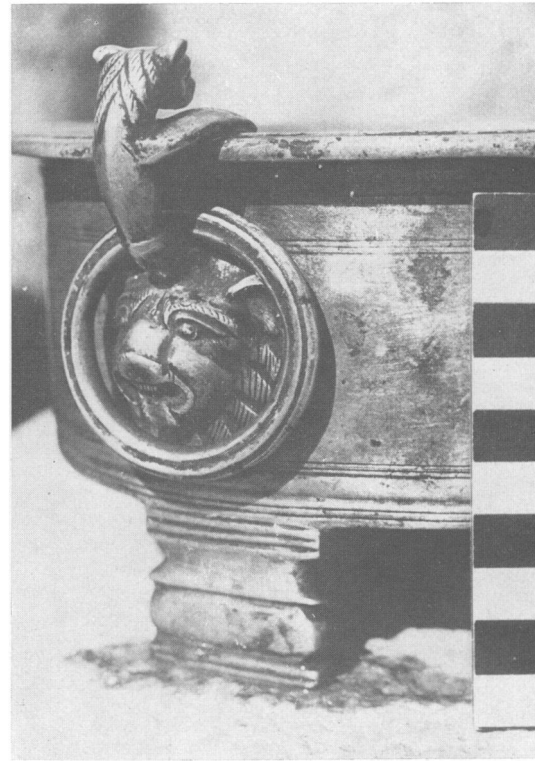
Much remains to be done at Qaşr Ibrîm. The level of the lake has risen very considerably since 1974. It is to be regretted that the interesting East Gate has now completely disappeared beneath the water, no doubt with the irreparable loss of much valuable information. The action of the water is sapping large stretches of the fortification walls. The greater part of the great north-west bastion has collapsed into the lake and it is probable that it will not be long before the South Gate falls in ruins into the water. It is not possible to forecast how high the level of the lake will eventually reach on the site. Certainly time is short. Every effort must be made to use what time remains to rescue as much as possible from this unique site which, without question, still holds the answers to many of the unsolved questions of the past history of Nubia.

¹⁵ Nancy Pence Britton, *A Study of Some early Islamic Textiles* (Boston, 1938), figs. 4-9; R. Pfister, 'Toiles à Inscriptions Abbasides et Fatimides', *Bulletin d'Études Orientales*, 11 (1945-6), 50, and nos. 2, 3, 5, 11, and 52.

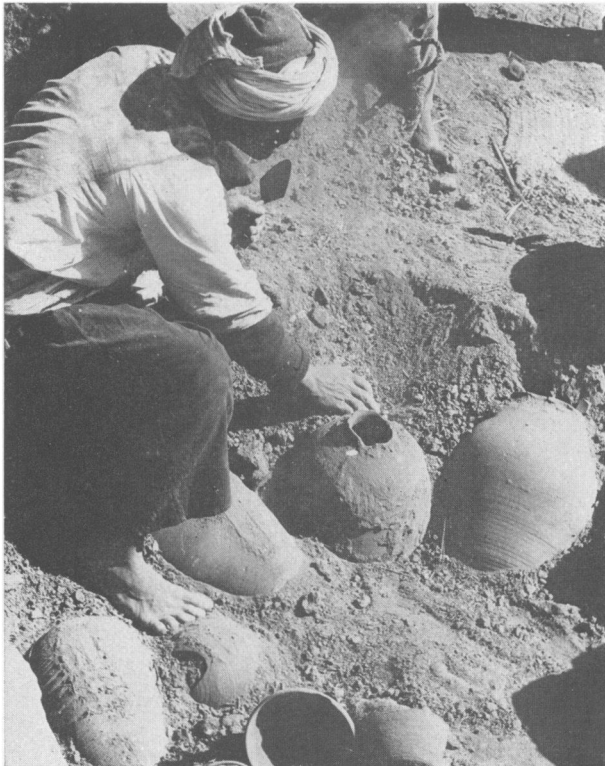
¹⁶ Plumley, *op. cit.* (1964), 3; Elisabeth Crowfoot, 'The Clothing of a fourteenth-century Nubian Bishop', in *Studies in Textile History in honour of Harold B. Burnham*, Royal Ontario Museum, forthcoming.



1. Bronze basin. X-group period



2. Bronze basin. Detail



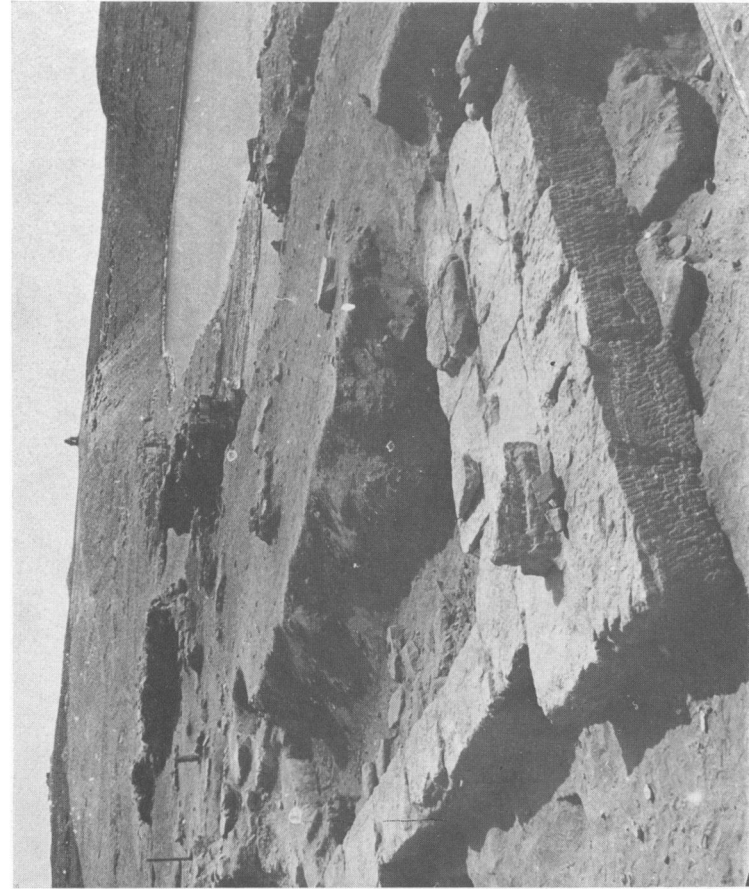
3. Part of collection of pottery found in X-31 near the stone gateway to the east of the Temple Church



4. Column bases and sunken basins in pavement to the west Temple area



2. Semicircular wall foundations, West Piazza

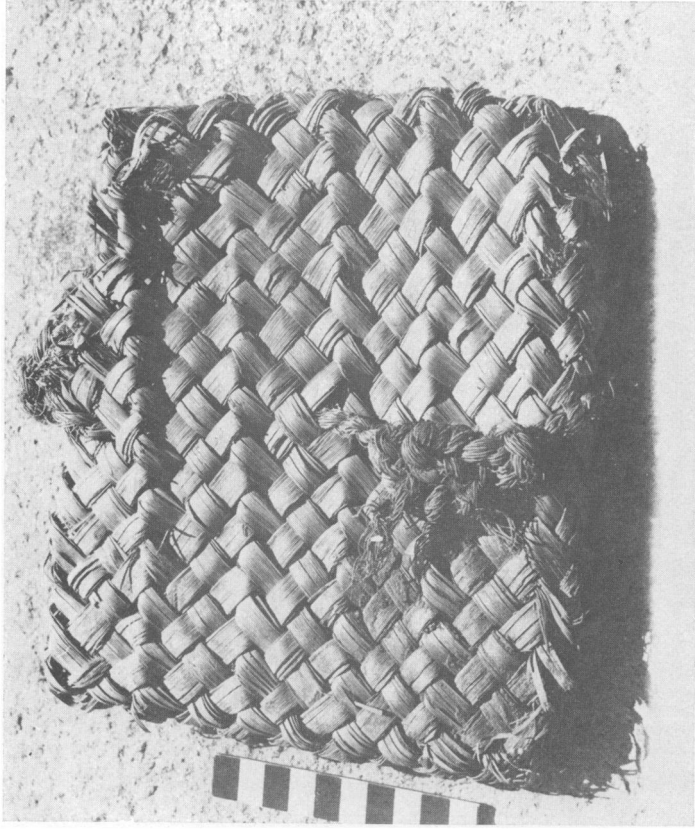


1. Sandstone foundations to west of Temple pavement



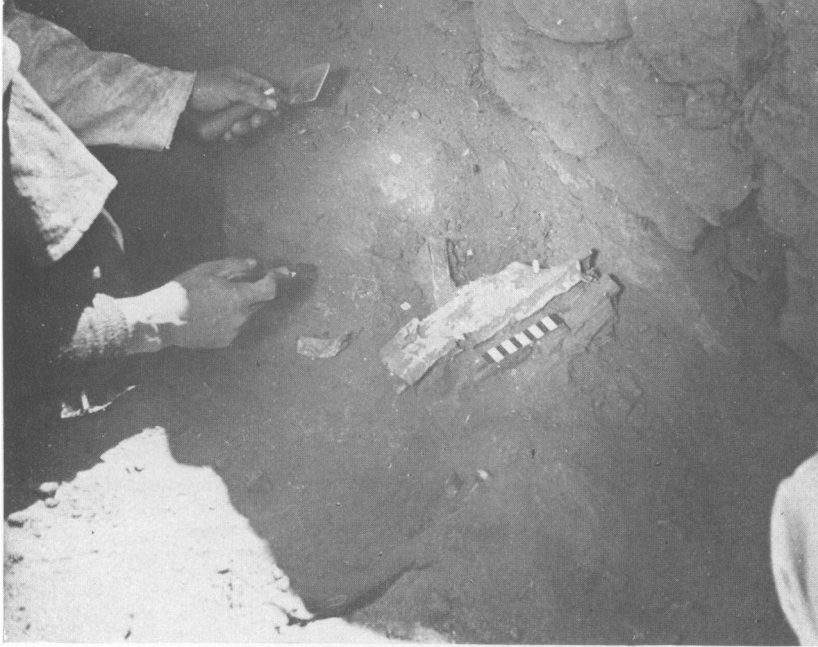


1. Copper frying-pan. X-group



2. Small palm fibre basket





1. Papyrus scrolls *in situ* in X-19



2. Doll's dress



3. Piece of embroidered cloth. Dark blue on white

A BIBLIOGRAPHY OF ELISE JENNY BAUMGARTEL

By V. A. DONOHUE

IN the appreciation which she contributed to the last volume of this *Journal*¹ Mrs. Payne has indicated the sorrow with which Elise Baumgartel's friends and collaborators will have received news of her death. There too are described Dr. Baumgartel's early studies, at first with Erman and Sethe at Berlin and then at Koenigsberg, where Wreszinski encouraged her to pursue that combination of conventional Egyptology and archaeology which gave direction to her future career and, in a subject which has benefited peculiarly little from the rigorous analysis of material culture, enabled her to complete a programme of research of the very greatest significance, alike in its elucidation of the earliest phases of Egyptian society, and in the example of its technique.

Insistence that Nilotic prehistory could be understood only within a much wider context led her initially to concentrate upon related material from North Africa and the Mediterranean: her earliest publication sought to demonstrate that Egyptian funerary architecture of the first dynasties represented a fusion of the native single-grave tradition with megalithic influences from the west, incidentally, and characteristically, attacking the then-fashionable hyper-diffusionism of Elliot Smith and his followers at one of its most central propositions; and similar concerns, in particular the comparative study of stone implements, occupied her for the next ten years. Her removal to London in 1934, however, and succession to Margaret Murray's duties in the Egyptian collection at University College were to provide a new and lasting stimulus. Embarked upon a catalogue of predynastic antiquities from the classic series of excavations undertaken by Petrie at the turn of the century, and with access to a large body of more recently acquired information, she soon realized that the relative chronology which he had formulated on the basis of tomb-groups from Naqada was in need of substantial modification. In the absence of any comparable range of assemblages it was clear that this was only to be achieved by reconsideration of the original excavation itself,² but since the detailed, unpublished registers were no longer available, it was first necessary to locate and examine afresh the many thousands of objects now dispersed throughout Europe and North America. Although thirty years were to elapse before this daunting task could be regarded as complete (below, 31), it was already well in hand when, relinquishing hope of seeing the full inventory of the London collection in print, Dr. Baumgartel published the first volume of her study of predynastic Egypt in 1947 (12).

¹ *JEA* 62 (1975), 3-4.

² Material from Armant has subsequently been analysed by W. Kaiser, 'Zur inneren Chronologie der Naqadakultur', *Archaeologica Geographica*, 6 (1957), 69-77. Cf. also P. J. Ucko, 'The Predynastic Cemetery N 7000 at Naga-ed-der', *CdÉ* 42 (1967), 345-53.

Apart from its redefinition of the southern cultural sequence, and analyses of particular classes of object, in which prominence is given to their foreign associations, the book is especially valuable for its criticism of Sethe's theory of the northern origin of pharaonic civilization, related to which is its argument for a late dating of the Neolithic A culture in the Fayûm, and of the settlement at Merimda Beni Salama, hitherto regarded as material demonstration of the Delta Hypothesis (cf. 25, 28).³ The second volume, which appeared in 1960 (20), if less obviously spectacular than its predecessor, was in many ways even more important, portraying, through the examination of a wide range of artefacts, the interplay of tradition and innovation within which dynastic society developed, and giving particular attention to the previously neglected evidence for emergent urbanism. The book was received with considerable enthusiasm, and as was inevitable with a work of such marked originality, written 'not to be believed, but to be argued about', it generated lively debate.⁴ A reprint of the first volume was called for within the year, to be followed in 1955 by a revised version, whilst the appearance of the second volume prompted demands for a new edition of the whole, now happily complete.

When in 1964 Dr. Baumgartel returned to Oxford, to renew her long association with the Ashmolean Museum and Griffith Institute, it might have been expected that, engaged upon revision and with the Naqada volume still to be finished, she would find little opportunity to initiate further work. On the contrary, her later years saw an increased productivity, with results as penetrating as anything that had gone before. Already in 1948, in reassessing the eccentric colossi discovered by Petrie at Koptos and believed by him to be prehistoric, she had shown that accepted interpretations of figurines from the 'main deposit' at Hieraconpolis and from the temple of Osiris at Abydos, which had been regarded as the principal evidence for protodynastic art, and might therefore have been used in comparison, were without foundation (15). Both groups, it now emerged, had been dated by their excavators on the basis of the earliest objects found among them, whilst the circumstances of neither discovery provided a *terminus ad quem* earlier than the Eighteenth Dynasty.⁵ In this situation stylistic analysis alone could offer a guide for the dating of any individual piece, and in a number of recent articles an attempt was made to come to terms with the problem (27, 33). At the same time she returned to the discussion of the undoubtedly early mace-heads and palettes from Hieraconpolis, the carved scenes on which have so often been used to give a specious air of definition to the reconstruction of contemporary political events. An extended treatment of these, stressing their essentially ritual nature, had appeared in the second volume of *Prehistoric Egypt*; now the evidence which they have been thought to furnish for the existence of a protohistorical king Scorpion was examined anew and rejected (26), and it was the related interpretation of royal titles, on which

³ See also B. J. Kemp, 'Merimda and the Theory of House Burial in Prehistoric Egypt', *CdÉ* 43 (1968), 22-33.

⁴ For a general assessment see G. E. Daniel, *A Hundred and Fifty Years of Archaeology* (London, 1975), 198-9. Reviews: below, n. 7. Cf. the most recent attempt at synthesis: A. J. Arkell, *The Prehistory of the Nile Valley* (Handbuch der Orientalistik 7, 1, 2A) (Leiden and Cologne, 1975).

⁵ Also B. J. Kemp, *MDAIK* 23 (1968), 153-5.

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¹² Reviews: *Ann. Egyptol. Bibl.*, 1970, 14-15 (no. 70048).

¹³ *Proc. Twenty-ninth Int. Cong. Orient., Egyptology*, 1 (Paris, 1975), i.

THE PERIODIC SYSTEM OF BUILDING A PYRAMID

By ALEXANDER BADAWY

THE building of a pyramid involved special problems, among which are cosmic orientation, avoiding twist and maintaining the angle of incline. We know that building proceeded in horizontal courses whose height decreased toward the top. A study of the cross-section shows a series of layers of equal width slanting at 75° around a central core.

Some of the constructional problems common to other types of monuments were rendered more difficult on account of the nature of the pyramid. The blocks were to be of a constant height throughout one course, and of relatively large dimensions. The size of the pyramid set another problem, if one thinks that about 115,000 blocks averaging 0.75 metres in height were required for only the casing of Khufu's pyramid. The transport of materials from the quarries was in itself an achievement, even though advantage was taken of the flood waters that allowed one to sail closer to the quarries in the east, and to the pyramid sites in the west. Unlike buildings located in the valley, the pyramids stood on the western desert plateau and the blocks transported on the river or canal boats had to be hauled up from the water's edge by means of sleds made to slide along a slippery ramp.

Causeways of pyramids were certainly used at the start of the work as constructional ramps. At least two ramps rose to the east and south sides of the pyramid at Meydum, in addition to its causeway, though there could have been, according to Petrie,¹ one more on the south and one or two more on the north, 'thus there were the needed five or six lines of approach for the material'. Constructional ramps existed at Giza (Khufu, Khaḥfrē, Menkaurē), Lisht (Amenemhet I), Abusir, Saqqāra, and Dahshur. The theory of the design of constructional ramps for pyramids was studied by several scholars, particularly by Lauer.² To enable the masons to place the casing blocks and dress them after the building was completed, a foothold embankment of brick surrounding the pyramid as a carapace was built and raised successively at the levels of its courses. It could have measured about 13 metres in width.³

In contrast with most other monuments pyramids had to be cosmically oriented, as were sun temples. Edwards⁴ has suggested that a plumb-line *merkhet* 'indicator', and a *bꜣy n imy wnꜣwt* 'palm of the observer of hours' were used, in conjunction with a circular wall the height of a man to determine the line midway between the positions of rising and setting of a northern star on a true horizontal datum line.

¹ *Egyptian Architecture* (London, 1938), 36.

² J.-Ph. Lauer, *Le Mystère des pyramides* (Paris, 1974), 279, fig. 62; I. E. S. Edwards, *The Pyramids of Egypt* (London, 1961), 205 ff.

³ S. Clarke and R. Engelbach, *Ancient Egyptian Masonry* (Oxford, 1930), 126.

⁴ Edwards, op. cit. 208.

Before dealing with the problem of avoiding twist and maintaining the angle of incline during the construction of a pyramid it is essential to examine the internal structure. All pyramids of the Old Kingdom show a series of slanting layers laid out on concentric squares around a prismatic core. These layers slanted 75° , the usual batter for the faces of mastaba superstructures. The faces of these so-called 'accretion layers' were made of better stone and masonry than their internal core, even to be smoothly dressed as at Neterikhet and at Meydum. Clarke and Engelbach⁵ tentatively mentioned that it was 'an aid to the stability of the structure', or was the result of 'intense conservatism' or of a 'religious motive'. There is no way to investigate the internal structure of the three pyramids at Giza, but Borchardt deduced from the occurrence of well-dressed 'girdle-blocks' every ten cubits along the passage driven through existing masonry to the Great Gallery of Khufu that the system of accretion layers was followed there. Against this theory Clarke and Engelbach⁶ raised, among other objections, the closeness of the layers and the consistent superb masonry in successive faces. The first argument loses much of its impact in view of the fact that Sekhemkhet's pyramid showed thirteen accretion layers, restored by Lauer as twinned layers, ten cubits thick for every layer. That the accretion layers were intended to enhance the stability of the pyramid is certainly true since forces within the structure are made to act toward the core. In addition they formed datum planes from which the process of construction could be constantly checked for accuracy. At Meydum, however, an error of 2.6 metres out of the square was detected by Petrie.⁷

The problem of maintaining accuracy throughout the lengthy process of construction of a pyramid that could rise 220 courses high (Khufu) must have been a major concern with the ancient architects. Twist in the pyramid had to be avoided, perhaps through checking the diagonals of the square plan with reference to datum points on the ground that would be projected on to the course.⁸ Another major concern would have been to maintain the angle of incline. Two solutions were presented by Clarke and Engelbach: calculating the square at every course and describing it accurately on the masonry, or measurements by plumbing. The first method was seemingly not used by the builders (Clarke and Engelbach). As to the second one, the only suggested possibility was horizontal measuring to build up the slope 11:14 from a plumb line outside the foothold embankment. It was essential, however, to carry out this measurement over a considerable height, no less than 5 metres, and not on every course separately, to eliminate any cumulative error. Thirty shifts would then have sufficed for the tallest pyramid. Clarke and Engelbach concluded with the assumption that pits for plumb lines were built in the embankments. Lauer does not lend much attention to the problem, but mentions casually numerous large set squares, which would not have reached higher than two or three courses at a time. Measuring from a plumb line exposed to the wind or even sheltered within a pit would have presented serious difficulties and never could have been foolproof.

⁵ Clarke and Engelbach, *op. cit.* 121.

⁶ *Ibid.* 124.

⁷ *Medum* (London, 1892), 6, 7.

⁸ Clarke and Engelbach, *op. cit.* 125, fig. 136.

Since the Fourth Dynasty, and probably even earlier, a sighting device was used to control the batter of $75\text{--}76^\circ$ or $1:4$ in walls. Petrie⁹ found in a mastaba at Meydum that there were vertical corner walls standing at foundation level. A double line marked in red sloped at 75° from the lower corner of each of the two inner faces. This indicated the trace of the plane of the battered face of the mastaba and formed a datum or guide-line for sighting and stretching a cord between both ends of the wall under construction. Horizontal lines marked with inverted triangles the levels at cubit intervals, thus providing at the points of intersection with the guide-line as many points as necessary for controlling the accuracy of batter during the progress of construction. This method of sighting with guide-lines at the corners of enveloping walls was used at all periods, as for controlling the vertical profile of the foundation platform of the shrines at Tell el-Rub'a (Late Period).¹⁰

Pyramid builders did not forget earlier methods or types of construction, since they incorporated in the pyramid structure the massif, battered at 75° , characteristic of the mastaba. It is most probable that they built this massif, at least in the earliest attempt at Meydum, with the help of enveloping corner walls. (See fig. 1.) The faces of the massif were then well dressed. The process was repeated for every skin or accretion layer to the designed height, keeping also control throughout against twist by checking diagonals and axes of concentric squares. This process adapted to build the casing would have required corner walls inscribed with guide-lines sloping at $11:14$ which could have enabled one to sight along the outer face at each course level, before it would be embedded in the rising embankment. (See fig. 2.) Such corner walls would have been of brick built on the embankment, tangent to the alignment of the casing or at some distance, to allow handling the blocks from the front.

Controlling the slope of the faces by sighting and measuring from corner walls would have presented an immense advantage over measuring from a plumb line in a pit built as deep as 17 metres in the embankment, as tentatively suggested by Clarke and Englebach.¹¹ Moreover the same corner walls would have served again for the dressing of the face, as the embankment would be lowered and a wooden scaffolding built to the height of the corner walls.¹² An alternative method, less satisfactory than that using corner walls, but improving upon the sunken pit system would be to build such a pit from the level of construction up. (See fig. 3.) From the guide-line marked on its walls horizontal measurements but no sighting could be made.

The practice of dressing the accretion faces was discontinued after Neterikhet and Snefru, and this allowed the whole pyramid to be built course by course throughout.¹³ The system of building in periods up to the levels of the accretion faces, if correct, was certainly brought in conjunction with the corner walls corresponding to these levels. It was observed¹⁴ that the casing blocks of Khufu's pyramid show a periodic decrease in height, which was explained as resulting from the use of certain amounts of stone renewed when exhausted according to a planned supply. It would be of interest to

⁹ *Architecture*, 8, 29, fig. 10.

¹⁰ D. P. Hansen, 'The Excavations at Tell el Rub'a', *JARCE*. 6 (1967), 7.

¹¹ *Op. cit.* 126-8.

¹² *Ibid.* 125.

¹³ *Ibid.* 121.

¹⁴ *Ibid.* 128.

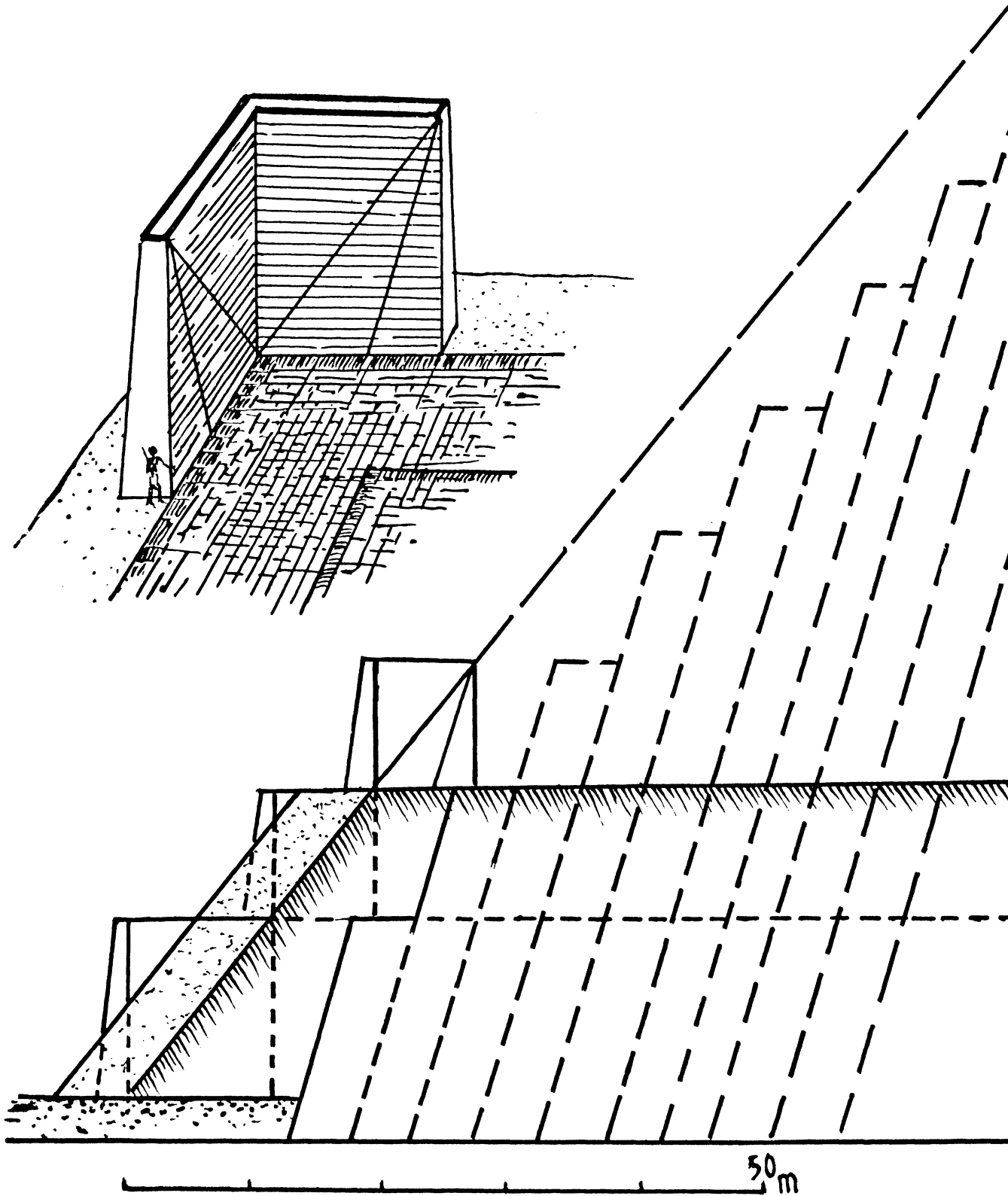


FIG. 1

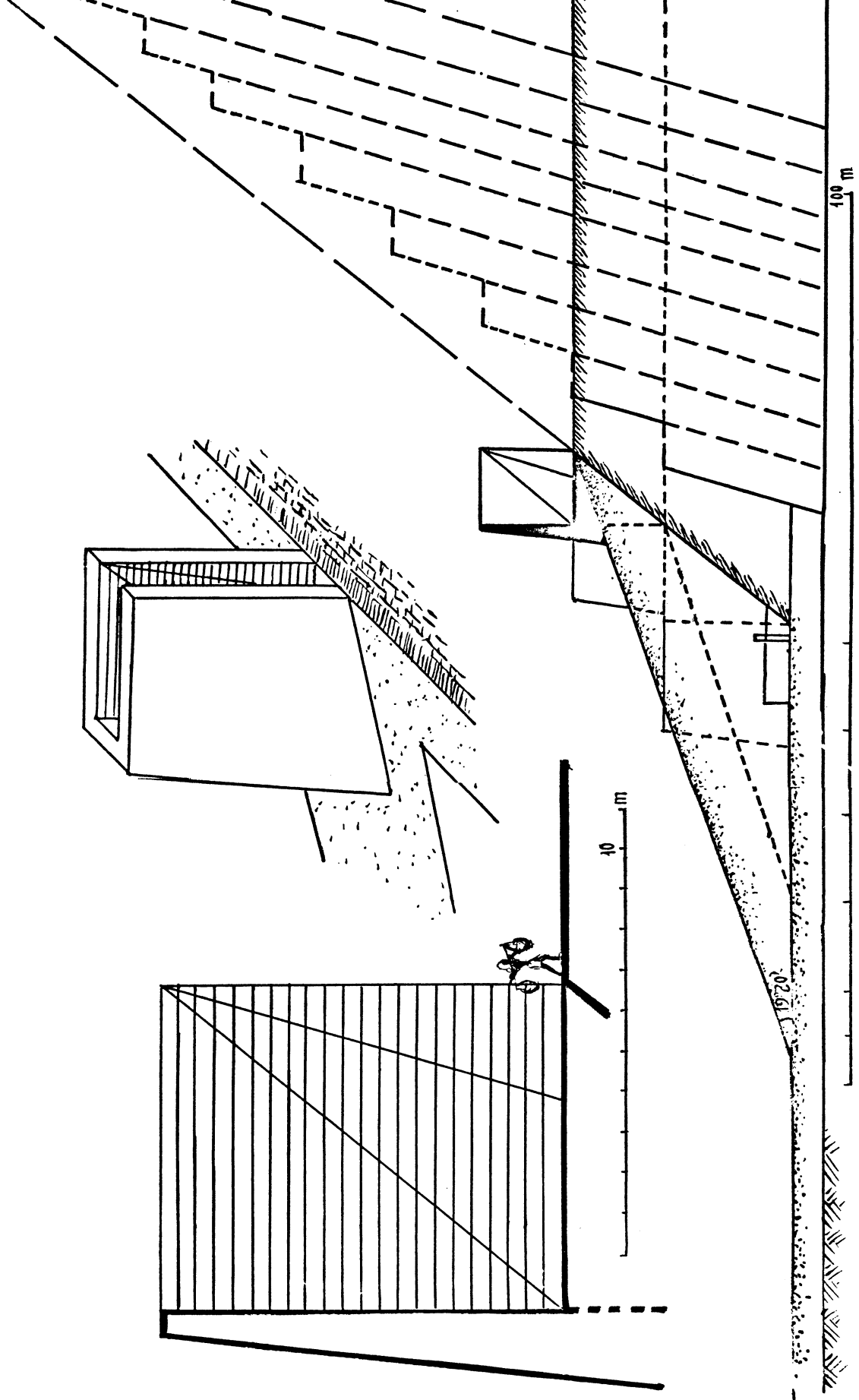


FIG. 2

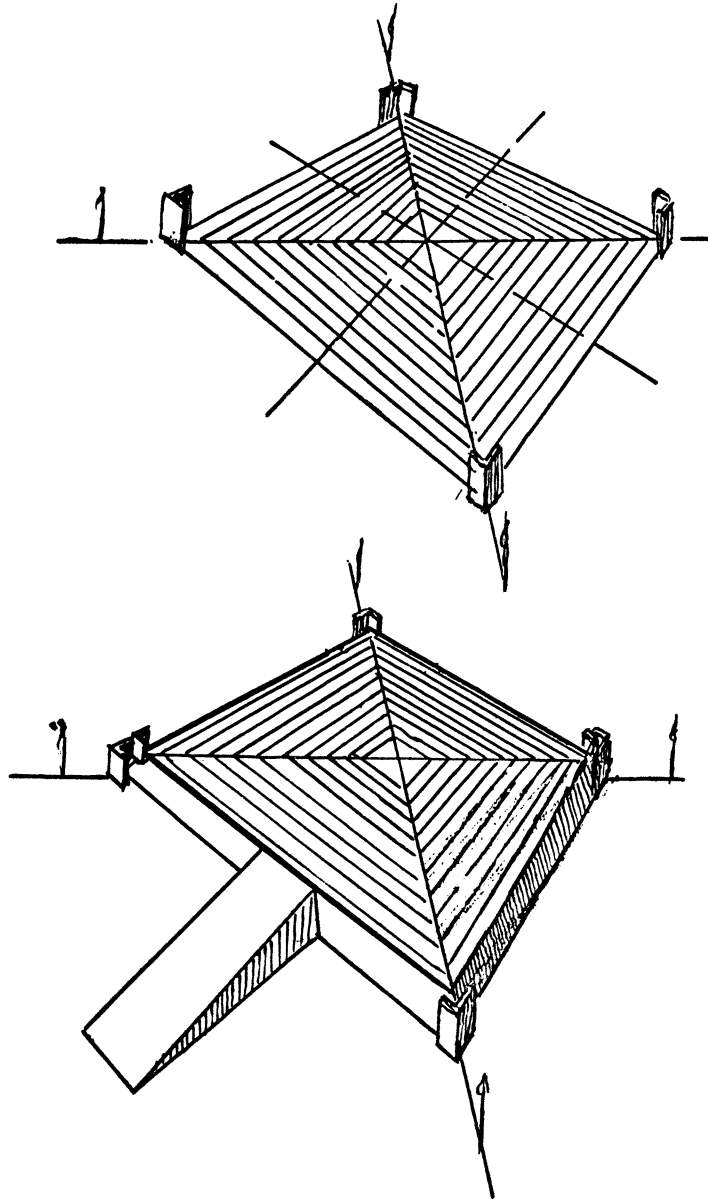



FIG. 3

investigate this periodic decrease in size, for there is strong presumption that it echoes the system of periodic construction determined by the steps of accretion layers.

Since the number of accretion layers seems to have been a determining factor in the periodic construction of a pyramid, it would have been of importance to keep them as few as possible. This number averages between 5 (Zawyet el-'Aryan), 6 (Neterikhet, Saḥurē), and 8 (Meydum) which means a corresponding number of 5, 6, to 8 shifts of corner walls or periods in construction. Keeping down the number of shifts meant less risks of cumulative errors. At the same time it meant taller corner walls. An

examination of the section of Meydum pyramid shows that the heights of steps in accretion layers, and consequently those of corresponding corner walls, were from the bottom: 14.5, 10, 10, 10, 10, 10, 8, 8 metres for a constant width of 5 metres to the accretion layer. Building corner walls of such heights in brick presented no difficulty, for 10 metres seems to have been the average height reached by brick girdle walls from the Second Dynasty (Abydos, Hierakonpolis) throughout later periods (fortresses at Buhen, Mi'am).

Essentially structural as the purpose was to stabilize the huge mass and to provide datum planes during the process of constructing the accretion layers within the pyramid, the process could also have had, as hinted by Clarke and Engelbach,¹⁵ a religious motive. Left apparent in the earlier step pyramids (Zawyet el-'Aryan, Neterikhet, earliest Meydum), they formed a gigantic stairway which enabled the Pharaoh to mount up to the Imperishable Stars. In the *Pyramid Texts* this idea of a stellar destiny following an ascent on a stairway is clearly expressed: 'A staircase to heaven is laid for him that he may ascend on it to the sky' (no. 365).¹⁶ This concept is found again in the hieroglyph  sometimes described as a double stairway, but more probably representing the profile of a step pyramid and determining the verb *ir* 'to ascend'.¹⁷ The names of the pyramids of Snefru, Khufu, Dedefrēt, and Nebrē indicate clearly a stellar connotation while those of Saḥurē, Neferirkarē, and Neferefrē describe the stellar destiny of the *ba*.

¹⁵ Op. cit. 121.

¹⁶ Edwards, op. cit. 234; Alexander Badawy, 'Philological Evidence about Methods of Construction in Ancient Egypt', *ASAE* 54 (1956), 60; cf. *Pyr.* 1090 c, 1431 b, 1749 b.

¹⁷ Edwards, op. cit. 234 f.; Alexander Badawy, 'The Ideology of the Superstructure of the Mastaba-Tomb in Egypt', *JNES* 15 (1956), 180-3.

THE IDENTIFICATION OF $\underline{D}rw/\check{S}m\check{s}i$ AND $\underline{D}rw$
IN THE DECORATION OF THEIR TOMB AT
DEIR EL-GEBRAWI¹

By NAGUIB KANAWATI

$\underline{D}rw/\check{S}m\check{s}i$ and $\underline{D}rw$ of Deir el-Gebrawi provide, as far as I know, a unique instance in the Old Kingdom of two nomarchs—father and son—who were buried in one and the same tomb.² Since it was the practice to depict one important figure—the owner of the tomb—in a prominent manner in the scenes of his chapel, the burial of two nomarchs in one place must have represented an unusual case for the artist responsible for the decoration of the tomb. The difficulty was probably increased by the fact that both individuals bore the name $\underline{D}rw$ though $\check{S}m\check{s}i$ was a *rn-f nfr* of the father. How successful was the artist in rendering the two nomarchs distinguishable to those who were to visit the tomb, if not for the *Kas* of the deceased ones themselves?

Davies in commenting on a wife, *Hnt-ns*, standing behind $\underline{D}rw$ (pl. 12) writes: "The wife of Zau-Shmaa, as has been seen, is differently named, yet there is nothing in the rest of the scene to indicate that this wall is decorated in honour of Zau the son, nor should we expect it. It seems more likely, however, that it gives us the name of the son's wife than that it represents a second wife of the father; but its insertion here may be an error on the part of the designer."³ Neither the man with the first-mentioned wife was specifically stated to be $\underline{D}rw/\check{S}m\check{s}i$ (pl. 6), nor is there anything in the scene in pl. 12 to argue against it being in honour of $\underline{D}rw$. Moreover, this error, if it occurred, shows ignorance, on the part of the designer, of such fundamental information as the identity and family relationship of his well-known employer, and also negligence, on the part of $\underline{D}rw$, to follow the progress of the work in his tomb. It should not, therefore, be unquestionably accepted as simply an error.

A thorough examination of the scenes in this tomb shows that the artist used one or more conventional methods to differentiate between the two main individuals:

1. The father was referred to by his *rn-f nfr* $\check{S}m\check{s}i$ (pls. 3, 5, 7, 8, 10), except when otherwise recognizable.

¹ Davies, *The Rock Tombs of Deir el Gebrâwi*, II (London, 1902), 1-13, pls. 2-14. All plates referred to in the text are from this volume.

² Fischer (*Dendera*, 115-17) rules out the so-called 'Four-name mastaba' (Petrie, *Dendereh*, 14, pls. 11 11A) as another example. He thinks that the owner was *N-ibw-nswt/Bbt*. Instances, however, exist of sons excavating their tombs in order to open into those of their fathers; e.g. *Sibni* and *Mhw* of Aswân (de Morgan, *Catalogue des Monuments*, I, 144) and *Ppy-nh/Hny-km* and *N-nh-ppy* of Meir (Blackman, *Meir*, v, pl. 1).

³ Davies, *op. cit.* 12.

2. Representing the father and his son, *z:f Dcw*, together (pls. 3-4, 5, 9, 10) ruled out any chance of confusing their identity.⁴
3. Two groups of titles were used. The first includes priesthoods, *hm-ntr* or *imy-r ht hm-ntr* or both, of Pepy II's Pyramid, *Nfrkꜣrc-mn-cnḥ* (pls. 5, 8, 9, 10, top 12). The second group does not include any priesthood (pls. 3, 4, 6, 11-13). Compared with other nomes, where a tendency to drop titles connected with Pepy II's Pyramid from among the nomarchs' titles is apparent,⁵ one is tempted to surmise that these priesthoods were held by *Dcw/Šmꜣi* and not by his son. The decorator, however, did not find it necessary to give, each time he was depicted, a complete list of the father's titles, including the priestly ones, particularly when the nomarch was otherwise distinguishable.

The affection shown for his father, as appears in *Dcw*'s biography,⁶ probably did not prevent him from, or even might have led him to depict himself, on each wall, almost the same size as his father, and also, as will shortly be demonstrated, to establish parallelism in the frequency of their representation on each occasion.

Bearing these general indications in mind, we can determine the identity of the main figure in pls. 6 and 12, where two different wives are depicted. In each case the nomarch is taken by Davies to be *Dcw/Šmꜣi*.⁷ Yet in neither of them does *Šmꜣi* appear in the name, is a priesthood of Pepy included, or is a son shown to demonstrate that the main figure is that of the father. Moreover, I would expect to find *Dcw* and not *Dcw/Šmꜣi* represented on the right half of the west wall (pl. 6) facing his father supervising work in the province on the left half of the same wall (pl. 7). This would be in keeping with the design of the north wall (pl. 10), where the father and son are shown facing each other, and probably also on the east wall (pl. 8) though the name of, perhaps, the son is obliterated.

The wife standing behind *Dcw* in pl. 6 is named *cnḥ-n-s-ppy*. A wife with the same name appears on the north wall behind *Dcw* (the son). Davies takes her to be the father's wife,⁸ probably influenced by his previous identification of *Dcw* in pl. 6 with the father. A similar scene, also on the north wall, in the tomb of *Ibi* shows the wife before the son and not behind him.⁹

Finally, *Dcw* in pl. 6 bears the title *iry-pꜣt*; obviously the highest title in the Old Kingdom.¹⁰ This distinction was probably attained after being a *hꜣty-ꜣ*, since, to my

⁴ An interesting parallelism is evident here. *Dcw* is described twice as *z:f* (ibid., pls. 5, 9) and twice as *z:f smꜣw* (ibid., pls. 3, 10). He was certainly the same son since in both cases he was the *hry-tp ꜣ Dwf* (pls. 5, 9, 10).

⁵ At Aswân such a position was regularly held by *Sꜣbni*, *Hmw-hwn* and *Ppy-nḥt* (de Morgan, op. cit. 148, 199, 175 respectively), then was dropped by *Hw-ns* (ibid. 158-62). At Dendera such a title existed in the case of *Idw* I (Fischer, op. cit. 93), but seems to be missing in the cases of *Idw* II, *Tꜣwti* and *Mni*, all of whom belonged to the end of Pepy II's reign or to the First Intermediate Period (ibid. 100-1, 103, 107 respectively). At Sheikh Saïd the position was exercised by *Tti-cnḥ* and *Mrw-bbi* (Davies, *Sheikh Saïd*, pls. 29, 19), but not by *Mrw* or *Wiw/tyw* (ibid. 30, pls. 21-4). At Deir el-Gebrâwi itself, *Dcw/Šmꜣi*'s father, *Ibi*, had such titles (Davies, *Deir el-Gebrâwi*, 1, pl. 7), while the later nomarchs dropped it. See *Hm-ꜣ/Izi* (ibid. 11, pls. 17-21) and *Hnꜣw/Ii . . . f* (ibid., pls. 23-6), though both held the curious title *imy-r niwt-mꜣ* with no reference to a specific king (ibid., pls. 19, 23).

⁶ Where he states that he buried his father with him in order that they should be in the same place, and not because of lack of wealth for making a second tomb (ibid., pl. 13; Urk. I, 146-7).

⁷ Davies, op. cit. 7, 12.

⁸ Ibid. 3.

⁹ Ibid. 1, pl. 15.

¹⁰ Baer, *Rank and Title*, Chart III, p. 201.

knowledge, all nomarchs who bore the title $\dot{h}ry-p\dot{r}t$ were also $\dot{h}ry-c$, but not vice versa.¹¹ We read in the above-mentioned biography of $\underline{D}rw$ that his father was promoted to the rank of $\dot{h}ty-c$ only as a posthumous boon by Pepy II. Therefore, it is more likely that we are dealing here with $\underline{D}rw$ (the son), and that $\underline{D}rw/\underline{\check{S}m}i$ did not attain the rank of $\dot{h}ry-p\dot{r}t$ because of his premature death.

Davies thinks that the two large figures in the middle of the west wall (pl. 7) belong to the father and his son.¹² The name $\underline{\check{S}m}i$ is written above the first person, while the name of the second is missing.¹³ However, it seems to me that we have here a double representation of $\underline{\check{S}m}i$ himself. The decorator of the tomb of $\underline{D}rw$ has copied the arrangement of scenes from the tomb of his patron's grandfather, $\underline{I}bi$. On the west wall of the latter's tomb there is a scene¹⁴ similar to that which occurs on the corresponding wall in $\underline{D}rw$'s tomb (pl. 7). There is one major difference, however—there are no large figures in the middle of the scene in $\underline{I}bi$'s tomb corresponding to those that appear in $\underline{D}rw$'s tomb. Admittedly the centre portion of the scene in $\underline{I}bi$'s tomb is damaged, but by studying the upper part of this damaged portion¹⁵ I think the above point still holds. This innovation on the west wall of $\underline{D}rw$'s tomb can be explained by the presence of a pit opposite the two figures (pl. 2). The only other pit in the tomb is in front of the shrine, in which there exist three false-doors, all for $\underline{D}rw$. Since one would expect to find a false-door for $\underline{D}rw/\underline{\check{S}m}i$ somewhere in the tomb, the most obvious place is opposite the pit which faces the centre part of the west wall. Therefore, I would suggest that the representation of the two figures in this place serves the purpose of a false-door. This is supported by the appearance of the $\dot{h}tp-d\dot{i}-nswt$ formula and invocation offerings above the left figure. There are three lots of invocation offerings inscribed for $\underline{D}rw$, associated with his false-doors (pls. 11–13). In keeping with the general symmetry of the scenes in the tomb, one would expect to find three corresponding invocation offerings for $\underline{D}rw/\underline{\check{S}m}i$ —one of these is on the east wall in front of the seated figure (pl. 8). The only place where we definitely have $\underline{D}rw/\underline{\check{S}m}i$ represented, and which might accommodate such an inscription, is in the middle of the west wall, i.e. above the right figure (pl. 7). The left, unnamed, figure in this place also has invocation offerings inscribed above it. Since $\underline{D}rw$ already has three places where invocation offerings are inscribed to him, it is unlikely that this unnamed person is $\underline{D}rw$, but rather $\underline{D}rw/\underline{\check{S}m}i$, thus giving each of them three inscriptions of invocation offerings. Another reason why it is unlikely that the left figure is $\underline{D}rw$ is that one would not expect him to be represented in such a dominating way in front of what must be his father's burial pit. Thus in the middle of the west wall we probably have the father represented twice, once wearing the panther skin and once without it.¹⁶ Double

¹¹ For nomarchs who had both titles see $\underline{I}zi$ of Edfou (Alliot, *Tell Edfou 1933*, *FIFAO* 10. 2, 8–28); $\underline{T}wti$ of Qasr el-Saiyad (Montet, *Kémi* 6 (1936), 84–109); $\underline{P}py-cnh-wr$ (Chabân, *ASAE* 3 (1902), 253) and $\underline{P}py-cnh-hry-ib$ (Blackman, *Meir*, IV, 12) of Meir. Other nomarchs of Deir el-Gebrâwi itself were also $\dot{h}ry-p\dot{r}t$ and $\dot{h}ty-c$. See $\underline{I}bi$, $\underline{H}m-c/\underline{I}zi$ and $\underline{H}nqw/\underline{U} . . . f$ (Davies, op. cit., 2 vols., *passim*). On the other hand, $\underline{M}ry-c-nfr/\underline{Q}r$ of Edfu (Daressy, *ASAE* 17 (1917), 130–40), $\underline{I}dw/\underline{S}nni$ of Qasr el-Saiyad (Montet, op. cit. 110–25) and others were only $\dot{h}ty-c$ s.

¹² Davies, op. cit. 6.

¹³ The signs after the title $\dot{h}ry-tp c\dot{r} i b d w$ seem more likely to be part of the word mrc , rather than of the name $\underline{D}rw$, which should come at the end of the inscription as does the name of $\underline{\check{S}m}i$ in the same scene. Other examples of mrc following $\dot{h}ry-tp c\dot{r}$ are not lacking; see *ibid.*, pls. 3, top 12. If the designer was symmetrical, and inscribed the name as he did the father's, it is unlikely that the name would also have been inscribed in the damaged part in front of the figure. Such symmetry, though in a different arrangement, occurs in pl. 10, where names are written in front of both figures.

¹⁴ *Ibid.* I, pl. 10.

¹⁵ *Ibid.*, pl. 9.

¹⁶ Instances where men are shown wearing these two different garbs are not uncommon. See e.g. Lepsius, *Dkm.* II, 8, 18, 21, 83, 89.

representation of the father occurs also on the opposite wall, where he is shown seated at both ends of an inscription.¹⁷

In his copying from *Ibi's* tomb the decorator of *Dcrw's* seems to have strongly attempted to make a balance in the representations of his two main figures. In the fowling and fishing scenes on both sides of the south wall (pls. 3-4, 5), not only was the son participating in the actions, but also a second large figure in each scene seems to belong to him. In pl. 4, where the name and titles are well preserved, nothing suggests that *Šmꜣi* was intended.

At first glance the north wall seems to contradict this balance, especially on the west side of the wall where the figure of the father, shown twice, is of a dominating size, while the son is only a small figure (pl. 9). By taking the shrine, which opens in the north wall, into consideration it appears that the balance was well observed. This would suggest that the shrine was not considered as a separate room, but simply as a wide and deep recess in the north wall. Since the shrine had no independent south wall, its decoration could be actually seen by anyone facing the north wall. The interior of this shrine is wholly reserved for *Dcrw*,¹⁸ nothing refers to the father except in *Dcrw's* own biographical inscriptions.¹⁹ Between the north wall of the chapel and the three walls of the shrine we have two seated and two standing figures of the father (pls. 9, 10), and the same number for the son (pls. 10-13).

The proportion in representing the two nomarchs in the tomb as a whole applies also to the subject-matter. While the father appears twice before an offering table (pls. 8, 9), so does the son (pls. 11, 13).²⁰ Each of the latter two is also shown sitting in a stiffened tunic and holding a staff in his right hand and a *hrp* sceptre in his left, surveying some kind of labour in his nome (pls. 4, 10).²¹ Each of them has one slaughtering scene depicted in front of him (pls. 4, 8). The same applies to some other activities and inscriptions, including, as we have seen, the number of invocation offerings inscribed for each nomarch.

There seems to be no error on the part of the designer, as suggested by Davies, and I think that both wives, in pls. 6 and 12, are very likely to be those of *Dcrw*. These could have been successive marriages and not necessarily polygamy.

¹⁷ Davies, op. cit. II, pl. 8. The figure on the right is damaged, but the name *Dcrw* followed by *rn:f nfr* [.] makes the father's identity unquestionable.

¹⁸ Compare the false-doors here (ibid., pls. 11-13) with those in *Ibi's* shrine, where a priesthood of Pepy II is regular (ibid. I, pls. 17, 18). Note that the lintel in *Dcrw's* tomb, on which the priesthood of Pepy is inscribed, does not belong to the shrine, but joins the two sides of the outer north wall (ibid. II, pl. 12 top).

¹⁹ This applies to his biography and also to his name written twice as *Dcrw zꜣ n Dcrw* (ibid., pl. 13).

²⁰ This excludes the similar, but smaller, scenes on the false-doors of the shrine (ibid., pls. 11-13).

²¹ The father is represented two more times in a similar attitude, but in small size, different dress and no workmen before him, but an inscription (ibid., pl. 8).

NEFERHOTEP AND HIS FRIENDS

A GLIMPSE AT THE LIVES OF ORDINARY MEN

By WILLIAM A. WARD

AMONG the countless private funerary stelae of the Middle Kingdom, one sometimes finds an example which breaks away from the stereotyped texts and representations that characterize this genre. Within the framework of the usual offering-formulae and conventional scenes, there emerge very human traits which discard the dogma of formalized religion, allowing us to see an individual rather than the impersonal 'ideal' man the Egyptian mortuary cult preferred. Such a glimpse of a human being is afforded by the stela of the Singer Neferhotep in the Rijksmuseum van Oudheden, Leiden (pl. IX).

This stela was first published some eighty years ago by Steindorff¹ who dismissed the closing line of the text as 'unverständlich'. In reality, this line is the most interesting feature of the inscription. The stela is also pictured in the general catalogue of the Leiden Museum.² It is of a common Middle-Kingdom type with cornice and torus, generally considered as belonging to the 'false-door' style of the period, though sometimes more correctly described as an imitation of the façade of a naos.³ The workmanship is rather crude in keeping with the minor status of its owner.

I. The Relief

The relief is a clear departure from the norm. A very corpulent Neferhotep sits on both feet before his offering-table, reaching out with both hands to take the food piled there. This attitude seems to be unique. Normally, the deceased is seated on a chair or stands before his offering-table, extending one hand toward the food-offerings and holding a lotus or other object in the other hand. One does find rare examples of figures sitting on both feet, though only one hand reaches toward the food.⁴ The closest parallel I can quote is a stela in Hildesheim where the deceased is shown sitting on both feet with both hands reaching out, though he holds an object in one hand.⁵

¹ *ZÄS* 32 (1894), 125 f.

² P. A. A. Boeser, *Beschreibung des aegyptischen Sammlung des Niederländischen Reichsmuseums der Altertümer in Leiden*, II (The Hague, 1909), pl. 32, no. 44 (Stela V 95).

³ J. M. Saleh, *Les Antiquités égyptiennes de Zagreb* (Paris, 1970), 24, description of Stela no. 9; cf. J. Vandier, *Manuel d'archéologie égyptienne*, II, 484.

⁴ O. Koeford-Petersen, *Les stèles égyptiennes* (Copenhagen, 1948), no. 20 (AEIN 966); T. E. Peet, *The Cemeteries of Abydos*, II (London, 1914), pl. 24, 2.

⁵ H. Kayser, *Die ägyptischen Altertümer im Roemer-Pelizaeus Museum in Hildesheim* (Hildesheim, 1973), fig. 34, no. 3058. A somewhat similar example is in the British Museum, though the deceased holds a lotus in one hand; *Hieroglyphic Texts, etc., in the British Museum*, IV, pl. 43, no. 247.

One gets the impression that the artist has purposely portrayed Neferhotep leaning slightly forward and reaching out with both hands free to engage in what, judging from his appearance, was a life-long indulgence. There is a sense of eagerness and potential satisfaction which it is hard to believe is unintentional. Indeed, there is the hint of a smile on his face; the eternal gourmet anticipating his eternal meal.

In one of those rare coincidences which crop up from time to time, Neferhotep is shown on another stela in Leiden performing his musical chores before his patron, the Overseer of Prophets Iki and his wife Nes'ankh.⁶ Here, a more serious but just as corpulent Neferhotep plays his harp while seated in much the same attitude as on his own stela. There is a human touch in this second stela as well. The normal position of a seated male harpist prior to the Empire was to sit on one foot with one knee raised.⁷ That Neferhotep does not assume the traditional harpist's posture is obviously due to his bulk; he simply could not sit that way. On both stelae he has been portrayed in a position which was more comfortable for him in real life.

II. The Text (Fig. 1)

The short text of this stela, which contains several points of interest, reads as follows:

A Htp-di-nsw of Osiris, Lord of Abydos, and Harsiësis^a that they may give an invocation-offering of bread, beer, cattle, fowl, alabaster vessels, clothing, and everything good and pure for the ka of the Singer Neferhotep, deceased, born of the Housewife Henu.^b It is his beloved friend, the Carrier of Bricks^c Nebsumenu^d who has done this. Alas! Have mercy on him!^e

Below the relief is the single line:

The Draughtsman Rensonb's son Sonbau.^f

Commentary

(a) *Hr-sj-ist*; one of the very rare occurrences of this divine name prior to the N.K. *Wb.* III, 123, 8 quotes one M.K. stela in Cairo to which may be added a Thirteenth Dynasty stela from Edfu.⁸ As a personal name, *Hr-sj-ist* seems to appear first in the Second Intermediate Period.⁹

(b) The name of Neferhotep's mother, here spelled *Hnw*, is written *Hnw* on Leiden Stela V 68.¹⁰ The latter is a clear case of group-writing which, contrary to general opinion, is rather common in native Egyptian names and words; numerous examples can be quoted from M.K. texts.¹¹

⁶ Leiden Stela V 68, also published by Spiegelberg, loc. cit., and Boeser, op. cit., pl. 33. The short song of Neferhotep is included in the study of Harpers' Songs by M. Lichtheim, *JNES* 4 (1945), 189.

⁷ As noted by G. A. Reisner, *JEA* 6 (1920), 118, for the Old and Middle Kingdoms. Later on, one does find other positions such as the cross-legged harpist on a relief in the Yale University Art Gallery (no. 37. 126) and in Theban tombs: W. K. Simpson, *JARCE* 8 (1969-70), 49 f., and H. Hickmann, *BIE* 35 (1952-3), figs. 3 and 5.

⁸ R. Engelbach, *Ann. Serv.* 22 (1922), 115.

⁹ H. Ranke, *PN* 1, 250, 3.

¹⁰ See above, p. 63 n. 2.

¹¹ See my preliminary remarks in *JNES* 16 (1957), 200 ff., and *Ugarit-Forschung*, 8 (1976), 59 n. 2. Note, for example such spellings as *idw* for *id*, 'lad'; cf. W. C. Hayes, *JNES* 7 (1948), 8 n. 38.

(c) Pending publication of a study on the numerous titles beginning with *ḥrw n . . .* (in preparation), a brief note will suffice in the present context. The title *ḥrw n s:ḥrw*, here in an abbreviated spelling found on two M.K. scarabs,¹² indicates a minor functionary associated with brick-making who appears to be responsible for maintaining the store-house and transporting bricks from there to the building-site. On evidence now available, the translation 'Carrier of Bricks' seems justified.

(d) *Nb-Swmmw* is here written in an abbreviated spelling.¹³ Funerary texts dedicated by friends of the deceased are extremely rare, though one sometimes finds 'friends' of the deceased portrayed on their stelae.¹⁴

(e) *Hwḥw imi n·f mrt*, literally: 'Alas! Give love to him', or the like. *Hwḥw*, noted in *Wb.* II, 484. 14 as an 'Interjektion(?)', appears only here. It is yet another example of the Egypto-Semitic root *hwy* which I have discussed elsewhere.¹⁵ While the original sense of the root was 'speak, shout', it early developed the meaning 'lament, wail', in both Egyptian and Semitic. In the present funerary context, followed by an imperative plea to the gods, the latter nuance is required.

(f) *Snb:rw* must be the artist who carved the stela; this is one of the extremely rare artists' signatures known from pharaonic Egypt. The problem of such signatures has been analysed for the Old Kingdom by Wilson¹⁶ and his conclusions generally apply equally to the Middle Kingdom. A true 'signature' is one where the artist shows 'a voluntary act of claiming credit or responsibility' for his work¹⁷ in contrast to artists named with other craftsmen among the retainers of a particular official. Of the six Middle-Kingdom 'signatures' listed by Ware,¹⁸ all except that of the Leiden stela under discussion are the names of artists among the numerous retainers of their patrons, hence are not true 'signatures'.

III. Comment

Simple and seemingly ordinary as this stela appears to be, it remains a rare and poignant personal document. Neferhotep is pictured not as religion dictated he ought to be, but as he really was: the imperfect, obese human being unable to restrain himself at table, even in death. But it is in the short text that we catch a glimpse of the man inside the rotund figure reaching out for yet another meal.

There was no wife or son to speed Neferhotep on his way to the netherworld; his cronies made up for the family he did not have. This must surely be the explanation for the artist's signature on such a small and crude monument. The Draughtsman Sonbau, though a mediocre artist, gave what he was able and said his farewell in his own way; he drew the friend he knew in life, not the impersonal stereotype which obscures the man himself. And it was not a relative who dedicated Neferhotep's stela but another

¹² G. Martin, *Egyptian Administrative and Private-name Seals* (Oxford, 1971), nos. 30 and 530. For another probable similar abbreviation, see Boeser, *op. cit.*, pl. 38.

¹³ *Nb-Swmmw* is an epithet of Sobk, on which see Ch. Kuentz, *BIFAO* 28 (1929), 123 ff., with a list of examples of *Nb-Swmmw* as a personal name on pp. 137 ff.

¹⁴ L. Habachi, *JEA* 39 (1953), 51, notes a funerary graffito at Sehel dedicated by two friends of the deceased. For such 'friends' included among the family and retainers, see, for example, Petrie, *Denderah* (London, 1898), pl. 15, stela of Khnumredu; *Hieroglyphic Texts, etc., in the British Museum*, II, pl. 16, and III, pl. 5.

¹⁵ *JNES* 28 (1969), 265 ff.

¹⁶ J. Wilson, *JNES* 6 (1947), 231 ff., especially pp. 245 ff.

¹⁷ *Ibid.* 245 n. 65.

¹⁸ *AJSL* 43 (1926-7), 200 ff., nos. 3, 4, 24, 29, 32, 33.

friend who adds a unique prayer which cries out with a sadness the traditional formulae could never convey. 'Alas! Have mercy on him!' is the plea of Nebsumenu, the last words of one old comrade to another.

The Singer, the Carrier of Bricks, the Draughtsman. These are not the great lords and officials; they wielded no power, they commanded no wealth. These were the humble people of Egypt recorded on a humble monument. Yet there is something in this small, ill-carved stone which one does not often find among the grand tombs and ostentatious prayers of their social betters. Here is the residue of a life-long friendship, the last possible act one friend can perform for another. Perhaps even more: three elderly companions having lived out their simple lives in that bond which only the old and lonely share, and the special grief when the ties are broken.

People watch with unshocked eyes
But the old men know when an old man dies.¹⁹

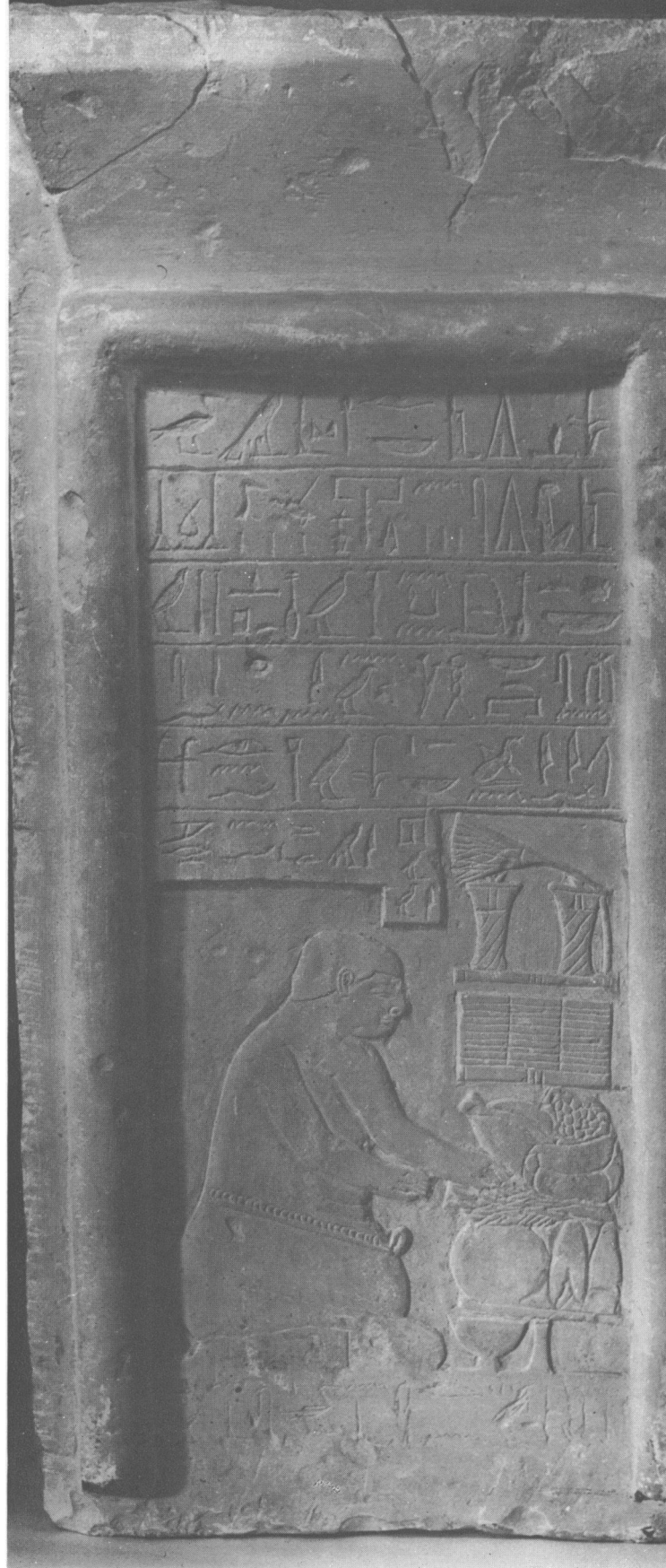
It is another small reminder that Egypt was not all pyramids and temples, but also people who share with us the pleasures and hurts of this life and the anticipation of the next.

¹⁹ From 'Old Men', by Ogden Nash.

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Text on Leiden stela V 95 (not a facsimile)



Stela of the singer Neferhotep, Leiden V 95
 Courtesy Rijksmuseum van Oudheden, Leiden

THE CONSTRUCTION OF AN ANCIENT EGYPTIAN WIG (*c.* 1400 B.C.) IN THE BRITISH MUSEUM

By J. STEVENS COX

(qualified registered hairdresser and wigmaker)

ON July 30, 1975, I examined the Egyptian wig (Brit. Mus. No. 2560), (pl. X, 1) in the British Museum by kind invitation of the Keeper of Egyptian Antiquities, Mr. T. G. H. James. According to the Museum Authorities this wig had never before been expertly examined by a wigmaker. The British Museum provided the necessary implements and facilities in their laboratories for as thorough an examination of the wig foundation as its condition would permit. It was not possible to remove it from the wooden block on which it is displayed.

Little has been published as a result of actual examination of any ancient Egyptian wig. Sadly, most of the writings have been based on casual observations through a glass case and imagination. There has been uncertainty regarding the methods used by the Egyptian wigmakers of anchoring the hair to the wig foundation. No details appear to have been published about the foundations and methods of securing hair to them. The manner in which the hair strands are attached to the open mesh foundation of the British Museum's wig is especially interesting and unlike any other published method (ancient or modern) of anchoring hair to a foundation.

This wig, made entirely of human hair (*c.* 1400 B.C.) was found in its original wig box (Brit. Mus. No. 2561), (pl. X, 1) in a tomb at Thebes. The box is constructed of reeds and measures 1 ft. 3 in. (38·10 cm) high, 1 ft. 7 in. (48·26 cm) long and 10 in. (25·4 cm) deep. The physical difficulties of examining the British Museum's Egyptian wig were very great, as the hair of the wig was extremely brittle, and to ensure that no damage was done to the hair or foundation it was only possible to open the hair mass a fraction of an inch to give a view of the foundation and the method used to anchor the hair. These wigs of the ancient Egyptians are the oldest existing wigs in the world and it is important that the fullest details of their method of manufacture should be ascertained and published.

The wig is of a large size, its circumference being about $23\frac{1}{2}$ in. (59·69 cm). It is dressed in a mass of half-inch (1·27 cm) diameter, annular, open-centre, brown curls which are heavily impregnated with a waxy substance composed of a mixture of bees-wax and resin. As far as could be ascertained the curls are formed on 7 in. (17·78 cm) naturally curly, tapered hair, and are of a type that today are called 'stand-up' curls. Each anchored strand of hair is formed into a separate curl at the point-end of an inch-long (2·540 cm) straight hair stem. Around the neck of the wig and extending from ear to ear hang several hundred three-strand, thin, tight plaits originally about

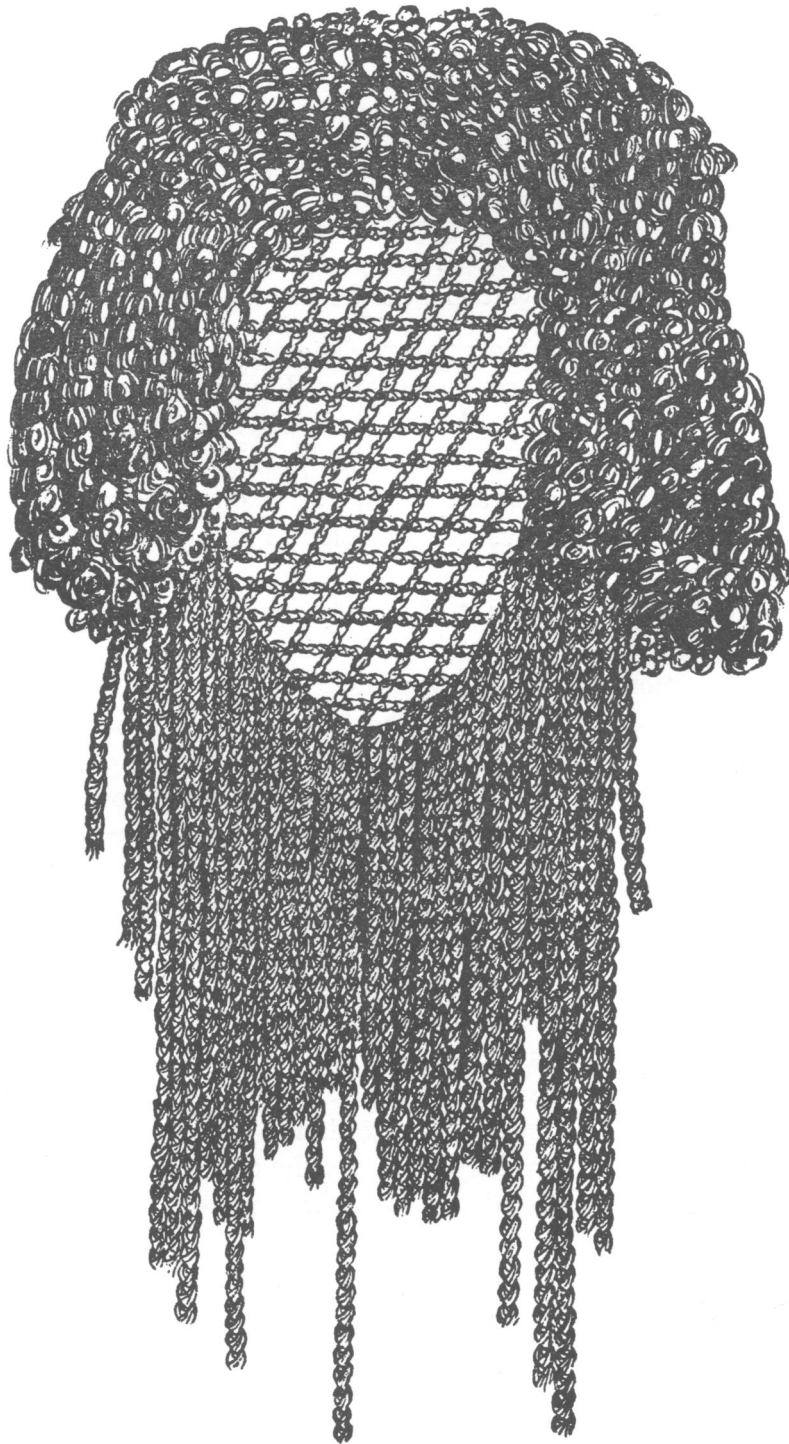


FIG. 1. Sketch of wig showing foundation. Scale: approximately a third natural size.

12–15 in. (30·48–38·10 cm) long, but most of the ends are broken off and only three or four of the plaits remain more or less intact and their full original length of 15 in. (38·10 cm).

The British Museum Research Laboratory undertook an examination and analysis of the wax-like material used in the construction and dressing of this Egyptian wig. Only an approximate result was possible, but examination showed that about two-thirds of the composition was beeswax and one-third resin. No attempt was made at that time to analyse the resin, and only suggestions, based on the known resins, such as myrrh or shellac,¹ used in Ancient Egypt, could be made as to the possible identification of it.

The wig foundation

Those areas of the wig's reticulated foundation that could be examined were at the front, sides, and back of the wig, and consist entirely of finely and tightly plaited human hair forming a hair net with rhomboidal apertures, the sides of which are approximately half an inch (1·27 cm) long (fig. 1). The apertures are now somewhat distorted. The open-mesh foundation of this wig with its elastic qualities (due to the elasticity² of the human hair from which it is constructed) is in essence, although the foundation materials differ, similar to the elastic open-mesh foundations of many modern 'fashion' wigs.

The wig foundation has a modern fabric lining, fitted in the nineteenth century soon after it came into the possession of the British Museum. The friable nature of the original foundation made such a lining necessary before the wig could be satisfactorily mounted on the wooden display block to which it is attached by small metal tacks.

Method of 'anchoring' the hair strands to the foundation

The wig is composed of some three hundred strands of hair, each strand containing about four hundred hairs. All the hair of the wig is coated with a mixture of beeswax and resin. An inch (2·54 cm) of the root end of each strand is looped around a mesh of the foundation (fig. 2A) and pressed against the waxed hair stem (fig. 2B). Fifteen or so hairs of the hair strand are separated from the stem up to the point of looping (fig. 2C). This thin hair strand ('sub-strand') is tightly wound around the hair stem starting close to the foundation (fig. 2D) and continuing to a fraction of an inch beyond the 'short looped end' (fig. 2E). The last quarter of an inch or so of this sub-strand is wound back up the already bound section and the hair ends are pressed into the waxed stem making a secure holdfast (fig. 2F). Presumably when the hair was originally

¹ The gum-resin myrrh was commonly used in the ancient east where it was celebrated as one of the finest perfumes together with spikenard and frankincense. Derived from *commiphora abyssinica*, it is indigenous to the countries bordering the Red Sea to about 22 °N. lat. The gum exudes from the trunk. For the possible use of shellac in Ancient Egypt see *Ancient Egyptian Materials and Industries* by A. Lucas, 4th edn., 1962, 358–61.

² Good-quality human hair will stretch in a dry state up to 20 per cent of its original length and up to 50 per cent in a wet state. See A. Savill and C. Warren, *The Hair and Scalp*, 5th edn., 1962.

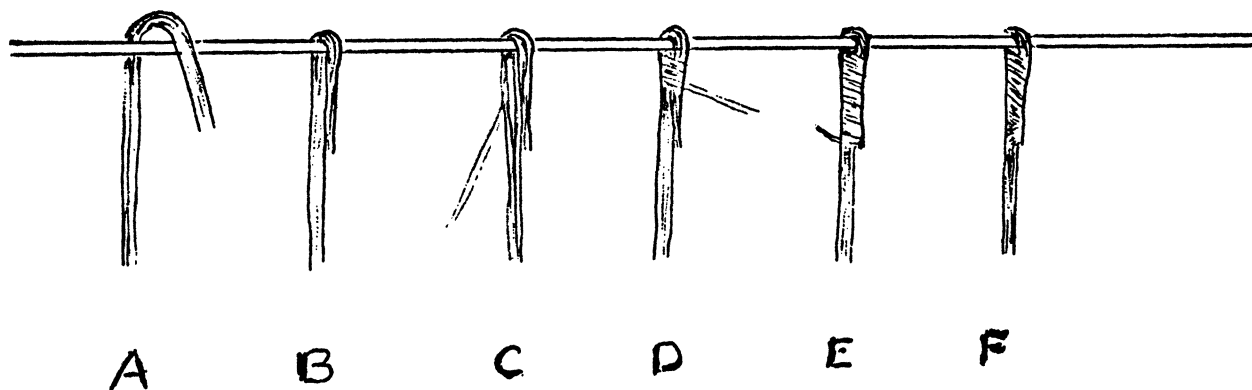


FIG. 2. Method of anchoring the hair strand. Scale: about half natural size.

- A. Waxed hair ends looped around mesh of net.
- B. Waxed hair ends pressed against waxed stem.
- C. Sub-strand separated from the main strand up to the point of looping.
- D. Commencement of the tight binding of the looped hair ends.
- E. The binding wound back over the last centimetre of already bound stem.
- F. Completed bind and anchorage.

worked the wax was warm and soft and within a few minutes of completing an anchorage it would have hardened and secured the 'tie'. See fig. 3 and pl. X, 2. The melting point of modern beeswax varies between 62°C (143.6°F) and 65°C (149°F).

The melting point of the beeswax used on the ancient Egyptian wigs examined by A. Lucas in the Cairo Museum varied between 60°C (140°F) and 63°C (145.4°F). (*Annales du Service*, 30 [1930], 190-6.) As long as the shade temperature did not exceed 60°C (140°F), the safety of the anchorage was assured. Should the temperature exceed the melting point of the mixture of beeswax and the resin used to hold the hair ends the wax and resin mixture would necessarily melt and the ends would loosen. As the highest shade temperatures of Egypt over the past hundred years have not been recorded as exceeding 60°C (140°F), there is no reason to suppose that these ancient Egyptian wigs were in danger of disintegrating with the heat!

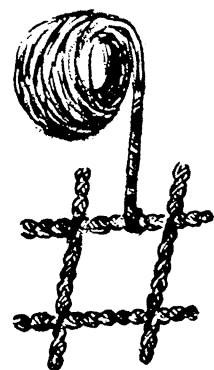
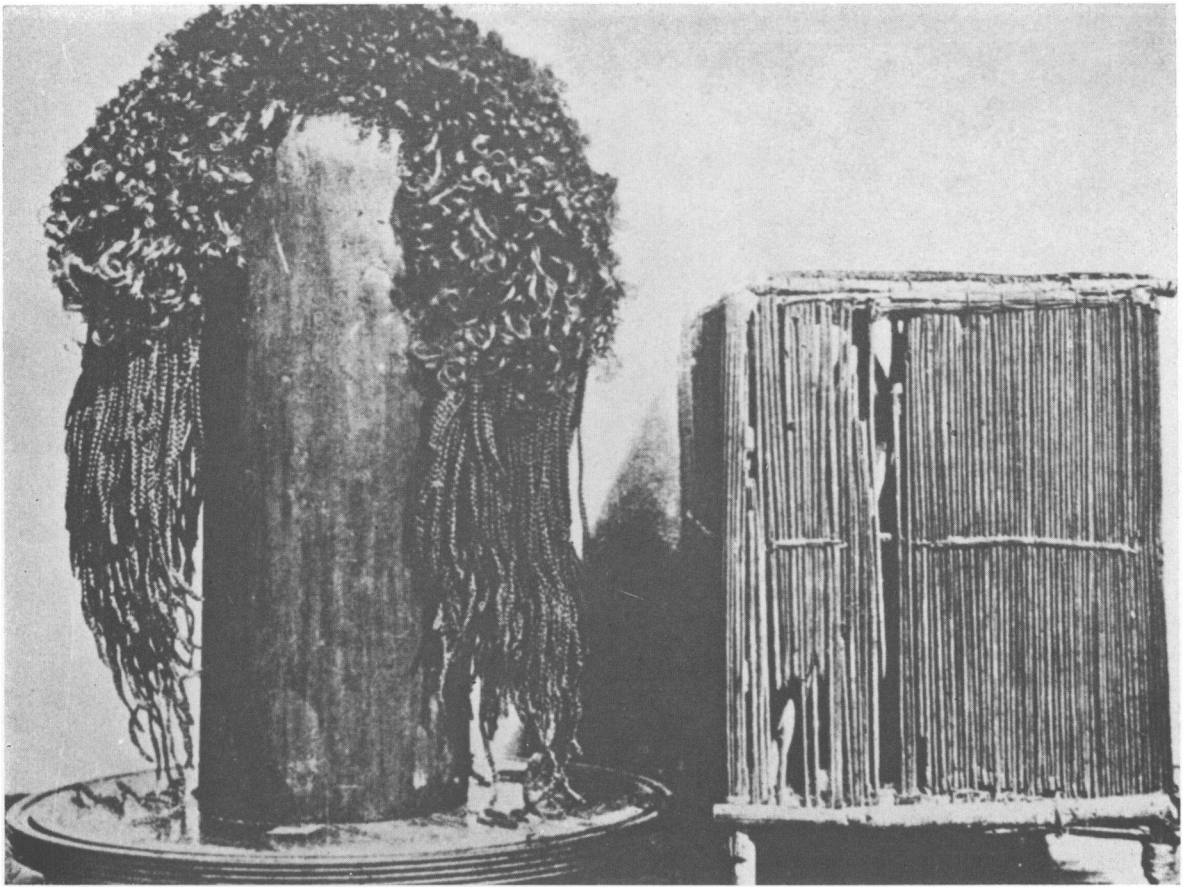


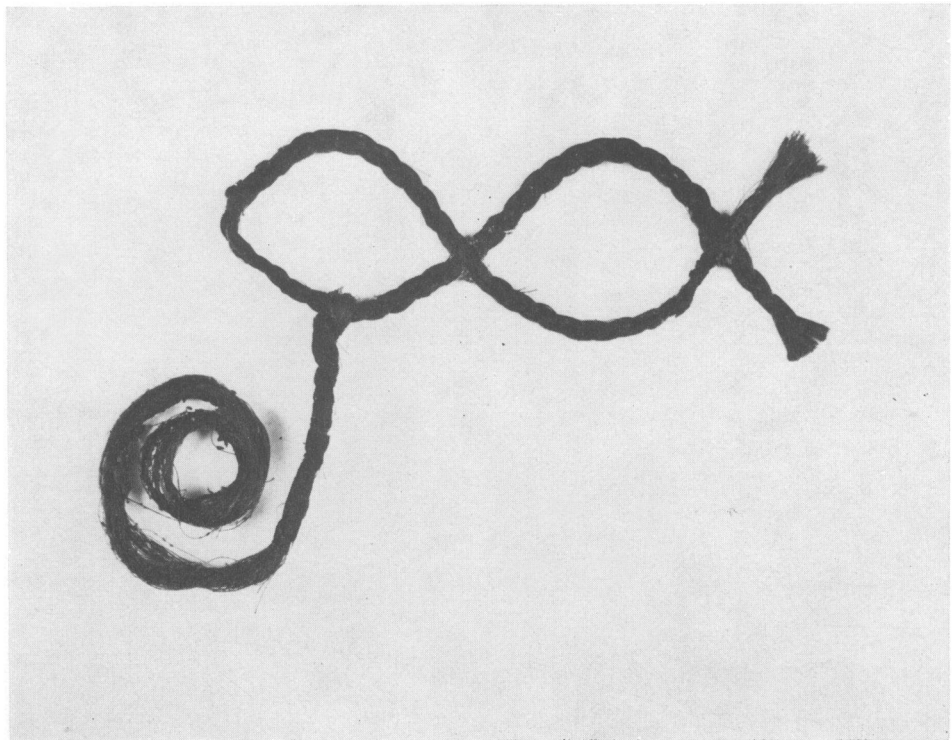
FIG. 3. Mesh of wig foundation and anchored hair strand. Scale: natural size.

The standard of craftsmanship exhibited in the wig is as high as in the best modern wigs, and its survival, with hair anchorages intact, is convincing evidence that its method of construction was suitable for its purpose and the climate in which it was worn.

It seems to the present writer that the Romans with their close contact with Egypt and its civilization were afforded ample opportunity to be influenced by the Egyptian wig.



1. Egyptian wig (Brit. Mus. No. 2560) on block and wig-box (Brit. Mus. No. 2561)
Scale: approximately a fifth natural size



2. Photograph of a modern copy of the ancient Egyptian anchored hairstrand
worked by the writer. Scale: approximately natural size

A BUILDING OF AMENOPHIS III AT KÔM EL-‘ABD

By BARRY J. KEMP

THE site of Kôm el-‘Abd lies on the west bank of the Nile, about 3.5 km to the south-west of Amenophis III’s palace complex at Malkata, and thus about 2 km beyond the south-westerly mounds of the Birket Habu. It stands between the modern villages of Hager el-Dabiya and Hager el-Meris (which appear on the older survey maps as Naga Abu Anz and Naga Omar Abu Khiragi). Its principal feature of interest is the isolated mud-brick building of Amenophis III excavated in 1936–7 by an expedition of the Egypt Exploration Society directed by O. H. Myers. A brief report on the work, which contains the essential information, appeared in *JEA* 23 (1937), 118, but otherwise it has remained unpublished, although detailed records were made at the time. The plans, made by Ralph Lavers, drawings of objects, photographs, and an outline text are preserved at the Egypt Exploration Society offices in London. During the survey of the Malkata area carried out in 1969 by the University Museum of Pennsylvania I located the site again and made a brief visit. Further visits were undertaken by various members of the staff of the University Museum expedition to Malkata in 1973 under my supervision, including one by the expedition’s surveyor, G. Dennis Sykes, who fixed the position of Kôm el-‘Abd in relation to the mounds of the Birket Habu. To these people, to Professor H. W. Fairman who first directed my attention to Myers’s work in the area, to the Committee of the Egypt Exploration Society who generously granted permission to study Myers’s records and to reproduce Lavers’s plan and section, and to Dr. David O’Connor, director of the Malkata project, I wish to express my indebtedness. The sketch map of fig. 1 I have built up myself from various sources, including the aerial photographs published in *The Bucheum*, III, pl. ix; the photographs published here were taken by myself and thus show the present state of the site.

The site is about 200 m from the present edge of the cultivation, and stands on the crest of a broad plateau of gravelly desert sloping slightly down towards the cultivation, broken by a shallow wadi a short distance to the north-east (pl. XI, 1). The desert cliffs lie a long way back, and the site has a sense of isolation which it probably possessed when first built. A careful examination of the surrounding desert failed to show any traces that might suggest that the Eighteenth-Dynasty buildings had spread any further than is shown on Lavers’s plan. An area of unexcavated settlement remains extends around the south-east side, but as the appendix suggests, the indications are that this belongs to a period much later, when the character of the site was very different. On the north-west side, beyond the row of tree pits, Myers seems to have tested the ground but without revealing any traces of antiquity at all. Around the west corner the desert surface seems to have been cleared of coarser stones, but this may be quite recent.

The Eighteenth-Dynasty building consists of two parts (fig. 2):

1. **The platform.** The rectangular platform measures 45 by 40 m, with a height to the top of the brick paving of 3.75 m. The central portion of the north-west wall is thickened to create a projection about 0.75 m wide (pl. XII, 1). The hollow rectangle of the thick surrounding wall is subdivided by internal partition walls, to add stability. The group on the north-east side, however, also gives the impression of having been constructed as usable rooms, (pl. XII, 2), and near the north corner an entrance had temporarily been left in the surrounding wall, though subsequently sealed up. Lavers suggested that they may have belonged to an earlier plan, later abandoned, for accommodation or storage; alternatively, the builders themselves may have arranged the walls like this for their own convenience. The rooms were never plastered, and whatever their purpose had been, when the platform was finished no hint can have remained of their existence. All of the internal spaces were filled with the local sand and gravel, which also contained predynastic sherds and flints, and a mud-brick pavement was laid over the whole surface. Myers had the filling removed from the rooms in the east corner, but otherwise left it in place.

One form of attack to which the platform was subsequently exposed was removal of the brickwork. This extended to the upper course of the retaining wall and of the internal walls, so that the pavement was broken into a series of islands isolated partly by trenches where brick robbing had been carried out. Nevertheless, it is important to note two places where Lavers clearly marks this paving running across the main internal partition walls, and an area of paving covering much of one of the rooms on the north-east side.

On the south-west side, the platform was reached by a broad ramp which evidently terminated in a square landing. At the conclusion of the excavation Myers restored the brickwork at the bottom of the ramp, and this is still visible (pl. XI, 2). A row of ten tree pits was located 11 m from the north-west face of the platform.

2. **The houses.** These, when excavated, were already destroyed down to the last few courses, or even to the foundation level. They filled a compound of similar dimensions to those of the platform itself, and comprised seven units. Four of them form a single block with central corridor and have identical plans: a square living-room with two smaller chambers opening off from one side, an entrance chamber and an intermediate chamber connecting it to the living-room. The column bases are evidently restored by Lavers. The same elements occur in the two separate houses, slightly rearranged so that the intermediate chamber becomes a third chamber leading from the living-room. Houses very similar in plan and arrangement were found at Malkata itself, in a block running parallel to the North Palace.¹ The seventh house is larger, and closer to the standard el-Amarna villa, though in less constricted sites the three rooms at the south-east end would normally have been arranged along the north-east side. The whole group bears a general resemblance to the group of houses in area VI at Maru-Aten² and, like them, was presumably caretaker accommodation.

¹ H. G. Evelyn-White, *BMMA* 10, no. 12 (Dec. 1915), 254-5, fig. 3.

² T. E. Peet and C. L. Woolley, *The City of Akhenaten*, 1, 114; pl. 29.

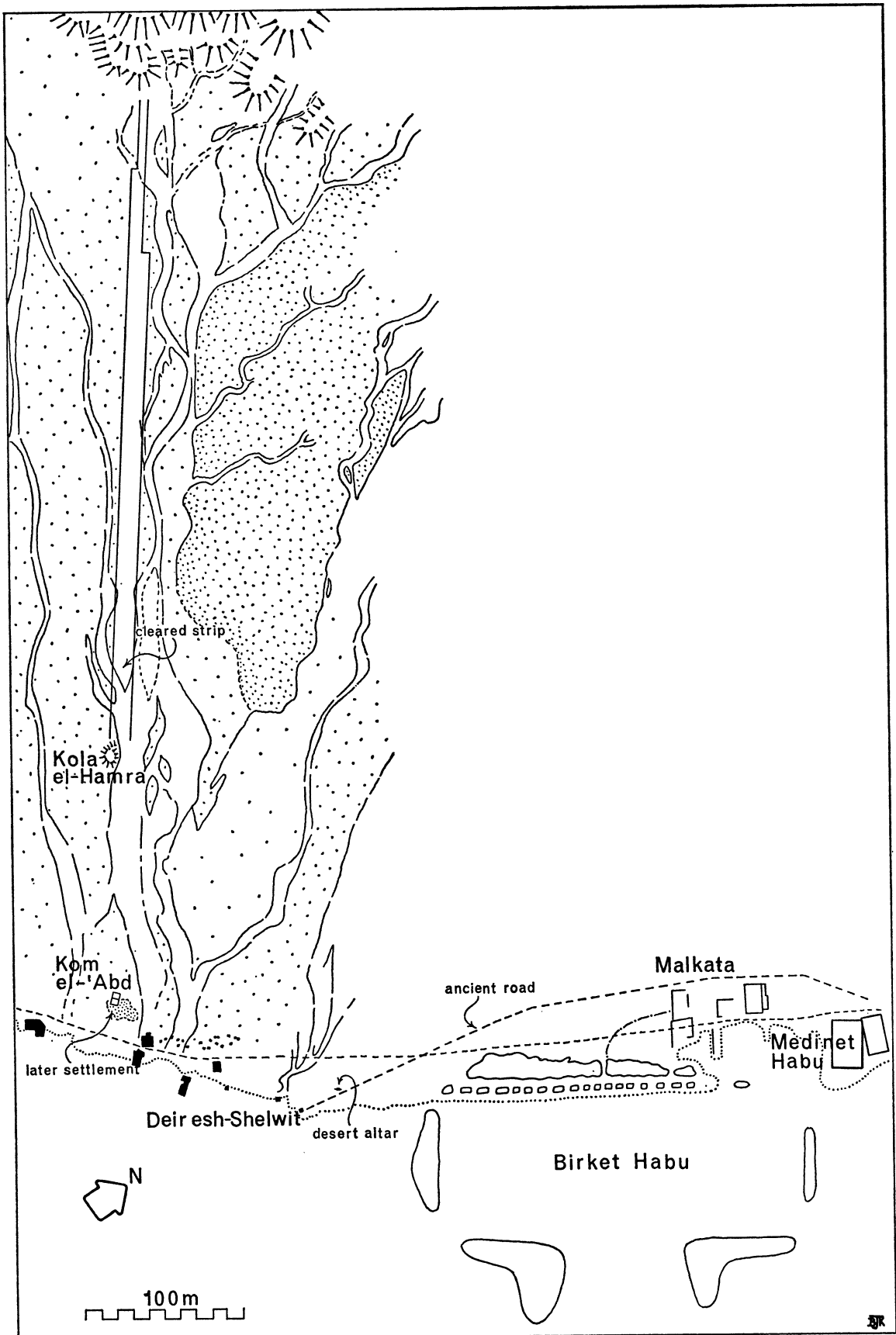
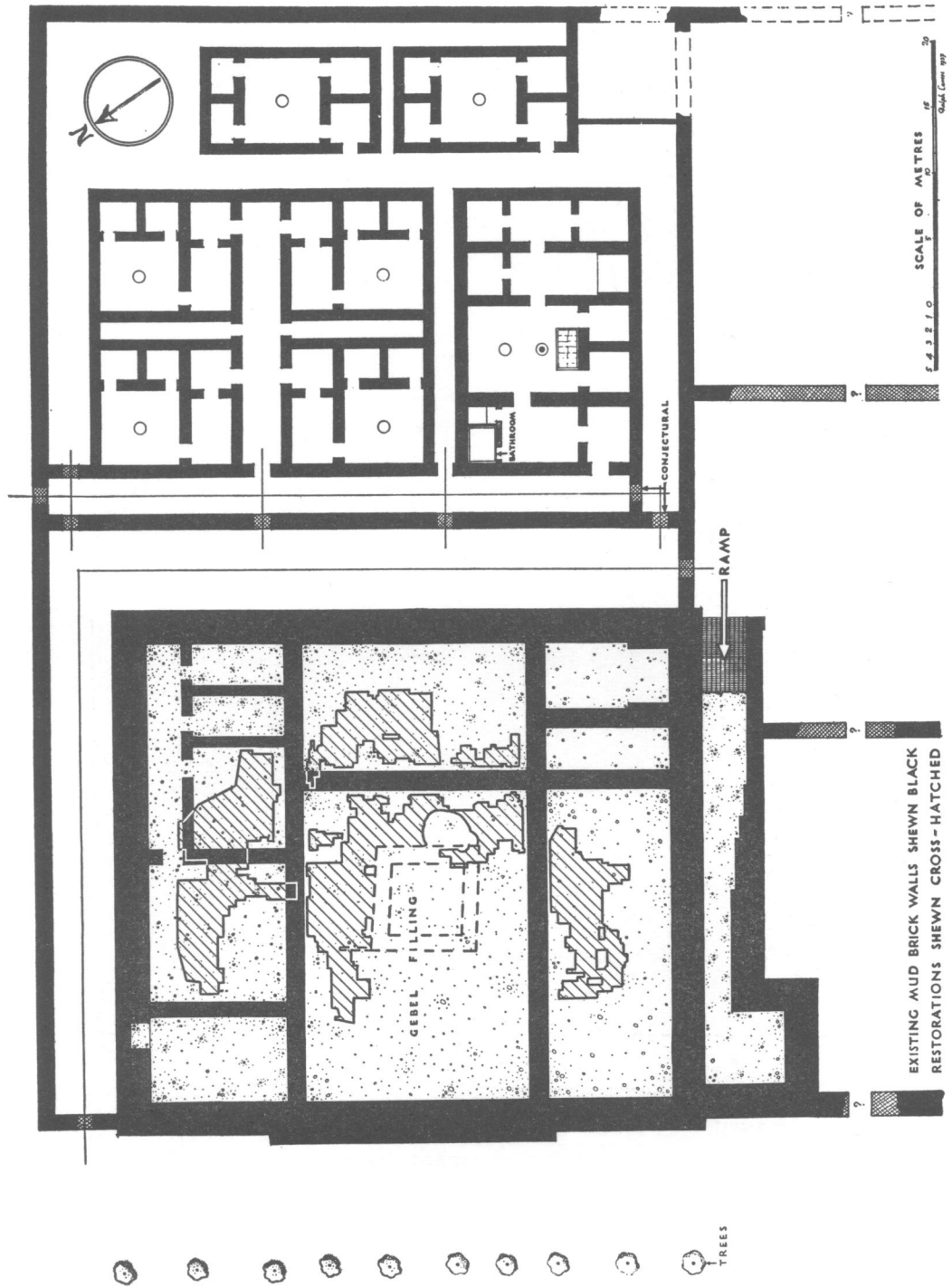
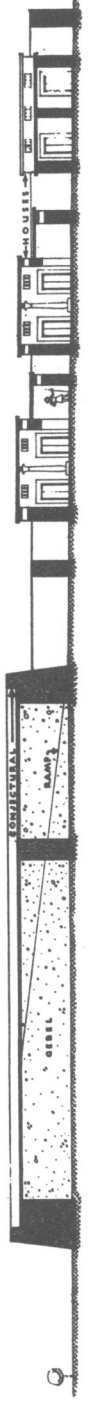


FIG. 1. Sketch map showing the relationship of Kôm el-'Abd to Malkata and to the strip of cleared desert behind Kola el-Hamra.

KŌM EL ÁBD



EXISTING MUD BRICK WALLS SHEWN BLACK
RESTORATIONS SHEWN CROSS-HATCHED



CROSS SECTION , N-W TO S-E .

SCALE OF METRES
0 5 10 15 20 25

The excavations produced Eighteenth-Dynasty pottery, including blue-painted sherds (and Mycenaean ones), but more specific for dating the building were bricks stamped with the name of Amenophis III. Myers formed the opinion that the original occupation had been very slight: the complex had either been used for a very short period or had never been used at all for its original purpose. This thought should be compared with the impression of incompleteness which the Birket Habu can create.³

In his surviving manuscript, which for Kôm el-‘Abd is quite brief, Myers allots little space to considering the purpose of the building, merely quoting Lavers’s comparison with the desert altars at el-Amarna. This comparison, however, is not a very appropriate one, particularly since a structure much closer to the desert altars can be found near to Malkata, not far from the western corner of the Birket Habu (fig. 1).⁴ Central to the interpretation of its purpose is the question: what, if anything, stood on top of the platform? The question is complicated by the fact that in later centuries a little village grew up around the platform, which itself had graves dug into it. In the middle of the platform and resting partly on the original pavement were the remains of a square brick room dubbed ‘The Pentice’ by Myers. Its outline is marked as a broken line on fig. 2. Its solidity and construction suggested contemporaneity with the platform, yet it was neither truly central nor in proper alignment with the main structure. Furthermore, it can be seen that its walls in no way correspond to the internal strengthening walls of the platform. Myers’s final suggestion was that it may have been a guard post for times when the structure was not in use; at all events, it should evidently be discounted in considering the original appearance and purpose of the platform.

No other walls which could conceivably belong to the original construction were found on the platform, despite the preservation of significant stretches of brick pavement. As noted above, robbery of brickwork has affected the upper courses of the internal walls, but even so at three points the pavement crosses them. Furthermore, had it been intended to erect rooms and columns on the platform, one can be reasonably sure that more internal walls would have been included so that the weight of the superstructure could be transmitted directly to the ground and not indirectly via the gravel fill. The largest of the desert altars at el-Amarna is instructive here.⁵ The platform in this case contained a maze of internal walls evidently to act as secure foundations for a columned pavilion built on top. In the North Palace at Malkata the casemate foundations were not as elaborate as this in that column bases at least seem not to have

³ B. Kemp and D. O’Connor, ‘An Ancient Nile Harbour. University Museum Excavations at the “Birket Habu”’, *Int. J. Nautical Archaeol.* 3 (1974), 101–36, esp. 133.

⁴ This was surveyed by the University Museum expedition in 1969 and 1973; subsequently it became part of the Waseda University Expedition concession, and was excavated by them in the following year, see J. Leclant, *Orientalia* 44 (1975), 221–2. The significance of their discovery of the painted stairway, fortuitously preserved, can easily be over-estimated. The desert altars at el-Amarna were probably quite handsome structures originally, but destruction has removed all their decoration. The decorative theme of bows and prisoners was used as pavement decoration in one of the less formal parts of the Great Palace at el-Amarna, see Petrie, *Tell el Amarna*, pl. 2. Hayes, *JNES* 10 (1951), 36 and n. 12, referred to the structure near Deir esh-Shelwit as ‘a small courtyard surrounding the base of a solar obelisk’.

⁵ H. Frankfort and J. D. S. Pendlebury, *The City of Akhenaten*, II, 101–2, pls. 26, 27.

had separate foundations, but even so the areas of the individual compartments were in general smaller than the main platform compartment at Kôm el-ʿAbd, despite being less than 2 m high (as against 3.75 m at Kôm el-ʿAbd). One can form the impression that within the plan of the platform and its ramp the elements of an el-Amarna villa are present, with the entrance hall at the top of the ramp, the main hall where the central compartment of the platform is, even a bed alcove in the south corner. Yet the evidence of the brick pavement seems definitely to exclude any major brick construction on the top. For the same reasons a heavy central altar, such as one would expect if the platform had served as a solar shrine, or 'sunshade', is equally unlikely. This is not the end of the matter of what may have stood on the top, but before considering other possibilities the question of its over-all purpose must be pursued a little further.

One of the difficulties in trying to find explanations for buildings made for kings is that, between them, religion and strict utility do not exhaust the possibilities. Kings are in a position to have their whims and fantasies realized, and in the history of royal architecture, oriental as well as, perhaps even more than, occidental, this is a strong theme, though often blended with symbolism. A clue for Kôm el-ʿAbd may exist in its location opposite the end of a long straight stretch of swept desert, which is marked on fig. 1. This is briefly described in *The Bucheum*, I, 26, and, with a little more detail, in Myers's manuscript. An oblique aerial photograph of most of it appears on pl. X of *The Bucheum*, III. It commenced about 2.0 km from the desert edge and ran in a straight line to the base of the hills about 4.1 km further away. It seems to have been about 120 m wide, and to have been made simply by removing all of the larger stones, a method of making desert roads known elsewhere in ancient Egypt, including the desert behind el-Amarna.⁶ At the further, north-western, end it narrows down twice, stepping in once from the north-east and then again from the south-west, as can be just seen with the aid of magnification in *The Bucheum* aerial photographs. Myers queried if this was perhaps a sign that it had been left unfinished, though the edges of this stepping do seem to have been very regular. However, a more definite indication that it was never finished was found in the form of small piles of pebbles remaining on the surface which gave the impression of having been collected but not yet removed. At its nearer end it terminated at a prominent hill called Kola el-Hamra. The top of this had been occupied by something like a Coptic hermitage, but in the course of examining the top, which included the excavation of the hermitage itself, forty-one New Kingdom sherds were collected by Myers's expedition. The sides of these sherds were worn from use as 'spades' or 'scrapers'. Whatever else is implied by this, Kôm el-ʿAbd is too far away from Kola el-Hamra for sherds to have been transported in a casual way, and they may thus have been connected with the road. No other direct evidence for date or use was found, and in the manuscript Myers notes that by 1938 *sebbakhîn* had destroyed all but the upper reach.

In *The Bucheum* Myers repeats a suggestion by Sir Robert Mond that the road may have led to an important tomb, and this appears also in the manuscript. A strong

⁶ Petrie, *Tell el Amarna*, 4-5, pl. 35; P. Timme, *Tell el-Amarna vor der deutschen Ausgrabung im Jahre 1911*, 33-5, Blatt 4, 6.

argument against this, and against any suggestion that it was intended to facilitate travel to anywhere at all from the Nile valley is that the nearer end of its course was blocked by the hill of Kola el-Hamra. The impression so created that it was complete in itself led to Myers's own view that it was a 'chariot race-course, the knoll in the Low Desert representing the grand stand'.⁷ One might note that we have no evidence that the Egyptians ever raced chariots, though this is perhaps too natural a thing to do for them to have avoided it, but certainly the display of individual chariotry skill by the king is well known, particularly from the larger of the sphinx stelae of Amenophis II,⁸ and the track behind Kôm el-‘Abd would seem eminently suitable for this sort of activity. From this association arises an explanation for Kôm el-‘Abd itself: that it served as a rest-house.

The quasi-military trappings which one might expect to be associated with chariotry displays suggests one form of structure which might have been set on the brick platform. Tents and awnings made of light timber frames to be covered with linen had been fabricated as far back as the Old Kingdom, a most instructive example being the awning frame on the funerary boat of Khufu.⁹ Deckhouses apparently of wooden frames covered with decorated tent-cloths were also standard on New-Kingdom boats,¹⁰ but now there is a more relevant source of information in the representations of military tents. Their outlines with characteristic pitched or curved roofs occur in the Battle of Qadesh reliefs.¹¹ The Abu Simbel version seems to depict painted decoration of kneeling prisoners on a side wall, and a cartouche flanked with falcons on the end wall. A similar tent outline with gently curving roof appears in the Punt reliefs of Ḥatshepsut at Deir el-Bahari, where it is actually labelled 'the tent (*imꜣw*) of the royal envoy'.¹² Some details of construction can probably be gleaned from pictures of two similarly shaped structures on two of the blocks associated with the Memphite tomb of Ḥoremḥeb.¹³ In particular, they seem to show poles with decorated tops and a door evidently in a wooden frame. This might imply wooden frame walls as well, with joinery perhaps along the lines of the canopy frame from the tomb of Tut'ankhamūn.¹⁴ Seven tent poles 'worked with silver of the tent (*imꜣw*)' of the prince of Qadesh were amongst the booty captured at

⁷ Sir R. Mond and O. H. Myers, *The Bucheum*, I, 26.

⁸ Discussed in W. Decker, *Die physische Leistung Pharaos: Untersuchungen zu Heldentum, Jagd und Leibesübungen der ägyptischen Könige* (Köln, 1971), 122-35.

⁹ B. Landström, *Ships of the Pharaohs* (London, 1970), 26-34.

¹⁰ *Ibid.* 98-110, 134-6.

¹¹ W. Wreszinski, *Atlas zur altaegyptischen Kulturgeschichte*, II, 81/2; 92a = 93/4; 169/70 = 177.

¹² E. Naville, *The Temple of Deir el Bahari*, III, pl. 69.

¹³ J. Capart, *JEA* 7 (1921), pl. 6, fig. 1, p. 33; Wreszinski, *Atlas*, I, 386. B; R. Hari, *Horemheb et la reine Moutnedjemet*, 73-6, figs. 17, 19. A. Badawy, *A History of Egyptian Architecture* (III), *The Empire* (the New Kingdom) (Berkeley and Los Angeles, 1968), 133, identifies the structures as sheds; cf. A. Badawy, *Le Dessin architectural chez les anciens égyptiens* (Cairo, 1948), 128; also H. Schäfer (ed. J. Baines), *Principles of Egyptian Art* (Oxford, 1974), 127.

¹⁴ *PM* I, 2nd edn., part 2, 571, no. 208; H. Carter, *The Tomb of Tut-Ankh-Amen*, II, pls. 55, 56. There would also have been a general resemblance to the larger military tents of the Roman army which were made of leather and, when for officers and commanders, were carried on a box frame of wooden poles and slats giving the same rectangular plan with pitched roof as Egyptian tents seem to have had. A useful discussion, based partly on the representations on Trajan's Column, is J. McIntyre and I. A. Richmond, 'Tents of the Roman Army and Leather from Birdoswald', *Trans. Cumberland and Westmorland Antiquarian and*

Megiddo by Tuthmosis III.¹⁵ Although royal tents are usually associated with military campaigns, in one significant instance the king uses one for a visit within his own country. The reference occurs in the second set of boundary stelae at el-Amarna:¹⁶ 'On this day, One was in Akhetaten in the tent of matting (*imꜣw n psst*)¹⁷ which had been made for His Majesty (l.p.h.) in Akhetaten, the name of which was "The Aten is Content".' Evidently in this case matting was substituted for linen, and again there is a parallel with deckhouses on ships.¹⁸

In the reconstruction of fig. 3 I have, with some liberty, sketched in some tents, although there is no clear evidence as to how large or extravagant they might have been. Those in fig. 3 probably err on the side of modesty. The act of reconstructing ancient buildings obliges one to find solutions to various uncertainties which a plan can discreetly avoid. Thus I also assumed that the walls on the south-west side did not extend very much further, and formed a series of courtyards; also that, as Lavers evidently concluded, no wall would have been as high as the platform so that the view from the top would not be obstructed. How the main gateways were completed has to remain very conjectural for lack of clear comparative evidence. The el-Amarna solution for combining firm gateposts with formality in the shape of the broken-lintel door frame may not have been in use in earlier domestic architecture. The pylon-like structure at the main entrance I still find somewhat unconvincing, but could think of nothing better. For each of the houses Lavers, in his section (fig. 2), provided a raised roof over the living-room. This seems reasonable in the case of the large house, but less so in the others since two sides of each living-room were external walls and thus lighting should have offered no problem. Other comparable house groups seem to provide a greater degree of privacy than the multiple means of access suggested by Lavers would offer; I thus disregarded several of his conjectural entrances. However, so that visiting parties entering from the valley side could receive services immediately upon arrival, direct access from the housing compound to the south-east courtyard seems to be required, and the small enclosure in the south corner of this compound would serve as an isolating intermediate zone between houses and the formal space of the courtyard.

The choice of site at Kôm el-ʿAbd may have been determined in the first instance by the fact that the desert behind may have been the nearest to Malkata which was relatively flat over a sufficient distance. Immediately to the north-east the ground rises to a low dissected plateau, then follows a wadi system, and finally the hills rapidly

Archaeological Soc. N.S. 34 (1934), 62–90. They also apparently had guy-lines, but these are omitted from the Trajan's Column carvings, a point that might be considered in interpreting the Egyptian evidence. If framed tents ever were pitched on the Kôm el-ʿAbd platform some form of anchoring would almost certainly have been necessary.

¹⁵ *Urk.* IV, 664, 7; cf. 659, 6–7.

¹⁶ N. de G. Davies, *The Rock Tombs of El Amarna*, v, pl. 26, line 5, p. 32; M. Sandman, *Texts from the Time of Akhenaten*, 122.

¹⁷ *Wb.* I, 555 (1); Faulkner, *Dict.*, 95; Helck, *Materialien*, (407), (434, 435). H. Goedicke, *The Report of Wenamun*, 49, suggests 'tavern' for the meaning of *imw* in this text. Possibly the context does demand an alternative to 'tent', but the *Urk.* IV, 60, 17 reference quoted in support has all the appearance of a figure of speech. The writer, Anena, would hardly have lived in 'lowly accommodation' (or if he did, have admitted it in this particular context).

¹⁸ Landström, *op. cit.* 134–7.

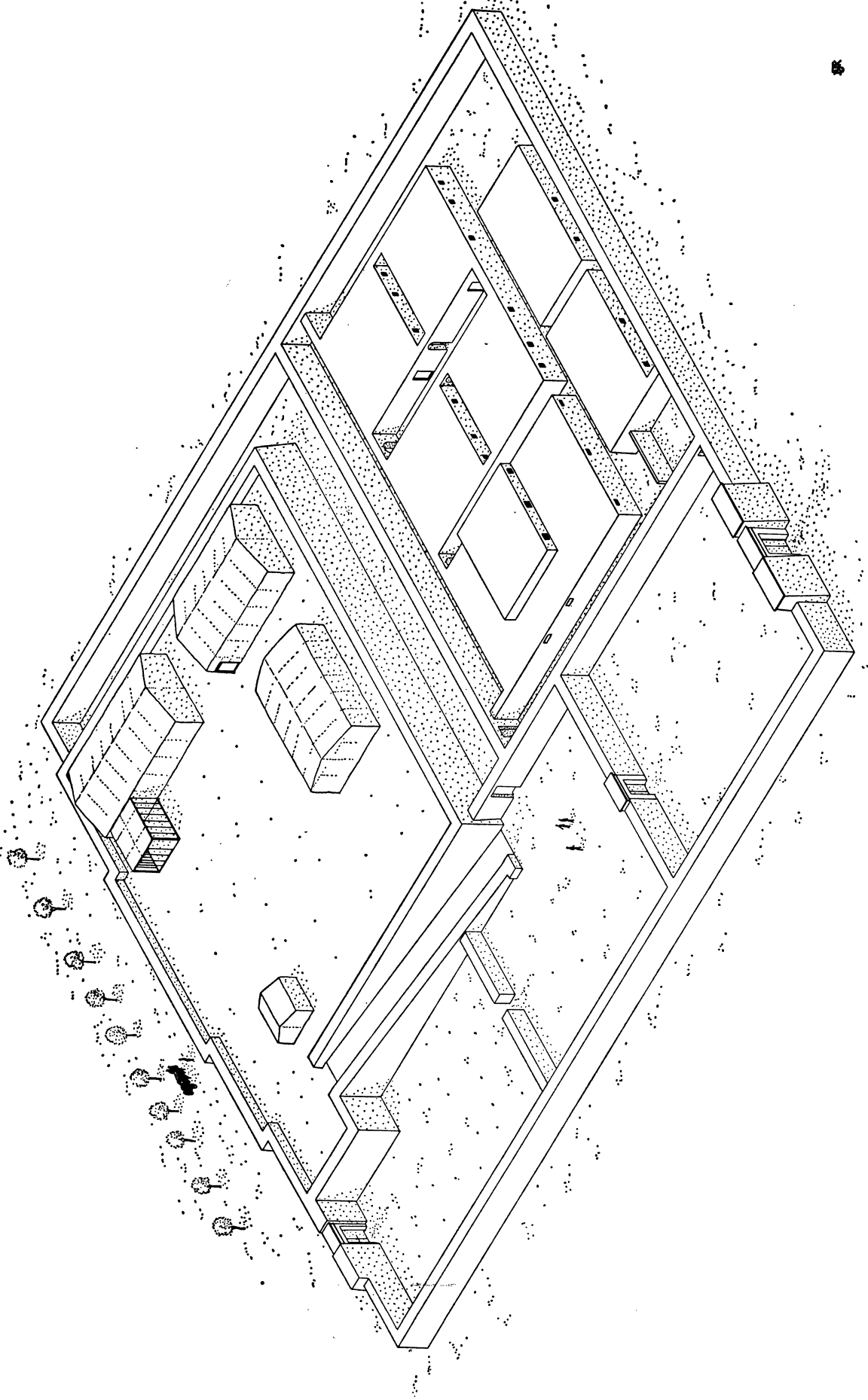


Fig. 3. Kôm el-ʿAbd: isometric reconstruction.

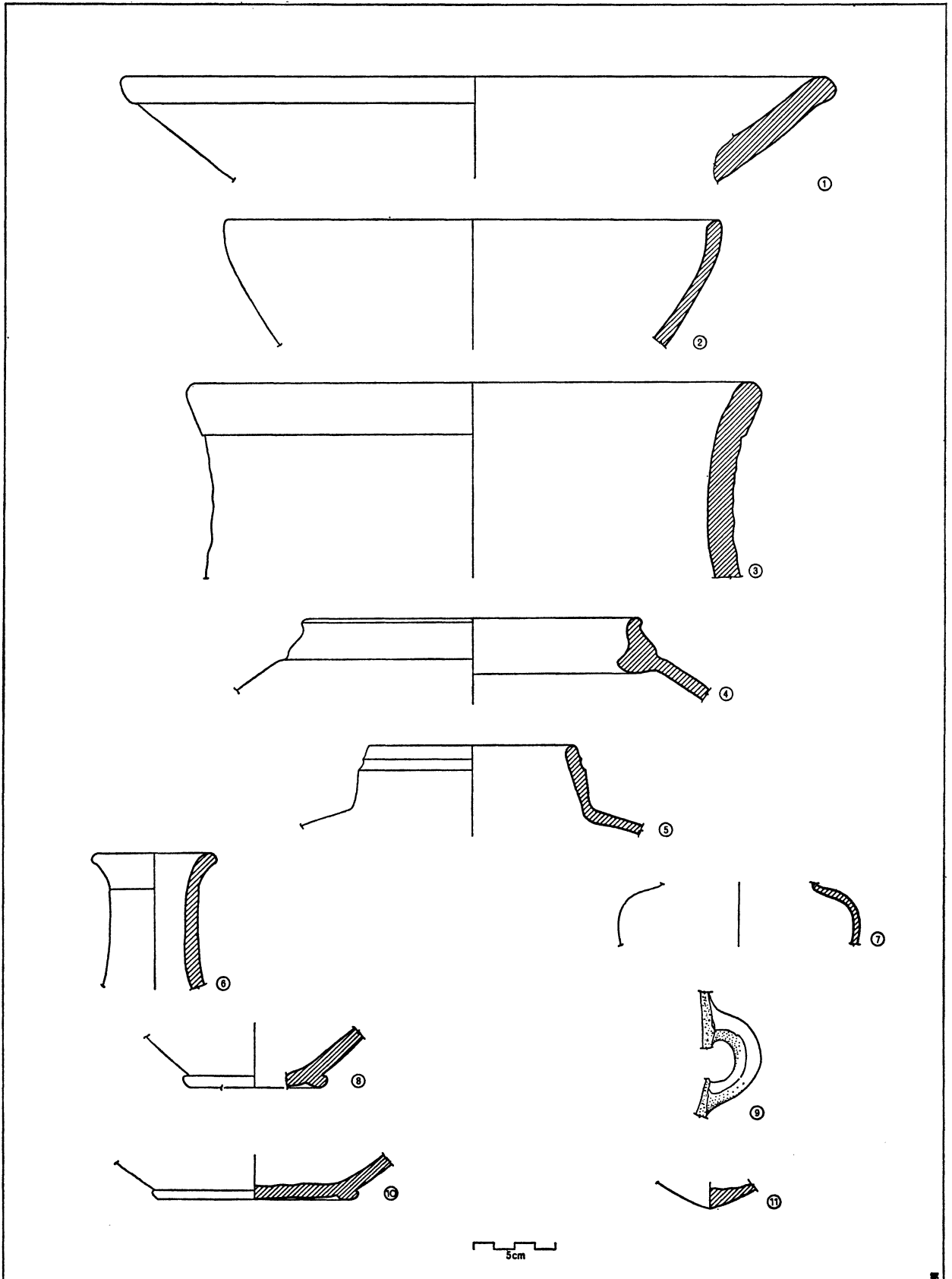


FIG. 4. Kôm el-'Abd: later settlement pottery.

approach the desert edge. The seclusion of the site may also have been in its favour, affording a temporary escape from palace life and affairs. Between Malkata and Kôm el-'Abd the desert surface is fairly rough in places and crossed by several shallowly-incised wadis, which would probably make difficulties for chariots. The work of the Metropolitan Museum of Art at Malkata drew attention to an ancient roadway, partly constructed as a causeway, most carefully laid out behind Malkata.¹⁹ It was assumed that this belonged to Amenophis III's constructions. However, my own examination of this curious feature, which I carried out in 1969, during the University Museum of Pennsylvania survey of the area, convinced me that it is later than the Malkata complex, was indeed probably made when it had been abandoned, and represents a military road or something similar which, because of the obstruction caused by the Birket Habu, had to forsake its river valley course and for a short distance take to the desert, skirting round the limits both of Malkata and Medinet Habu. At its south-westerly end it passes by the desert altar at a short distance and finally disappears beneath the temple of Deir esh-Shelwit. For Amenophis III, access may have had to have been, beyond the Birket Habu, via the edge of the floodplain.

APPENDIX

Surface pottery from the adjacent settlement

An area of disturbed, sherd-strewn debris stretches eastwards from the platform, evidently the remains of a settlement, and marked on fig. 1. A fairly superficial search was made by myself and members of the University Museum expedition for New Kingdom pottery, but no sherds were seen which could be positively identified as such, although with a bowl sherd like no. 1, fig. 4, one could not be entirely certain. But neither were blue-painted nor burnished cream amphora sherds seen which might have been expected on a settlement of Amenophis III's reign. The small collection of sherds made and illustrated in fig. 4, seem as a group to fit best into collections of pottery ascribed to the Third Intermediate Period and Late Period, e.g. from western Thebes and Heliopolis. This would be a very natural conclusion also on grounds of context, since it is presumably a continuation of the later settlement phase around the platform itself, which Myers tentatively ascribed to this period. A corpus of pottery from this part of his excavations is also amongst his records.

The following notes refer to the sherds illustrated in fig. 4:

1. Rim sherd from a large bowl, made in a coarse brown gritty fabric with dark core, with a red unburnished slip over the interior and exterior. A rope impression runs around the exterior (omitted from drawing).
2. Rim sherd from a bowl, made in a brown, slightly gritty fabric, with a thin unburnished buff slip added. The exterior surface is very slightly ribbed.
3. Rim sherd from a vessel probably like Petrie, *Hyksos and Israelite Cities*, pls. 36A. 4; 39E. 121. Coarse brown gritty fabric with dark core, surface altered by weathering.

¹⁹ W. C. Hayes, *JNES* 10 (1951), 36 and n. 12; C. F. Nims, *JNES* 14 (1955), 111 and n. 8.

4. Rim sherd from a storage jar, something like Petrie, *Qurneh*, pl. 49. 783; Hölscher, *The Excavation of Medinet Habu*, v, pl. 47. B3. Pink compact fabric, pale yellow core, with a thin unburnished buff slip on the outside.
5. Rim sherd from a storage jar, something like Petrie, *Qurneh*, pls. 49. 781; 50. 796; Petrie, *Heliopolis*, pl. 33. 44. Pink compact fabric, with a thick buff slip on the exterior.
6. Sherd from the neck possibly of a handled bottle, as in Petrie, *Heliopolis*, pl. 34. 60, 61. Brown gritty fabric, no slip or burnish.
7. Body sherd from a small bottle, in a buff compact fabric, with darker buff slip, unburnished.
8. Sherd from a ring-based bottle, perhaps from something like Petrie, *Heliopolis*, pl. 34. 60-5. Grey, slightly gritty, fabric with smooth unburnished surface.
9. Handle, in a pink compact fabric with pale-brown core. Buff, unburnished slip added.
10. Sherd from a ring-based bottle, made from a pink compact fabric with pale-yellow core and smooth unburnished surface, and slight ribbing on the inside.
11. Base from a closed vessel, perhaps from something like Petrie, *Qurneh*, pl. 49. 773, 774. Pink compact ware, with a thick unburnished buff slip on the outside.

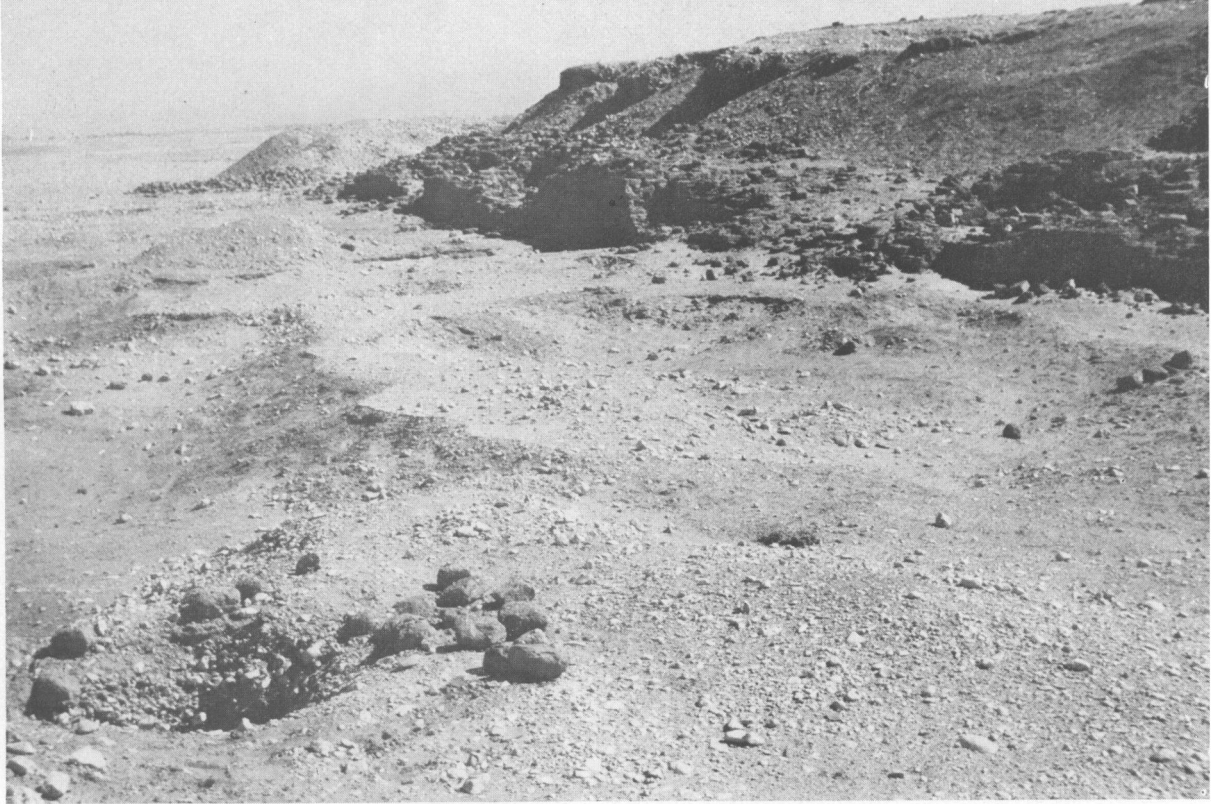


1. Kôm el-'Abd: general view from the north-east

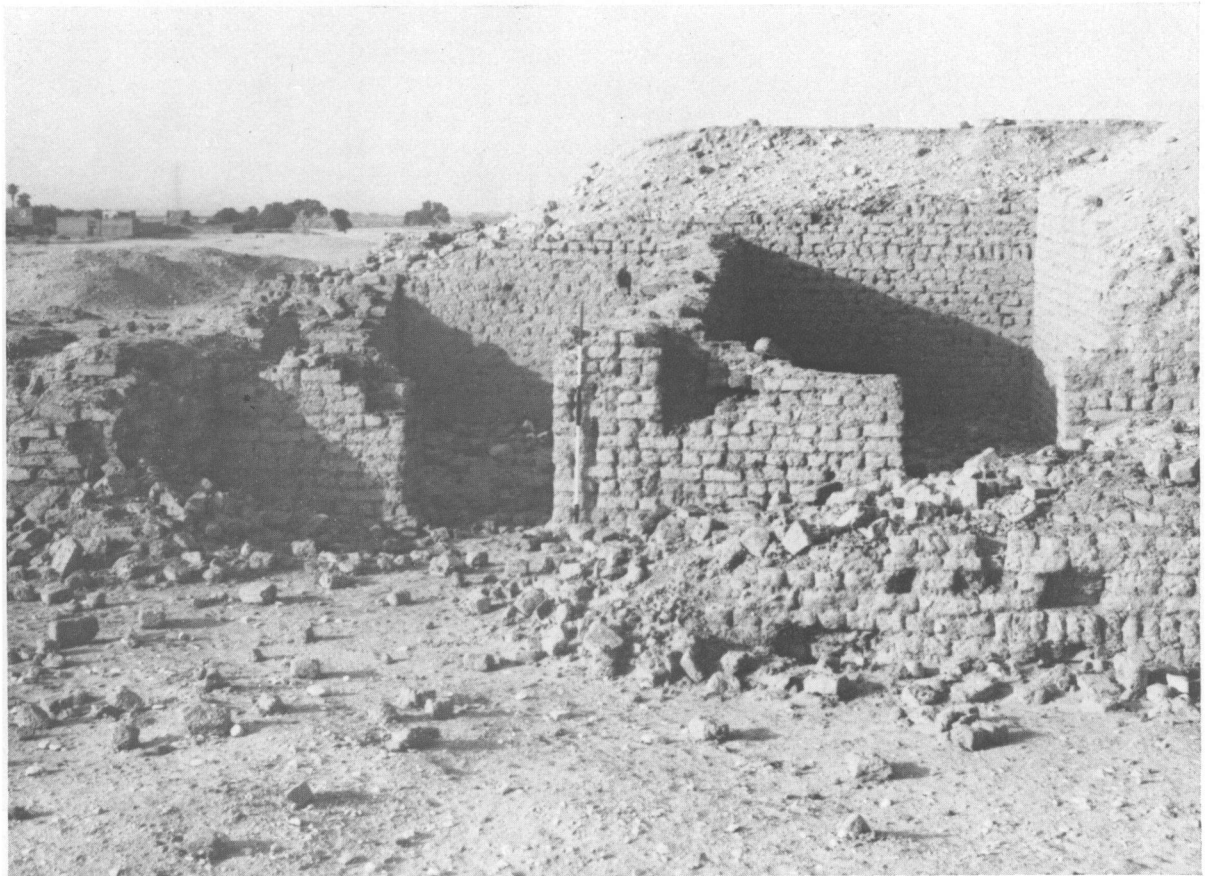


2. Kôm el-'Abd: the platform, looking north. The ramp is in the foreground, the denuded remains of the houses are just beginning on the right side of the picture

A BUILDING OF AMENOPHIS III AT KÔM EL-'ABD



1. Kôm el-ʿAbd: the platform, north-west side facing the desert, looking north-north-east. Note the wall thickening in the middle, and the tree pit in the immediate left foreground. The mounds of the Birket Habu are just visible on the horizon



2. Kôm el-ʿAbd: two of the chambers on the north-east side of the platform, emptied of gravel fill by Myers

ONCE AGAIN SOME MORE COMMEMORATIVE SCARABS OF AMENOPHIS III

By C. BLANKENBERG-VAN DELDEN

STILL more scarabs have been brought to my attention, and the description of nine 'new' scarabs is incorporated in this article. One of them (C115) is especially noteworthy because on the outer left-hand thickness of the base a *nefer* sign was incised at the time of the original cutting—a phenomenon that does not occur on the other scarabs of these series.

A scribe's error is seen in C117 where the substantive 'law' \square has been omitted; only the plural signs 𓂏𓂏𓂏 are rendered.

In A55 the title *nsw bit* in line 3 is followed by *nb trwy*, the eleventh example out of 195 described scarabs.

It gives me great pleasure to express my sincere thanks for permission to publish details and photographs of the scarabs described hereafter to the Israel Museum, Jerusalem, Mr. Peter Sharrer, Ridgewood, N.J., and the owner of the unknown private collection and his intermediary. See, however, the Postscript on p. 87. Gratitude is also expressed to Professor R. Giveon, Mr. T. G. H. James, London, and Mr. J. Malter, Encino, Cal., who provided information. I am also very grateful to Miss Carol A. R. Andrews who was kind enough to correct the English text of this article.

'Marriage' scarabs

GREAT BRITAIN, London

A53 Private collection; present owner and location in Great Britain unknown

Plate XIII, 1

Description: steatite, light brown; no traces of glaze; well cut; the cartouche of the pharaoh $\left(\begin{array}{c} \text{☉} \\ \text{𓂏} \end{array} \right)$ is on both sides between the legs; originally 10 lines of text.

Dimensions: 9 × 6 × 3.5 cm.

Type: three lines between the wing-cases; two lines dividing the wing-cases and prothorax, with double-lined triangular notches below the lower line at the outer corners.

Preservation: the edges are worn; line 10 of the text is lost.

Provenance: location of find unknown; formerly in the possession of the Duke of Northumberland; purchased at the Sotheby sale 21.4.1975, lot number 151.

Bibliography: 1975 *Sale Cat. Sotheby*, p. 35, no. 151: photographs of back and base with caption.

A54 Private collection, present owner and location in Great Britain unknown

Plate XIII, 2

Description: steatite, white; traces of green glaze; well cut; no cartouche of the pharaoh on the sides between the legs; 10 lines of text.

Dimensions: 9 × 6.2 × 2.8 cm.

Type: still visible are the outer ends of one line between the wing-cases, and of one line dividing the wing-cases and prothorax, with triangular notches below the latter line at the outer corners.

Preservation: the edges and back are worn and chipped.


Provenance: location of find unknown; formerly in the possession of the Duke of Northumberland, purchased at the Sotheby sale 21.4.1975, lot number 152.

Bibliography: 1975 *Sale Cat. Sotheby*, p. 36, no. 152: photographs of back and base with caption.

ISRAEL, Jerusalem

A55 Israel Museum, no. 76.18.228

Plate XIII, 3

Description: steatite, grey; no traces of glaze; well cut; the title *nsw bit* in line 3 is followed by *nb tꜣwy*; the cartouche of the pharaoh  is on both sides between the legs; 10 lines of text.

Dimensions: 8.2 × 5.5 × 3.6–3.9 cm.

Type: one line between the wing-cases; one line dividing the wing-cases and prothorax, with triangular notches below this line at the outer corners.

Preservation: in rather good condition; base, right edge of lines 2–7 and 9–10 broken off.

Provenance: location of find unknown; formerly in the possession of General M. Dayan, Israel, who purchased the scarab in New York in 1971 (details and photographs kindly provided by Professor R. Giveon, Israel); it then passed into that of the late Dr. K. J. Stern, London, who bequeathed his collection of Egyptian antiquities to the Israel Museum in 1973.

No Bibliography.

Lion-hunt scarabs

GREAT BRITAIN, London

C114 Private collection, present owner and location in Great Britain unknown

Plate XIII, 4

Description: steatite, white; traces of green glaze; well cut; no cartouche of the pharaoh on the sides between the legs; 8 lines of text.

Dimensions: 7.8 × 5.3 × 4.8 cm.

Type: still visible are the outer ends of one line between the wing-cases, and of one line dividing the right wing-case and prothorax, with a triangular notch below this line.

Preservation: the edges and back chipped and worn.

Provenance: location of find unknown; formerly in the possession of the Duke of Northumberland; purchased at the Sotheby sale 21.4.1975, lot number 154.

Bibliography: 1975 *Sale Cat. Sotheby*, p. 37, lot no. 154: photographs of back and base with caption.

UNITED STATES OF AMERICA, Ridgewood, N.J.

C115 P. Sharrer. See Postscript.

Plate XIII, 5-6

Description: steatite; dark green glaze; good deep cutting; a *nefer* sign is, quite exceptionally, on the outer left-hand thickness of the base on a level between lines 6 and 7 of the text: the glaze covers this sign with the same thickness and consistency as the remainder of the scarab, so it was incised at the time of the original cutting (see pl. XIII, 6); no cartouche of the pharaoh on the sides between the legs; 8 lines of text.

Dimensions: 7.1 × 4.7 × 2.6 cm.

Type: two lines between the wing-cases (blending into one); two lines dividing the wing-cases and prothorax, with triangular notches below the lower line at the outer corners.


Preservation: in fine condition; the glaze intact throughout with minor chipping on portion of outside edge and head.

Provenance: location of find unknown; formerly in the possession of the Duke of Northumberland; purchased at the Sotheby sale 21.4.1975, lot number 153.

Bibliography: 1975 *Sale Cat. Sotheby*, p. 37, no. 153: photographs of back and base with caption.

C116 P. Sharrer. See Postscript.

Plate XIV, 1

Description: steatite, white-brown; traces of green glaze in a few of the hieroglyphs and in the deepest interstices of legs; the cartouche of the pharaoh  is on both sides between the legs; 8 lines of text.

Dimensions: 5.3 × 3.7 × 1.8 cm.

Type: two lines between the wing-cases; two lines dividing the wing-cases and prothorax, with triangular notches below the lower line at the outer corners.

Preservation: in excellent condition.

Provenance: unknown; purchased in New York in 1974.

No Bibliography.

C117 P. Sharrer. See Postscript.

Plate XIV, 2

Description: steatite, grey-tan where fractured, ochre-tan where the original surface is present; traces of pale blue glaze; well cut; no cartouche of the pharaoh on the sides between the legs; 8 lines of text.

Dimensions: 8 × 5.5 × 3.5 cm.

Type: three lines between the wing-cases; two lines dividing the wing-cases and prothorax, with triangular notches below the lower line at the outer corners.

Preservation: in fairly good condition; back, chipped and pieces broken off, base, weathered and pieces broken off around edge, inscription which remains is cut quite well.

Provenance: Fayûm; purchased at the Christie sale 9.12.1975, lot no. 150.

Bibliography: 1975 sale cat. Christie, *Antiquities and Primitive Art*, p. 27, no. 150; photographs of back and base on pl. 8.

ISRAEL, Jerusalem

C118 Israel Museum, no. 76.18.230

Plate XIV, 3

Description: steatite, white; slight traces of green glaze; deeply cut; no cartouche of the pharaoh on the sides between the legs; 8 lines of text.

Dimensions: 9.3 × 6.4 × 3.5 cm.

Type: originally three lines dividing the wing-cases of which the outer ends are still visible; two lines dividing the wing-cases and prothorax, with double-lined notches below the lower line at the outer corners.

Preservation: back, weathered, lower part of left wing-case badly damaged: a straight line runs obliquely across the back, and a second short straight line is on the left wing-case (this damage was probably caused recently by a spade or ploughshare when the scarab was dug up, as the steatite at the break is clean and has not been discoloured by the soil in which it was buried); base, the first two lines of text and edges all around damaged.

Provenance: location of find unknown; formerly in the possession of A. L. Owens, Salisbury, Conn.; purchased at the Parke-Bernet sale 5.11.1971 by J. Malter, Encino, Cal.; the scarab came into the possession of the late Dr. K. J. Stern, London, in 1972, who bequeathed his collection of Egyptian antiquities to the Israel Museum in 1973.

Bibliography: 1971 *Sale Cat. Parke-Bernet*, p. and pl. 3, no. 22, photograph of base. 1971/72 Joel Malter, *Journal of Numismatic . . . Fine Arts*, vol. 1, no. 6: back page, photographs of back and base with caption.

C119 Israel Museum, no. 76.18.229

Plate XIV, 4

Description: sandstone, yellowish-brown; dark brown pigment in the inscription and other lines of incision; no cartouche of the pharaoh on the sides between the legs; 10 lines of text.

Dimensions: 7.6 × 5 × 2.5 cm.

Type: one line dividing the wing-cases; one line dividing the wing-cases and prothorax, with triangular notches below this line at the outer corners.

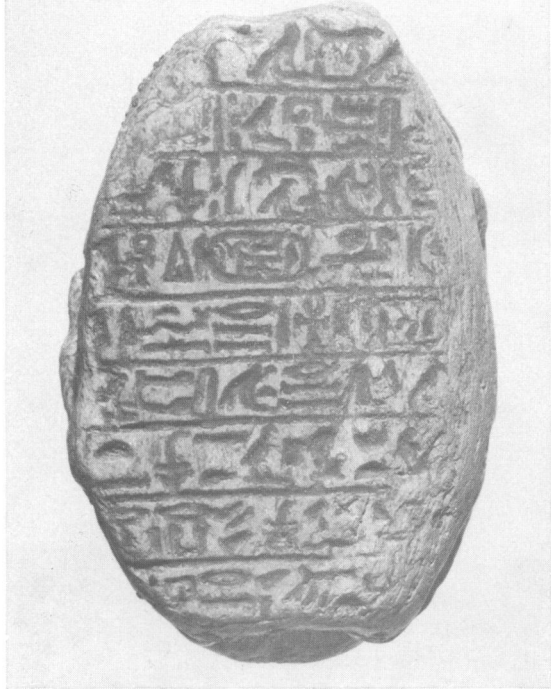
Preservation: back, well preserved; base, damaged, only centre part of the inscription remains.

Provenance: location of find unknown; originally in the possession of Mr. Henry Rye, London, who inherited it from his cousin Reginald Arthur Rye, Goldsmith's Librarian, University of London. Mr. R. A. Rye, who died in 1945, was a keen amateur Egyptologist and a friend of Petrie; he received some antiquities from Petrie, but there are no records of where the lion-hunt scarab came from; purchased at the Sotheby sale 10.7.1972, lot number 5, by the late Dr. K. J. Stern, London, who bequeathed his collection of Egyptian antiquities to the Israel Museum in 1973.

Bibliography: 1972 *Sale Cat. Sotheby*, p. 6, no. 5; sold with a restored inscription, a translation, and transliteration made on paper of The Library, University of London.

Postscript

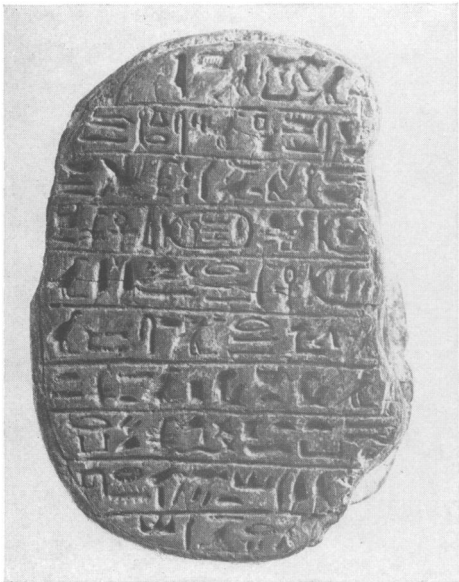
Very recently Mr. Sharrer informed me that he has sold his scarabs in 1976 to two museums in West Germany. C115 is now in the possession of the Kestner Museum, Hannover, Inv. nr. 1976. 106. The scarab will also be published in *Corpus Antiquitatum Aegyptiacarum Hannover*, 'Skarabäen' in the near future. C116 and C117 are now in the possession of the Roemer Pelizäus Museum, Hildesheim. I am most grateful to both museums for allowing me to mention the change of ownership, in particular to Prof. Dr. Peter Munro, director of the Kestner Museum for his reply by return of post and added information.



1. (A 53)



2. (A 54)



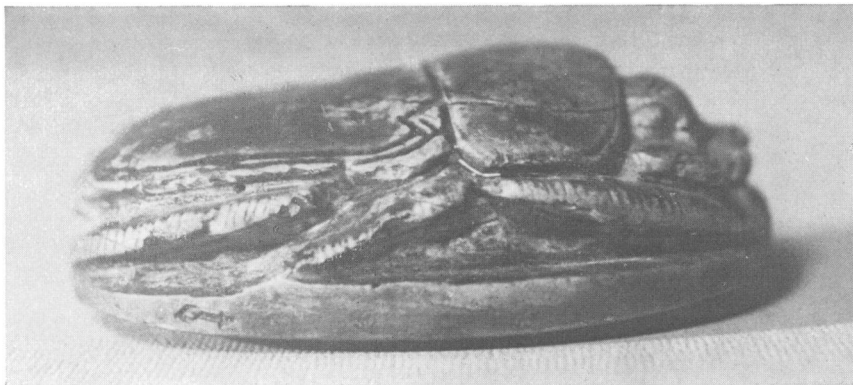
3. (A 55)



4. (C 114)



5. (C 115)

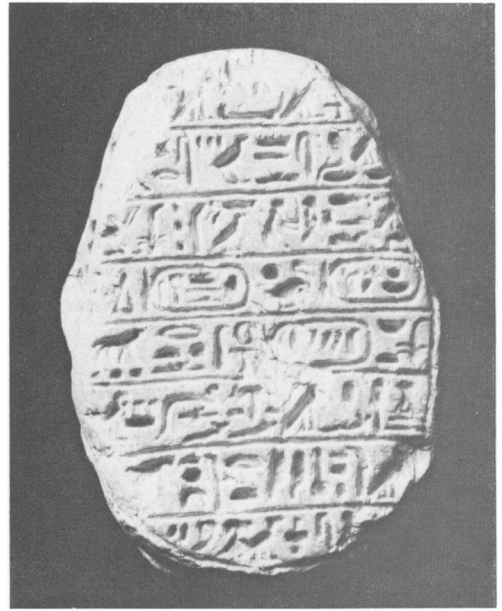


6. (C 115)

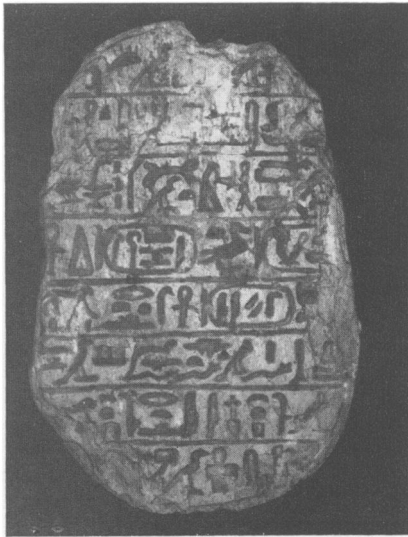
AGAIN MORE COMMEMORATIVE SCARABS OF AMENOPHIS III



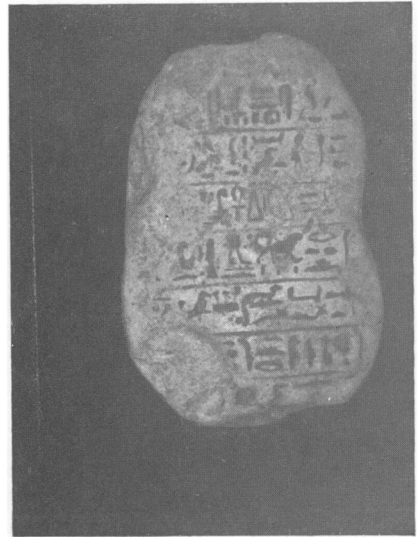
1. (C 116)



2. (C 117)



3. (C 118)



4. (C 119)

AGAIN MORE COMMEMORATIVE SCARABS OF AMENOPHIS III

NEFERTITI'S REGALITY

By JULIA SAMSON

AN unexpected result of the work on the Akhenaten Temple at Karnak (1973-4) is the discovery that Nefertiti was depicted in a substantially greater number of reliefs than Akhenaten. Dr. D. B. Redford¹ writes that it is difficult to say that this reflects political power although one can 'entertain a suspicion'; and he adds that discoveries continue to be made 'regarding the Queen's person and status'. It is timely, therefore, to study for comparison with these developments, the evidence of Nefertiti's royal and religious status in the following years at Amarna.

Clearly Akhenaten was established early as King/Priest, eradicating the division between royal and religious power. Similarly, there was no apparent division between Nefertiti's equal participation with him in royal and religious ceremonies at Amarna. It has been written² that it is unthinkable that Nefertiti should 'wish to play the role of king', because her divine position logically should be higher than that of any ruling king. But Akhenaten was God/King; and in addition to Nefertiti's undeniably divine position,³ the Amarna evidence strongly suggests she was also co-regnant during his lifetime. Logically therefore it would seem that if she were alive, she would continue to rule after his death, until Tut'ankhamūn and her own daughter ascended to the throne.

Briefly put, and discussed more fully below, with references, the Amarna evidence of Nefertiti's royal and religious activities includes the following facts:

(A) She sits parallel with the king on thrones and in the State Palanquin; she walks beside him in processions; she attends investitures and in Windows of Appearance she actually awards the gold collars in some scenes. She sometimes drives her own chariot, drawn by plumed horses and equipped like the king's with a sheathed bow and case. In contrast, it is interesting to note Dr. Redford's¹ comment that 'at Karnak only the king offers, rides in chariot or palanquin, walks or occasionally sits at meat'. He notes that 'The Queen accompanies the King on these occasions or offers herself'.

(B) At Amarna, however, Nefertiti stands beside the King *officiating* at the High Altar in the Temple and is ubiquitously shown offering with him at Aten altars.

(C) Wearing her own distinctive crown, Nefertiti is pictured pharaonically wielding the *ḥpš* scimitar over a captive, on a boat with representations of her own head on the steering poles.

(D) Nefertiti also wears king's crowns. This was noted by Professor J. R. Harris in connection with the Pasi Stela in East Berlin (17.813). The two figures on this were originally designated by

I am very grateful to Professor H. S. Smith for his ever-encouraging help. The views expressed herein, however, are entirely the author's responsibility.

¹ 'Studies on Akhenaten at Thebes, 2; University of Pennsylvania', *JARCE* 12 (1975), 9-10.

² Sayed Tawfik, *MDAIK* 31 (1975), 159 ff.

³ J. A. Wilson, *JNES* 32 (1973), 239-40.

Borchardt and Schäfer as Akhenaten and Nefertiti, but following Carter, Newberry later decided they must be two kings, because they both wore crowns. For nearly fifty years this statement, based on a wrong premiss, went unchallenged. Following Petrie's early conjectures, this continued a legend of a youthful coregent whose name included a part of Nefertiti's name. But as Professor Harris⁴ has pointed out, the three cartouches on the Pasi stela represent a king and queen, but not a coregency; two kings need four cartouches.⁵ So the assumption that this stela showed a coregency of two kings, is based on as wrong a premiss as the deduction that the second figure must be a man because it wore a king's crown.

(E) On the mud bricks of a 'State Building' at Amarna, Nefertiti's name is coupled with the king's in two cartouches, omitting the name Akhenaten, and reading *nfr-hprw-rꜥ wr-n-rꜥ* beside *nfr-nfrw-itn nfrt-iti*.

(F) Besides her name being changed in Thebes like the King's to include the Aten, she later, at Amarna, doubled her name in two adjacent cartouches, resembling the king's and the Aten's two names. (Queen Tawosret did the same at the end of the Nineteenth Dynasty, apparently *before* adopting the full titles of a reigning king at the death of her husband, and *after* discarding the title *hmt nsw (wrt)* which Nefertiti also changed at the end of Akhenaten's reign.)

(G) From Amarna also comes the evidence that in the *prenomens* of Akhenaten's successor a *t* is sometimes inserted, for which there is no satisfactory grammatical reason other than to make a masculine name feminine.

Enthronement scenes

A. The dual enthronement of Akhenaten and Nefertiti is clearly carved in the tomb of Meryrē' 2.⁶ The King and Queen sit parallel for all the tribute-bearers from abroad to see. The Queen's right arm is around the King and they clasp hands. Her gown and scarf beyond him are clearly shown; her left shoulder, and what is possibly a streamer from her crown; but no line of the crown appears. This may be because it was the same shape as his 'blue' crown and obliterated by it, for otherwise Nefertiti's distinctive crown seems wide enough to have shown at the sides; a plumed head-dress would possibly have shown above; and it seems unlikely that the Queen would wear a less formal head-dress on such a state occasion.

Norman de Garis Davies has drawn a restoration of the scene from the tomb of Huyu where the King and Queen ride side by side in a palanquin.⁷ In this the Queen's red crown is clearly parallel to the King's, as she sits with her right arm around him. They are surrounded by shelter- and fan-bearers as they are in Parennefer's tomb where they process together on foot.⁸

In these reliefs of enthronements and palanquins the Queen is shown beside the King. But in some scenes the conceptual imagery of Ancient Egyptian art is evident, where the King and Queen are clearly thought of as beside each other, but are shown one in front of the other. In the tomb of Tutu, although the scene is confused by the

⁴ *GM* 4 (1973), 15.

⁵ J. R. Harris, *Acta Or.* 35 (1973), 6.

⁶ *RT* 2 (37-8); also see Harris, *Acta Or.* 35 (1973), 11; and *Acta Or.* 36 (1974), 20 (nn. 40-1).

Such a large proportion of Amarna evidence comes from the Rock Tombs of the nobles in the six volumes compiled by N. de Garis Davies, and published by the Egypt Exploration Fund/Society, 1903-1908, that these references have been reduced to *RT*, with volume and plate numbers following, and a page reference where necessary.

⁷ *RT* 3 (13).

⁸ *RT* 6 (3).

destruction of the Queen's head and torso, her throne is pictured behind the King but her left arm is around his waist in a manner only possible if she were sitting at his right side. Her right arm is occupied with the child on her knee.⁹ In statues and statuettes, Nefertiti is also shown at the King's right side, and with one foot forward in an unusually masculine and regnant position for a Queen (copied by the older princesses as children).¹⁰

The representations and placing of Nefertiti at Amarna *vis-à-vis* the King and the Aten are part of the iconography describing what is apparently her equal royal and religious status. Beside the King she is mostly shown in the proportions of a normal woman beside a man—*never* knee-high to the King, as queens in other reigns. In the sculptures carved in the early Amarna exaggerated style for the first buildings at Amarna, the Queen's body is disproportionately small, just as part of her body and the King's are disproportionately large, as on the central palace balustrades.¹¹ When the art became more natural she is shown with her head by, or above his shoulder.¹²

In the 'Windows of Appearance', Nefertiti is always with the King, and of adult size. Where Meryrē' 2 is being awarded gold collars the young princesses hand them to the Queen (perhaps to keep them quiet and teach them royal duties) and the Queen passes them to Akhenaten.¹³ But in Huya's tomb the daughters are not in the window and the Queen appears to hand the award herself.¹⁴ In Ay's tomb the Queen and the princess royal, Meritaten, are both speeding the awards to the 'Divine Father'.¹⁵ The Queen also accompanies the King in less formal awards to Meryrē' where they both stand in 'the outer court of the granary'.¹⁶ It is in this tomb too that the Queen is shown driving her own chariot and pair of plumed horses; she is equipped with the bow-case and sheathed bow like the King.¹⁷

Scenes of worship

B. Scenes of the King and Queen worshipping jointly at Aten altars, either on opposite sides or beside each other under the rays of the god, were obviously ubiquitous at Amarna. Always the hands of the god hold the sign of life to their noses. This direct gift of life is transmitted only to them; not even Meritaten in the later years receives 'divine' life.

On the Boundary Stelae, in the rock tombs, on private and temple stelae, on the doors and lintels of the houses, this royal couple stand equally under the god. Sometimes both are censuring and/or offering fragrant gifts,¹⁸ libations,¹⁹ loaves of bread,²⁰ flames for the altar,²¹ or prayers with raised arms.²² On occasions they vary their

⁹ RT 6 (17).

¹⁰ RT 5 (40, N) and (41, A); also J. Samson, *Amarna, City of Akhenaten and Nefertiti* (1972), pl. 5a, and 5b; this last example in the Louvre has, unfortunately, been reversed; the Queen stands on the right of the King.

¹¹ J. Samson, *op. cit.*, pl. 20; and Cyril Aldred, *Akhenaten and Nefertiti*, fig. 33.

¹² RT 2 (12) *passim*.

¹³ RT 2 (33 and 34).

¹⁴ RT 3 (17).

¹⁵ RT 6 (29).

¹⁶ RT 1 (25/30) and p. 35.

¹⁷ RT (10 and 17), p. 27.

¹⁸ RT 2 (5) and (8); RT 4 (35); RT 5 (3) and (15).

¹⁹ RT 2 (5) and (6); RT 5 (3) and (15); RT 6 (6) and (16); Pendlebury, *City of Akhenaten*, 3 (1951), pl. 31.

²⁰ RT 4 (23).

²¹ RT 6 (16).

²² RT 5 (33).

attentions to the god, which explodes the old theory that the Queen always followed the same ritual as the King. In some scenes they both offer the *Sekhem* Sceptre, symbol of power and authority;²³ in others Nefertiti holds this royal sceptre while Akhenaten pours oil/water²⁴ and fragrant drops.²⁵ On one stela found by Petrie the King appears to have been censuring with an outstretched arm, now partly missing, and the Queen offering the sceptre.²⁶

In the tomb of Apy the King and Queen stand under the Aten's rays before a laden altar.²⁷ Both raise to the god mounted offerings of the Aten's names in cartouches. Flanking those offered by Akhenaten are two figures, wearing the side-lock of youth, with streamers (?), surmounted by the four feathers of Shu;²⁸ these figures raise their arms in adoration of the Aten. On Nefertiti's offering, her image, wearing her unique crown, is squatting with upraised arms in adoration of the Aten to whom she offers it in person.

On two fragments of stelae²⁹ found by Petrie in the central palace, Nefertiti makes a similar offering of the Aten names mounted on a *nb* sign. One is just that. But on the other is a nude female squatting figure, wearing a wig with possibly a pigtail down the back; it is not possible to see if it has lappets; but the significant difference is that here the female figure offered by Nefertiti is wearing the four feathers of Shu. The Aten names it offers are flanked on one side by the *ankh* and *djed* signs; on the other by the *w3s* sceptre. Unfortunately the offerings of the King preceding Nefertiti are missing.

I am grateful to Professor Harris for his studies of this iconography. On the faience knob³⁰ recently published by him³¹ there are representations of the King and Queen which suggest parallels. He writes of two solar barks pictured on it, that at one end of each 'is a royal figure squatting upon its haunches, with both arms raised in a gesture of adoration towards a plain solar disc at the other end'. One figure, under the name Akhenaten, wears 'the kingly white crown'; the other, placed under the name of Nefertiti, wears 'the characteristic flat-topped cap associated with Nefertiti'. Professor Harris notes the emphasis on 'the similar formal status of the royal figures' . . . 'equated in size, in symbolism of stance and gesture, and in their relationship to the sun disc. The manner in which they are paired', he writes, 'suggests indeed, that they are assimilated to Shu and Tefenet'.

C. Published by John Cooney, the representations in Boston of Nefertiti's boat are now well known.³² Of the blocks featuring the Queen in the traditional pose of an Egyptian king smiting a vanquished foe with a *hps* scimitar, Cooney writes, 'If she were a queen regnant, the composition, still exceptional, would be understandable or even suitable but as queen consort the role is unique and incongruous.' Fortunately Nefertiti wears her uniquely distinctive crown; otherwise voices might be raised that it must be a king and could never be Nefertiti in such a masculine and kingly role.

²³ *RT* 1 (25-7); *RT* 2 (7); *RT* 6 (26).

²⁵ *RT* 4 (15).

²⁷ *RT* 4 (31).

²⁹ Petrie, *Tell el Amarna*, pl. 12 (1 and 2) (1894, reprinted 1974).

³⁰ Private collection, Copenhagen.

³¹ J. R. Harris, *Burlington Magazine*, forthcoming.

³² J. D. Cooney, *Amarna Reliefs from Hermopolis in American Collections* (Brooklyn Museum, 1965), 80-5.

²⁴ Pendlebury, loc. cit.

²⁶ Petrie, *Tell el Amarna*, pl. 10 (3).

²⁸ *ASAE* 56 (1959), 247-9.

The figure is portrayed as feminine; the Queen wears only a kilt, belted at the waist, for which there is a parallel in the Petrie Museum, University College, London.³³

The steering poles of the boat have, as terminals, heads representing Nefertiti, again wearing her distinctive crown, with uraeus, and here surmounted by the disc, plumes, and upright Hathor or Isis horns. Other representations from Luxor of Nefertiti smiting and trampling on enemies with full pharaonic significance have been published more recently.³⁴

D. Some obvious representations of Nefertiti wearing a king's crown are here reproduced. In fig. 1 she wears a smaller and possibly lighter example of the *Atef* crown worn by the King.³⁵ On the column drum found by Petrie, now in the Ashmolean Museum³⁶ (fig. 2) she wears her own distinctive crown with uraeus, surmounted by disc, plumes, and ram's horns (not the more upright variety of Hathor/Isis horns). This type of crown with the ram's horns, disc, and plumes is also worn by Akhenaten on part of a stone balustrade now in Cairo³⁷ (fig. 3), and the ram's horns are worn by Nefertiti on Boundary Stela A.³⁸ From the Pasi Stela, it would seem that Nefertiti wore the *Khepresh* crown.³⁹

The details of Akhenaten's and Nefertiti's crowns at Amarna were not carved consistently. The discs, which in other reigns appear on the *Khepresh* crown, are shown on glazed fragments of it from Amarna statues and inlays, and on glazed examples of Nefertiti's flat-topped crown from statues and inlays.⁴⁰ But these discs are rarely carved on either crown in the stone reliefs, possibly because of the difficulty of endlessly repeating the concentric circles on stone walls, often high above ground level.

In the more malleable material of Tutankhamun's golden shrine the discs are beaten into the surface of both his *Khepresh* crown and Ankhesenamun's cap-crown.⁴¹ This suggests that Nefertiti's cap-crown may also have had discs on it. No glazed or gold example is known to the writer; and, like the other crowns, discs are omitted from stone examples, except in the Royal Tomb, from which there is a fragment of what appears to be a decorated cap-crown on her head (unless it is a *Khepresh* crown; the damaged back-line above the streamers appears to have been straight).⁴² There are inconsistencies in the decoration of crowns even in this tomb where the carving is of such infinite detail. On the stela from it found by Barsanti,⁴³ Nefertiti's wig is covered with curls, has a fillet with uraei, and is surmounted by a diadem, sun disc with uraei, Hathor horns, and feathers; but the *Khepresh* crown worn by Akhenaten is without the discs and even lacks the usual emphasis on the almost unvarying diagonal fold.

³³ J. Samson, *Amarna, City of Akhenaten and Nefertiti*, pl. 21.

³⁴ J. A. Wilson, *JNES* 31 (1973), 239 (n. 22); J. Harris, *Acta Or.* 36 (1974), 20 (n. 29); D. B. Redford, *JARCE* 12 (1975), pl. 56; and S. Tawfik, *MDAIK* 31 (1975), 165, fig. 1. I understand from Professor Harris that one noted by him in note 29 as above, as described to him by Dr. A. J. Spencer, is not yet published.

³⁵ *RT* 2 (8).

³⁶ Cyril Aldred, *Akhenaten and Nefertiti* (Brooklyn 1973, London 1974), no. 31, p. 116; Ashmolean Museum, Oxford, 1893.1.41 (71).

³⁷ Cairo, 20/6/28/8; Pendlebury, *City of Akhenaten*, 3, pl. 69 (4).

³⁸ *RT* 5 (41).

³⁹ E. Berlin, 17813.

⁴⁰ J. Samson, *JEA* 59 (1973), 53.

⁴¹ I. E. S. Edwards, *The Treasures of Tutankhamen* (1972), 25.

⁴² G. T. Martin, *The Royal Tomb at El-'Amarna*, 1 (1974), pl. 21, 8.

⁴³ G. T. Martin, *op. cit.*, pl. 54, 395.

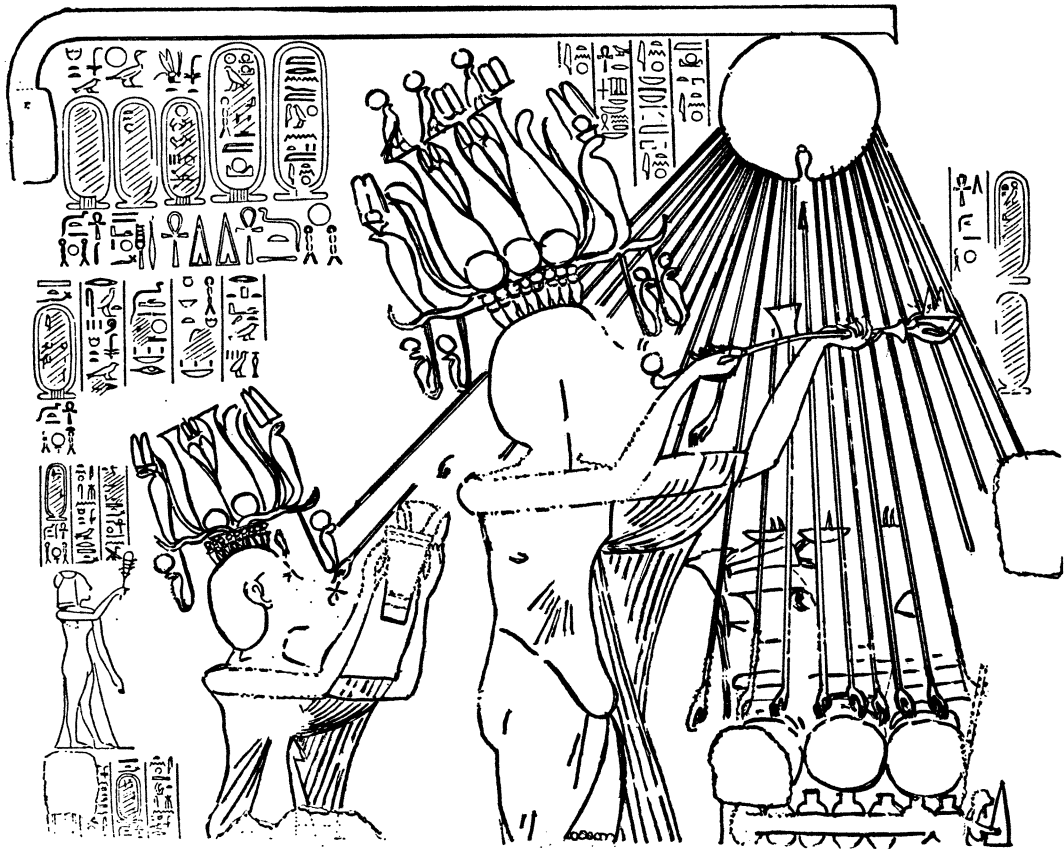


FIG. 1 (After *The Rock Tombs of El Amarna*, II, pl. 8. EES.)



FIG. 2 (After photograph, courtesy Ashmolean Museum)

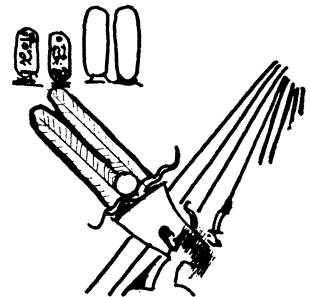


FIG. 3 (Cairo Museum; after *The City of Akhenaten*, II, pl. 69, 4. EES.)

The evidence of names from Amarna

E. The official residence of Chief Priest Paneḥesy, although an 'annex' of the Great Temple, was an independent structure, writes Pendlebury, and evidently a 'state building' since its bricks were stamped with cartouches of Akhenaten and Nefertiti. This does not explain why they were not stamped with his two names, and the Queen's one cartouche, but with two cartouches, his name on the left, *nfr-ḥprw Rr wr-n-Rr*, and hers on the right, *nfr-nfrw-itn nfrt-ity*.⁴⁴ The linking of only the *nomen* Akhenaten with Nefertiti's full name occurs on the faience knob in Copenhagen published by Professor Harris.⁴⁵ He has kindly given other references⁴⁵ where the single name of a king is linked to a Queen's name in varied circumstances.

F. The doubling of Nefertiti's own name into two joined cartouches like the King's two names is found on numerous moulds and some glazed plaques which are exactly like the plaques doubling the names of the King and the Aten.⁴⁶ As Professor Harris⁴⁷ has written, her status of kingship 'may be further confirmed by the otherwise unexplained duplication of her cartouche, as though, like a king she possessed a prenomen and nomen'. The device of a Queen doubling her name to resemble the two names of a king is a striking parallel to the action of Queen Tawosret at the end of the Nineteenth Dynasty.⁴⁸ As mentioned above, she doubled her name probably before adopting the full titles of a reigning king at the death of her husband, and apparently after discarding the wifely title *ḥmt nsw (wrt)*.⁴⁹

Nefertiti also changed her wifely title in the later years of Akhenaten's lifetime. In every description of her so far traced by the author her title is wife or great wife of the king, in the usual form *ḥmt nsw (wrt)*—except in the tomb of Meryrē 2, where in the scene with all six daughters she is described as *ḥmt nsw r̄st*.⁵⁰ The subtle difference between *wrt* and *r̄st* is hard to assess, but the fact that the changed title occurs only over the two youngest daughters is significant. The old form of the description is clear over Maketaten and 'Ankhesenpa-aten, although broken away from the wall over Meritaten and Nefernefuaten (*ta sherit*). The new title appears in two other scenes, in one of which the Queen is straining the King's wine into his cup, which suggests the change was in his lifetime.

It is also significant that the alteration appears in this tomb that spans the period of Akhenaten and his successor, where there is an unfinished drawing of the two figures described by Davies as roughly sketched, 'the ink of which is now almost invisible' with many 'false' lines and the figures restored on them 'something of a travesty'.⁵¹ Had these figures been reliably visible they could have given us the positive knowledge of Akhenaten's successor. But they cannot. In the past the ghostly figures, possibly begun as Akhenaten and Nefertiti, have been assumed to be Smenkhkarē and Meritaten, because of three cartouches, two with the successor's name and a third reading *Mry-itn*. This last is without the female figure usual in the princess's name, or the determinative of a queen. This is no evidence of a marriage between Akhenaten's successor and Meritaten, which has been assumed in the past. The cartouches may also have begun to be carved for Akhenaten and Nefertiti,

⁴⁴ Pendlebury, *City of Akhenaten*, 3, Pt. 1, 26; Pt. 2, pl. 83, 4 (wrongly headed under jar sealings).

⁴⁵ *Burlington Magazine*, forthcoming. See also *Acta Or.* 36 (1974), 17.

⁴⁶ Petrie, *Tell el Amarna* (1974), pl. 15 (82). J. Samson, *CdÉ* 48 (1973), fig. 2.

⁴⁷ *Acta Or.* 35 (1973), 13.

⁴⁸ J. R. Harris, *Acta Or.* 36 (1974), 21.

⁴⁹ W. C. Hayes, *The Scepter of Egypt* (1959), 357.

⁵⁰ *RT* 2 (37, 38) and (29 and 32); see also J. Samson, *CdÉ* 99/100 (Part 2, 1975).

⁵¹ *RT* 2, 44 n. 2.

and have ended with the successor's name, 'beloved of the Aten'. There is another example of *ḥnḥ-ḥprw-Rc mry-itn* accompanied by *nfr-nfrw-itn ḥkꜣ* which was published by Professor Harris.⁵²

G. From Petrie's finds, and those of the German excavators later at Amarna, comes the evidence that Akhenaten's successor had, on occasions, a *t* introduced into the *prenomen*, *ḥnḥ-ḥprw-Rc*. As noted above, there is no satisfactory grammatical reason for this. It can only appear as a means of making feminine a name which was of masculine or no apparent gender.⁵³ Besides the *t* in ring bezels in the Petrie Collection⁵⁴ there are moulds in West and East Berlin for the manufacture of the same spelling *ḥnḥt-ḥprw-Rc*. In one Petrie example this is followed by *mrt-wꜣ-n-Rc* (instead of *mr*) and in another the *mrt* alone carries the additional *t*.

Dr. S. Tawfik⁵⁵ in his recent article notes that Ḥatshepsut ordered the addition of the feminine *t* to the word 'majesty'. He writes, that if Akhenaten's successor were Nefertiti with the new throne name of Smenkhkarēꜥ, 'the examples showing Smenkhkara, whether in text or scenes, should somehow show the feminine aspect'. This is exactly what happened in the text, *ḥnḥt-ḥprw-Rc*; and there are no scenes showing a named portrait of a successor (other than Nefertiti) from Amarna, Thebes, or Hermopolis or elsewhere; not a single authenticated piece of evidence yet found showing that the successor was a man; no pronouncement by such a King.

On the Petrie coregency stela,⁵⁶ besides Akhenaten's *nomen* and *prenomen*, the successor's names are written *ḥnḥ-ḥprw-Rc*, beloved of *wꜣ-n-Rc*; and *nfr-nfrw-itn*, beloved of *ḥn-ḥn-itn*. Professor Harris has pointed out that the queens in Ancient Egypt, with kingly status changed their names on just this pattern, i.e. they adopted a first name and used their own name plus epithet as their throne name. Ḥatshepsut used *Maḥkarēꜥ: Ḥatshepsut-Khnemetamūn*.

The actual name Smenkhkarēꜥ is not used on the Petrie stela. The development appears to be as follows:

- (a) Akhenaten's successor used the same *prenomen* *ḥnḥ-ḥprw-Rc* throughout.
- (b) It was linked, probably at first, with Nefertiti's *soubriquet* *nfr-nfrw-itn*; and with Akhenaten as beloved by him.
- (c) The name Smenkhkarēꜥ has not been found linked with Akhenaten, as though it was used after his death.⁵⁷
- (d) The name Smenkhkarēꜥ has not been found linked with *nfr-nfrw-itn*, as though the new name replaced it, possibly because *Rēꜥ* was supplanting the *Aten* in royal names.

From the original policy of including the Aten in the names of the King, Queen, and the four eldest daughters, came the change in the two youngest daughters' names to include *Rēꜥ*, in Neferneferurēꜥ and Setepenrēꜥ. This suggests the measured introduction

⁵² *Acta Or.* 36 (1974), 17, fig. 3.

⁵³ Unlike the *t* in *Gm (t) pꜣ itn*, which has a grammatical connotation, *but* which the author has been unable to trace with the *t* from any other relevant site. Cf. D. B. Redford, *JARCE* 10 (1973); 12 (1975), *passim*.

⁵⁴ J. Samson, *CdÉ* 48 (1973), 243-50.

⁵⁵ S. Tawfik, *MDAIK* 31 (1975), pl. 64.

⁵⁶ J. Samson, *Amarna, City of Akhenaten and Nefertiti*, pl. 104.

⁵⁷ J. R. Harris, *Acta Or.* 36 (1974), nn. 14, 30.

of a change, less radical and therefore more acceptable to Akhenaten in his lifetime, than the reversal later by Tut'ankh-aten/amūn: and this could explain the reason for Akhenaten's successor eventually dropping *nfr-nfrw-itn* and becoming *Smenkhkarē djoser khepru*.⁵⁸

Dr. Tawfik⁵⁹ asks why the word Aten was never reversed in the *Nfr-nfrw-itn* name of Smenkhkarē and he thinks it might be because 'he did not have the same extraordinary religious prestige which Nefertiti had'.⁵⁹ But as he so valuably noted elsewhere, 'obviously it was Nefertiti's wish that even in her Aten name she had to face the Aton . . . and for that reason . . . the word Aton was reversed to face the Queen at the end of her name'.⁶⁰ So the Aten was actually reversed to face the Queen's image, i.e. the normal queenly determinative, of a queen's figure in her personal name, not to face her *soubriquet*, *Nfr-nfrw-itn*.⁶¹

The complicated iconographical instructions which must have been issued to show Nefertiti's equal participation in every sphere at Amarna were not meaningless nor haphazard. There are too many variations in her numerous activities to be accounted for by 'models' given to the sculptors to copy: and the varied carving techniques, using high and low relief in carvings of only a few inches for instance,⁶² all emphasize the Queen's official activities, and must reflect the intent behind the instructions given.

In relation to the Aten the placing of the Queen is clearly on organized lines expressing her relation to the god. In the past a criterion for identifying an unnamed royal Amarna figure under the disc has been that if it were centred under the straight or narrow-angled rays it was the King; if under the wide-angled rays, to the side of the picture, it was the Queen. But this is not always so. On the Berlin stela 14511, Nefertiti in her distinctive crown is directly beneath the central rays of the Aten while the King is reached by its outer rays.⁶³

Chariot scenes in the Rock Tombs also show Nefertiti centred under the Aten rays. In the tomb of Maḥu the King and Queen share one *ꜥankh* handed down by the god,⁶⁴ a scene repeated in the restoration of the west wall of Aḥmes's tomb.⁶⁵ In the tomb of Paneḥesy, where the Queen drives her own chariot, she is well centred under the rays, in fact rather more so than Akhenaten who is perhaps going faster as the Aten has to bend the wrist of the hand with the *ꜥankh* to get it ahead of him.⁶⁶ In Amarna family scenes, like the Cairo stela with the three children playing with trinkets, the King and Queen sit opposite each other and the rays swing out to both their heads.⁶⁷ A similar pattern, but with the Queen on the right is seen on the Berlin altar-piece with the two eldest children, and, as Cyril Aldred has pointed out, the Queen is sitting on the seat with the royal emblems and the King on an undecorated one.⁶⁸ In reliefs where the Queen is shown on the outer edge of the rays there can be no doubt about her total inclusion in its blessing. On the limestone relief from the royal tomb,⁶⁹ the god reaches a protective hand behind her head to draw her into its ambience, while another holds the *ꜥankh* to her nose and other rays reach down beside her body. In the tomb of Apy,

⁵⁸ J. Samson, *CdÉ* 48 (1973), 249.

⁵⁹ *Op. cit.* 162.

⁶⁰ *Ibid.* 86.

⁶¹ J. R. Harris, *Acta Or.* 35 (1973), 13 n. 53; and *Acta Or.* 36 (1974), 21 n. 53.

⁶² J. Samson, *Amarna, City of Akhenaten and Nefertiti* (1972), pls. 24 and 25.

⁶³ H. Schäfer, *Amarna in Religion und Kunst* (1931), pl. 22.

⁶⁴ *RT* 4 (20 and 22).

⁶⁵ *RT* 3 (32a).

⁶⁶ *RT* 2 (16).

⁶⁷ Cairo, 44865; Cyril Aldred, *Akhenaten and Nefertiti*, fig. 2.

⁶⁸ *Ägyptisches Museum Catalogue* (1967), no. 749.

⁶⁹ G. T. Martin, *The Royal Tomb at El-'Amarna*, 1, pl. 54.

the scene discussed above shows the King well to the side of the Aten rays because his large offering would not fit above the laden altar under the disc. Nefertiti is further to the side with the unusual feature of a second altar under her image, possibly for her own dedication. An Aten hand holds her elbow; others bless her altar, her image, and her own crown.⁷⁰ Clearly the placing of the royal figures is sometimes dictated by the legend of the picture, but throughout the Amarna scenes Nefertiti is always given repeated blessings by the god.

Dr. Redford has published the restored pillars of the Karnak chapel with the name *Gm(t)-pꜣ-itn* consistently occurring. Nefertiti, without the King, is here centred under the Aten rays on three sides of the pillars; on the 'special' side she stands flanking the central altar with the rays reaching out to her.⁷¹ On a Berlin block from Karnak her uplifted arms are centred under the rays;⁷² this portrait is damaged but resembles another block from Karnak in Cleveland.⁷³ Another Karnak block showing a royal figure offering under the rays and over an altar, comes from the Luxor Museum and resembles a more recently found Karnak portrait of Nefertiti offering.⁷⁴ They are strikingly similar and need comparison because the Luxor example, with two others like it, are labelled '*Der König unter der Strahlensonne*'.⁷⁵ This demonstrates a need for re-thinking and for a re-examination of older finds in the light of new evidence of Nefertiti's status.

At the four corners of Akhenaten's sarcophagus from Amarna, where Nefertiti replaces the usual four goddesses, she is centred under the Aten's rays⁷⁶ and is similarly placed on a fragment from Maketaten's sarcophagus.⁷⁷

Nefertiti's status

The Queen's 'divinity', usually the attribute of kings, is ubiquitously recorded, visually, as above, and verbally too. John Wilson⁷⁸ writes that the worship normally intended for a god or king is shared by Nefertiti in the Amarna Hymns to the Aten, and that in prayers she 'may be asked for the same benefits as the god and the King'.

Nefertiti's unique sovereignty with Akhenaten, as in a co-regnancy, is immortalized. At his death, until the succession of Tut'ankhamūn, she would have been the obvious royal and divine ruler in the interregnum.

⁷⁰ *RT* 4 (31).

⁷¹ D. B. Redford, *JARCE* 10 (1973), pl. 7.

⁷² *Ägyptisches Museum Catalogue* (1967), no. 754.

⁷³ *Bulletin of Cleveland Museum of Art* (January 1968), fig. 6.

⁷⁴ D. B. Redford, *JARCE* 12 (1975), pl. 2.

⁷⁵ *Nofretete: Echnaton*, Ägyptisches Museum (1976), nos. 18/19/20.

⁷⁶ G. T. Martin, *op. cit.*, pl. 19 (6) and 20 (2).

⁷⁷ Schäfer, *op. cit.*, pl. 56.

⁷⁸ *JNES* 32 (1973), 235-41.

A BESET AMULET FROM THE AMARNA PERIOD

By KATE BOSSE-GRIFFITHS

THERE are three similar bead-collars with pendant amulets from the Amarna Period in the Wellcome Collection of Egyptian Antiquities at University College, Swansea. In the centre of the lower rim of each collar a big blue amulet is suspended, to either side of which smaller amulets of various shapes and colours are arranged in an almost symmetrical order. On account of their three chief amulets, I have ventured to name them the 'Fan-collar', the 'Heart-collar', and the 'Bes-collar'.¹ The last name proved to be a misnomer as the figure represented by the central amulet is not a common Bes but a much rarer and evasive female of the Bes-family² (pl. XV, 1).

My thanks are due to Cyril Aldred for first drawing my attention to the exceptional nature of this amulet, in a letter of September 9, 1973. After he had examined a colour slide of the central part of the collar, he wrote that 'the faience pendants do not look like Bes with his tambourine which is almost the only kind found at Amarna'.

At the time I interpreted his words as a vote of no-confidence and almost a proof that the amulet, and with it the whole stringing of the collar, was under suspicion. In a further letter of October 23, 1973, Aldred defined his opinion more closely by saying that 'the dancing Bes [in Swansea] is not exactly like the Amarna amulet in its design and I had difficulty in recognizing it. However, the long tail is clear enough.' Eventually, however, I came across two almost identical amulets as well as a mould for producing such a figure and this proved to me not only the true nature of the Bes-like amulet in Swansea, but also its origin in the Amarna Period.

A photograph of the first amulet is in the Catalogue of the Collection of E. and H. Kopfler-Truinger. Hans Wolfgang Müller³ described it as 'weiblicher Bes . . . Glied einer Halskette. Amarnazeit. Fayence mit grüner Glasur, H. 2,8 cm'. Müller, therefore, explains the exceptional nature of the amulet by the fact that it does not represent a male Bes but the female form, Beset, and dates the object, by its style, to the Amarna Period.

His judgement is proved correct by the second amulet, which is in the Fitzwilliam Museum, Cambridge. It is exhibited there side by side with a mould of baked red clay, of the Amarna kind, which was meant to turn out Beset amulets of this sort (pl. XV, 2).⁴

¹ Kate Bosse-Griffiths, 'Bead Collars with Amarna Amulets' in *Actes du XXIX^e Congrès international des Orientalistes* (Paris, 1976), I, 20-4.

² The accession number of this collar in Swansea is W 11.

³ *Münchener Ägyptologische Studien*, 5 (Berlin, 1964), 93, fig. 132a.

⁴ The photograph of the amulet and the mould is by courtesy of the Fitzwilliam Museum, Cambridge. I am indebted to the Keeper, Mr. R. V. Nicholls and the Curator of the Egyptian Collection, Miss Janine Bouriaux, for their kind assistance. Both pieces came to the Museum in 1943 as part of the Gayer Anderson Collection. The inventory number of the mould is EGA 3637-1943.

The Swansea Beset collar will provide additional information concerning the use of such amulets.

A description of the Swansea Beset holds good—with very little variation—for all three amulets: it represents a naked female figure with bent legs and a long lion-tail, shown in profile and looking to the left. Her right hand grasps the root of the tail while her left hand lies under her left breast. The figure stands on a base line and a disc-bead is fastened on top of the head for the sake of suspension as part of a string of beads. This bead is of slightly differing colouring from the figure itself which is of greenish-blue faience. The back is flat, the height is 2.6 cm. The moulding is in the 'open-work technique' which is well attested in Amarna,⁵ and there are four holes between the arms, the legs, and the tail. The uncommon feature, for a Bes-figure with a lion-tail, is the head, which is that of a girl whose hair is falling loosely over her shoulders (the other two Besets possess tidy long-haired wigs which make them look even more human). This type of a female Bes bears comparison with other Bes-amulets and figures which are known to hail from Amarna. In calling all these dwarf figures with lion-tail by the name of Bes, I am following Hans Bonnet⁶ who found himself unable to draw a clear dividing-line between the godlings called 'Aḥa (the fighter), Ḥit or Ḥatiti (the dancer), and Bes, and so decided to use the generic name of Bes for the whole family of dwarf gods with apotropaic qualities.

There can be little doubt that in the long and complex typology of the dwarf gods of this kind, which has been studied in great detail by Franz Ballod,⁷ the female is the exception rather than the rule. In consequence, the appearance of Beset-amulets in the Amarna Period—noticed by neither Ballod nor Bonnet—deserves special attention.

Bes figures from Amarna

At Amarna, as stated by Aldred, perhaps the most popular Bes-amulet was the one which shows the naked dwarf god, in side view, dancing and beating a circular tambourine. A number of these were found as pendants of a small necklace which was discovered in the north-western quarter of the City of Akhenaten.⁸ Seven others are said to have come from the Royal Tomb at Amarna,⁹ and are now in Edinburgh; Petrie¹⁰ also found such dancing and tambourine-playing Bes-figures at Amarna during his excavations. They all have lion-ears, a lion-tail, and a bearded face.

⁵ W. C. Hayes, *The Scepter of Egypt* (New York, 1959), II, 290.

⁶ *Reallexikon der ägyptischen Religionsgeschichte* (Berlin, 1952), 102: 'Bei dieser Lage will es mir nach wie vor statthaft und ratsam erscheinen, den Namen Bes als Gattungsbezeichnung über die in Frage kommenden Dämonengruppen zu setzen.'

⁷ *Prolegomena zur Geschichte der zwerghaften Götter in Ägypten* (Moscow, 1913).

⁸ Pendlebury *et al.*, *The City of Akhenaten*, II (London, 1933), 41 and pl. 28, 7: 29/325, small necklace with Bes pendants, type IV, A 10, found in the north-western quarter of Amarna.

⁹ Geoffrey T. Martin, *The Royal Tomb at el-'Amarna*, I (London, 1974), 79–80, pl. 50/28, Edinburgh, 1883. 49.16: 'seven blue glazed faience pendants in the form of the god Bes playing a tambourine'. They are only 1.3 cm high.

¹⁰ *Tell el Amarna* (London, 1894), pl. 17, nos. 286, 287, 288.

But there were also the more traditional figures of Bes, seen in front view and putting his hands over his knees. He, too, has a lion's ears and tail, and often shows his tongue.¹¹ Another Bes, standing with outstretched arms, is dressed in a kilt.¹² But of special concern to us is the bearded figure of a naked Bes who holds the top of his tail with his right hand while his left hand is placed on his left breast (pl. XV, 3)¹³—in fact the same posture as that of the Beset figures from Amarna.

Bes in the Royal Palace

One could be inclined to hold the faience factories of Amarna responsible for the creation and the spreading of Bes-amulets, were it not for the fact that faience amulets of the dancing Bes and the frontal-view Bes have been found in the Palace of Amenophis III and Queen Tiy in Western Thebes¹⁴ where they had been worn by inmates of the Palace. There, too, were found moulds for turning out figures of Bes and Thoëris.

The most astonishing assortment of Bes types, however, is found on pieces of furniture which belonged to Queen Tiy or were given to relatives of hers. They were discovered in the tomb of her parents, Yuia and Thuiu.¹⁵ There were no less than three beds and three chairs with figures of representatives of the Bes-family and gods related to them. The best-known piece of furniture is the chair of Sit-Amūn, the eldest daughter of Queen Tiy and Amenophis III. This chair (*Cat. Gén.* 51113) carries on its back-panel a double figure of Sit-Amūn with the insignia of Hathor, the sistrum and *menat*, receiving 'gold from the countries of the south' out of the hands of female attendants. On the arms of the same chair, on the outside panels, are five Bes-figures (also one of Thoëris) shown in a lively dance, raising their feet and beating their tambourines, or waving their knives. Those seen in profile are quite obviously the prototype of the amulets of dancing Bes-figures in Western Thebes and in Amarna, with the one difference that the Bes-figures on the furniture are clad in short kilts. These strange short skirts with tail¹⁶ suggest that the figures should be understood as dancers with masks over their faces who are acting as Bes-gods.

On the back of the second chair (*Cat. Gén.* 51112) is a picture of the great royal wife Tiy seated on a throne which stands in a ceremonial papyrus boat while she is waited upon by two of her daughters. Within the frames of the arms of this ceremonial chair are figures of Bes and Thoëris carved in the round. On the rear part of this chair is a panel with yet another uncommon form of appearance of Bes: he is shown with wings spread from under his arms behind the seat, strongly recalling the falcon who spreads his wings behind the seat of Amenophis III on a carnelian bracelet plaque which

¹¹ Petrie, *op. cit.*, pl. 17, 290 and 291.

¹² *Ibid.*, pl. 17, 285.

¹³ This amuletic figure is in the Fitzwilliam Museum, Cambridge, by whose courtesy I was provided with a photograph.

¹⁴ W. C. Hayes, *op. cit.* II, 252.

¹⁵ Theodore M. Davis, *The Tomb of Iouiya and Touiyou* (London, 1907); J. E. Quibell, *The Tomb of Yuia and Thuiu* (Cairo, 1908), *Cat. Gén.* 51001–51191.

¹⁶ See also Pendlebury *et al.*, *The City of Akhenaten*, II, 35 and pl. 38, 1–3: 29/283, steatite Bes figure on alabaster stand, 12 cm, found in the northern quarter of Amarna. This Bes figure definitely has a skirt with tail.

pictures Amenophis III and Queen Tiy during their first Jubilee.¹⁷ In addition to protecting the Queen, this Bes also holds up with his hands two baskets filled with symbols of life and protection, while knives are fixed to his feet. Strangely enough, he is not meant to be seen, as he is partly hidden by one of the wooden uprights which support the frame of the chair from behind.

A panel at the back of the third chair (*Cat. Gén.* 51111) has a Bes figure in frontal view between two figures of Thoëris. All three of them are standing on *nub*-signs. By the evidence of these three chairs alone one can measure the importance of the Bes-gods in the life of Queen Tiy.

But, not surprisingly, the three beds are equally exuberant in their use of figures from the circle of Bes. The most decorative of them (*Cat. Gén.* 51110) contains no fewer than six panels of this kind with gods who are shown wearing circlets with feathers on their heads. The two other beds have figures of Bes and Thoëris (*Cat. Gén.* 51112 and 51109). Altogether one feels the impact of a certain missionary zeal anxious to spread the good news about the Bes-gods who protect the lives of women and children: a missionary zeal which shows itself in full strength in her son Akhenaten. Perhaps the figures on the furniture could serve as pattern book to devotees and followers of the Bes-family.

That Bes had been acceptable at Court is also proved by a relief in the temple of Hatshepsut at Deir el-Bahari,¹⁸ the famous picture of the confinement of Queen 'Ahmose when giving birth to Queen Hatshepsut. The Bes who appears here among other helpers, and in company of Thoëris, is of the traditional form: seen in front view, naked, with bent knees, lion-ears and lion-tail, a long beard, and showing his tongue.

Bes in the Book of the Dead

Another Bes-like figure of the New Kingdom is of a rarer type and could possibly be of help in connection with the Amarna Beset. A copy of the *Book of the Dead* for Neferubenef¹⁹ shows the deceased sitting in front of a monster while holding a figure of his heart in front of his left breast. The monster is a Bes-like being, seen in profile, who grasps the root of his tail with his left hand while his right hand holds up a knife: this, then, is a Bes-like god of a more malignant nature, a nature reserved for the enemies of the Sun-god, as has been recognized by Hartwig Altenmüller.²⁰ Chapter 28 of the *Book of the Dead* as well as the preceding and following chapters are concerned with not having one's heart taken away in the Underworld. The vignettes belonging to these chapters show the heart outside the body either in the hand of its owner, or on an offering table, or else in the hand of a god. According to T. G. Allen²¹ the papyrus of Neferubenef belongs to the Eighteenth or Nineteenth Dynasty and is therefore approximately contemporary with the Amarna Beset.

¹⁷ W. C. Hayes, op. cit. II, 243, fig. 147.

¹⁸ Édouard Naville, *The Temple of Deir el Bahari*, II (London, 1894), pl. 51.

¹⁹ Louvre III, 93 = Naville, *Totenbuch*, I, spell 28.

²⁰ *Die Apotropaia und die Götter Mittelägyptens* (Hamburg, 1965), 177.

²¹ *The Book of the Dead* (Chicago, 1974), 38 n. 65.

The person responsible for the shaping of the Amarna Beset who grasps her tail—be it priest or artist—must surely have been familiar with the aggressive god of Chapter 25 of the *Book of the Dead*. As the Amarna Beset gets hold of her tail with her right hand and presses her left hand over her left breast at the same time, she possibly was meant to unite in herself the aggressive nature of the 'Fighting Bes' and human nature in need of protection. Her posture may be a succinct way of suggesting that the amulet protects its wearer against the danger of having his heart taken away.

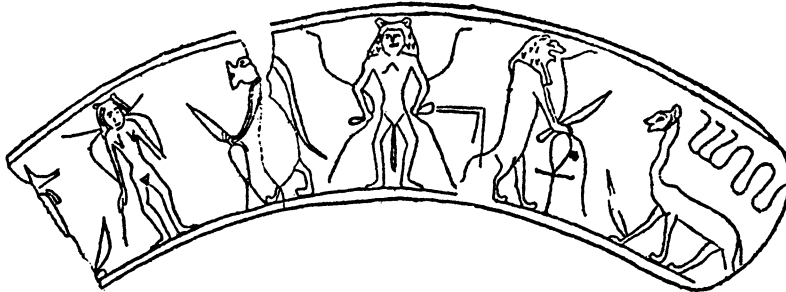


FIG. 1. Magic knife (*apotropaion*) with figures of male and female Bes. From a Twelfth-Dynasty tomb at Thebes (Ramesseum).

A female Bes

It is only in the Middle Kingdom that we can find some precedents for the *female* Bes in drawings on 'magic knives' or *apotropaia* as Altenmüller would like to call them. A fine example of this kind was found in the same tomb and in the same chest as the Ramesseum papyri and can therefore be dated to the Thirteenth Dynasty or earlier. We see on this magic knife, among various other daemons, a naked Bes-god with lion-tail, lion-ears, and bent legs who holds a serpent in each hand. A hippopotamus goddess (Thoëris?) stands between him and a *female* goddess with lion-ears and bent legs but without a tail: she also holds serpents in her hands (fig. 1).²² Altenmüller explains the daemons of the *apotropaia* as early divine beings who appear here in animal form. They are all helpers of the Sun-god. Led by a warlike deity represented as a standing lion, they are ready to defeat the enemies of the Sun-god at the time when he comes to take over his reign. The main power of the *apotropaia* (the magic knives) is of the sympathetic kind. It assumes that what happened to divine beings in mythical times can and will happen again. The gods pictured on the *apotropaia* have to fight for the life of a child in the same way as they once fought against the enemies of the solar child. Once more they destroy the enemies of Rē, who are also the enemies of the sick child. To heal a child, the *apotropaion* must be put over his body with the recitation of appropriate spells. It is, therefore, primarily an object used for the good of the living, and not meant to give a magic protection in the after-life. One has to know and consider these possibilities, if one tries to appreciate a little female figure²² which was also found in the same box as the magic knife (there were actually remains of four *apotropaia*).

²² J. E. Quibell, *The Ramesseum* (London, 1898), 11 and pl. 3, 2. The wooden figure which is 19.8 cm high is now in Manchester Museum (no. 1790). A photograph of it appeared in an article by H. R. Hall, 'The Relation of Aegean with Egyptian Art', in *JEA* 1 (1914), pl. 24, 2.

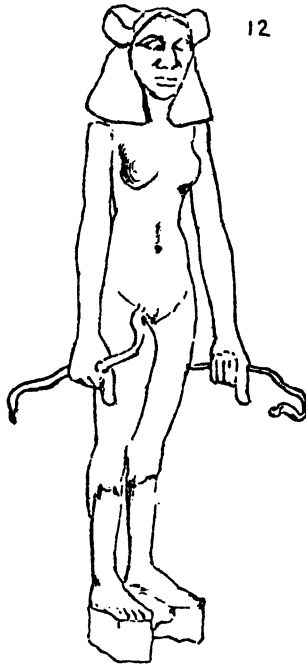


FIG. 2. Wooden female figure wearing a Bes-mask. From a Twelfth-Dynasty tomb at Thebes (Ramesseum).

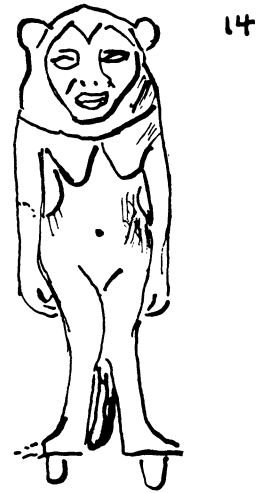


FIG. 3. Wooden female figure wearing a Bes-mask. From Twelfth-Dynasty house at Kahûn.

It is the wooden figure of a naked woman (fig. 2) who has drawn over her head either a complete mask, or at least a partial mask imitating the ears and the hair of a lioness. Like the female Bes on the wand, she holds a (bronze) serpent in each hand. Pieces of wood under her feet suggest that she was intended to stand on a plinth. In the introduction to *The Ramesseum Papyri* Gardiner²³ rightly concludes that the contents of the wooden box, found in a Middle-Kingdom tomb under the brick walls of the Ramesseum, are the 'professional outfit of a magician and medical practitioner' and states that in fact 'the subject matter of the papyri confirms this conjecture as they contain both medical and magical treaties'. In one of the spells, for example, we find the following lines:²⁴

O thou enemy, dead man or dead woman . . . thou hast caused Apôpis to rise up in front of Rē̄ and hast caused him to go up to heaven in place of Rē̄.

Such an enemy must be defeated at all costs—with the collaboration of the gods pictured on the *apotropaion*. One could imagine that the female figure in the disguise of Bes holding serpents in her hands could be placed on the body of a child in order to defeat the enemies of Rē̄ who are also the enemies of the child.

From the Middle Kingdom, as well, comes another wooden female figure wearing a Bes-mask (fig. 3) which was found in the living-quarter of a house at Kahûn.²⁵ She

²³ *The Ramesseum Papyri* (Oxford, 1955), I.

²⁴ *Ibid.*, Ram. Papyrus C 4, 10-12.

²⁵ Petrie, *Kahun, Gurob and Hawara* (London, 1890), 30 and pl. 8, 14.

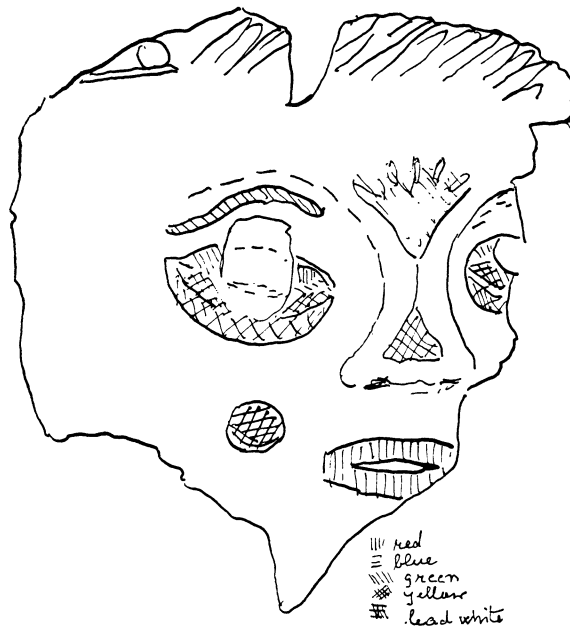


FIG. 4. Cartonnage Bes-mask to be worn by impersonator of male or female Bes. From a Twelfth-Dynasty house at Kahûn.

may be a dancer who in addition to her mask also has a lion's tail. But there are no serpents in her hands. The body is that of an old woman with hanging breasts. In addition to this figure, Petrie found, almost in the same place, the remains of a real mummer's mask representing, presumably, Bes (fig. 4); it was made of cartonnage and was painted over in many colours. There are holes for the eyes and for the nostrils. One of the papyri found in the same house was also of a medical kind. This material is convincing enough to enable us to assume that the healer was dressing up as Bes (or Beset?) or that there existed an organized cult of Bes in which dancers were acting the part of the god.

It is worth while noting that a similar ivory figure of a 'naked Bes with tail' (not Beset) with a lion mane, but straight legs, who appears to have held metal snakes was found in a Middle-Kingdom tomb at Sedment.²⁶

The dancing dwarf

There remains still one other line of enquiry to be followed. In our search for the antecedents of the female Bes of Amarna, we have already found Bes as a helper at birth, the protective Bes, the dancing Bes, the avenging Bes, Bes in the Palace, Bes in the company of the Sun-god, and some female Bes known to magical practitioners.

²⁶ Petrie and Brunton, *Sedment*, I (London, 1924), 18 with pl. 40 (Tomb 1300) and pl. 42, 7.

The question that remains is how to account for the fact that almost always—although not exclusively—Bes appears in the form of a misshapen dwarf. Franz Ballod²⁷ and after him Emma Brunner-Traut²⁸ refer to the religious dances performed by dwarfs before the king and especially to the letter sent by Pepi II to Prince Ḥarkhuf²⁹ asking him to fetch a *deneg* dwarf from the land of the spirits, from inner Africa, in order that he may perform his dance for the God. This dwarf, possibly a pygmy,³⁰ is not, of course, a god or a godling himself, but he might have impersonated a god in his dance. However that may be, his importance was so great that King Pepi himself could venture to tell the ferryman in the other world that he should be permitted to pass, because he (the king) was a *deneg* dwarf, a dancer of the God who pleased the heart of the God in front of his great throne.³¹

So we come to the final question. Why should Bes-gods have succeeded at Amarna at a time when so many great gods had been banned? In a general way one may suggest that at Amarna there was a chance for any symbol that could be related to the sun-disc: the lotus-blossom, the sun-calf, the Goddess Wadjet, even the scarab and the *Wedjat*-eye. And, presumably, it was on this account, because they had featured among the followers and protectors of the young sun-god—and not because they were the tutelary deities of Queen Tiy—that the Bes-gods, and especially the dancers among them, became favourite amulets at Amarna.

Beset

Now we may return to our Beset-amulet. We have seen that the pose of the female Bes, although seemingly playful, follows tradition, as the underlying meaning is connected with the fear of having one's heart taken away by force. Yet this must be one of the few kinds of female Bes (there are more of them in the Late Period), perhaps the only one, who has a leonine tail and a human face at the same time. As the daughters of the King played such an important part in that period—beginning with the daughters of Queen Tiy—I should like to suggest that the Beset-figures of Amarna with their girlish faces are impersonations of the king's daughters.

While the tambourine-beating Bes-figures could be worn by the living, as shown above, the Bes and Beset figures who protected the heart were obviously more suitable for the protection of the dead. This is borne out by the delicate work of the Beset-collar at Swansea (pl. XVI). Bes-figures can be better understood as members in a company—be it on an *apotropaion* or on a royal bed—than on their own. To illustrate this I shall try to examine the other amuletic figures of the Swansea collar with respect to their suitability. Leaving aside one lost and one broken amulet, we find that there are sixteen amulets of a female goddess holding a papyrus sceptre,³² all of them of bluish faience:

²⁷ Op. cit. 38.

²⁸ *Der Tanz im Alten Ägypten* (Glückstadt, 1938), 34–5.

²⁹ Kurt Sethe, *Urk.* I, 128 f.

³⁰ W. C. Hayes, op. cit. I, 222, fig. 139.

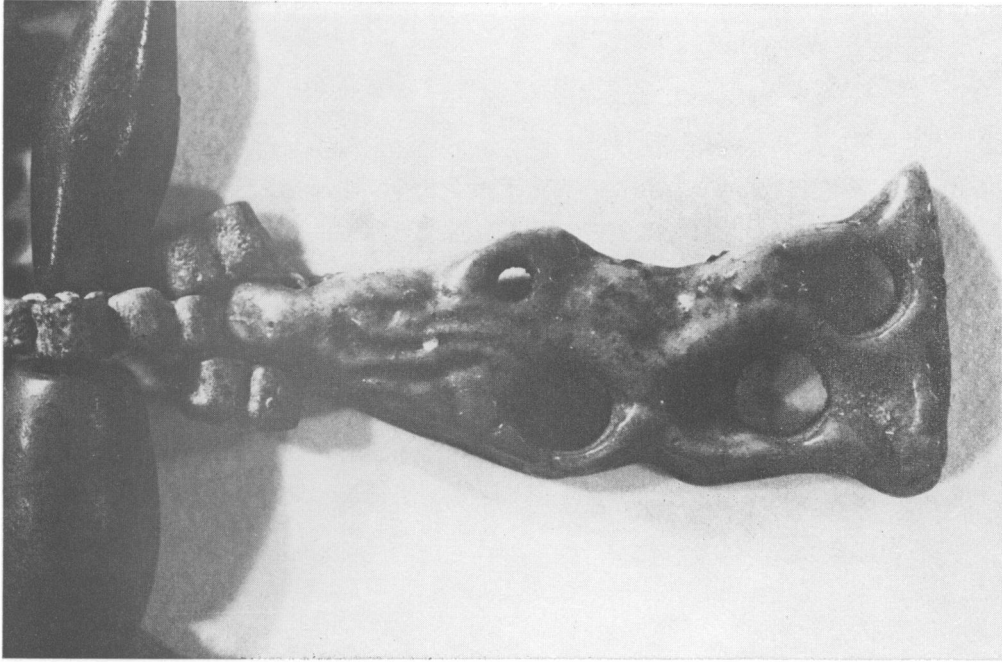
³¹ Kurt Sethe, *Pyr.* 1189 a–b.

³² Comparable to Petrie, *Tell el Amarna*, pl. 17, 283.

and some of them in open work. There is one amulet of a baboon wearing on his head a moon-crescent and disc,³³ and there is one figure of a naked child,³⁴ or could it be reminiscent of a *deneg* dwarf? The remaining pendant amulets are rust-red seed pods, and the fixed amulets are yellow and purple rosettes with tiny glass-bead centres. The suspension of the amulets is accomplished in an original manner with the use of double disc-beads. So, essentially, there is a female Bes, one of the company of Rēꜥ; a goddess who could be an impersonation of the eye of Rēꜥ; the baboon of Thoth who could take the place of the Sun-god at night; and the transient Amarna creation of a naked child (or dwarf?) used as an amulet. There is no discord whatsoever between them.

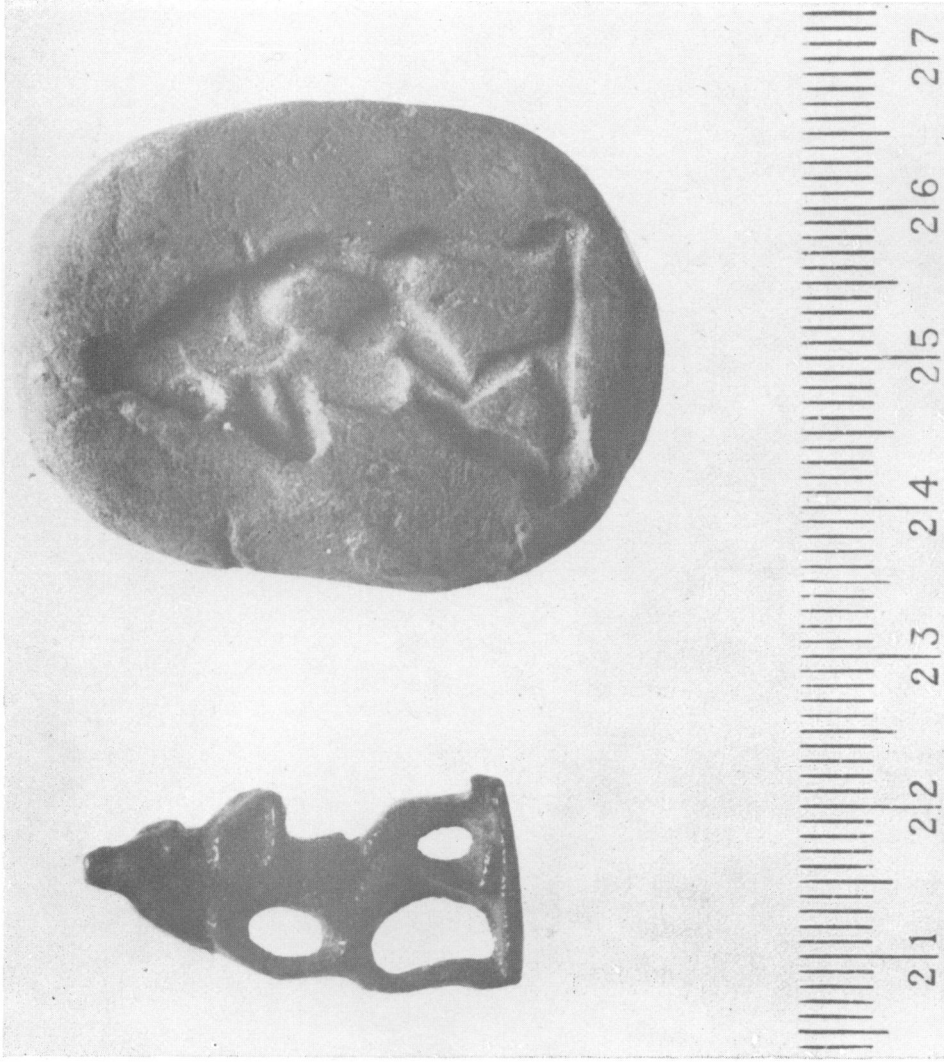
³³ Cf. Petrie, *op. cit.*, pl. 17, 294 (but without crescent and disc).

³⁴ Cf. Petrie, *op. cit.*, pl. 17, 275.

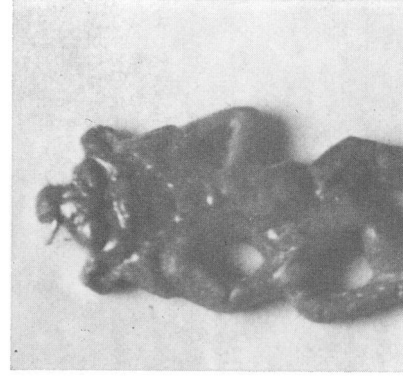


1. Female Bes amulet in the centre of the 'Beset Collar' in the Wellcome Collection at University College, Swansea (W. 11) enlarged

Photograph Roger Davies

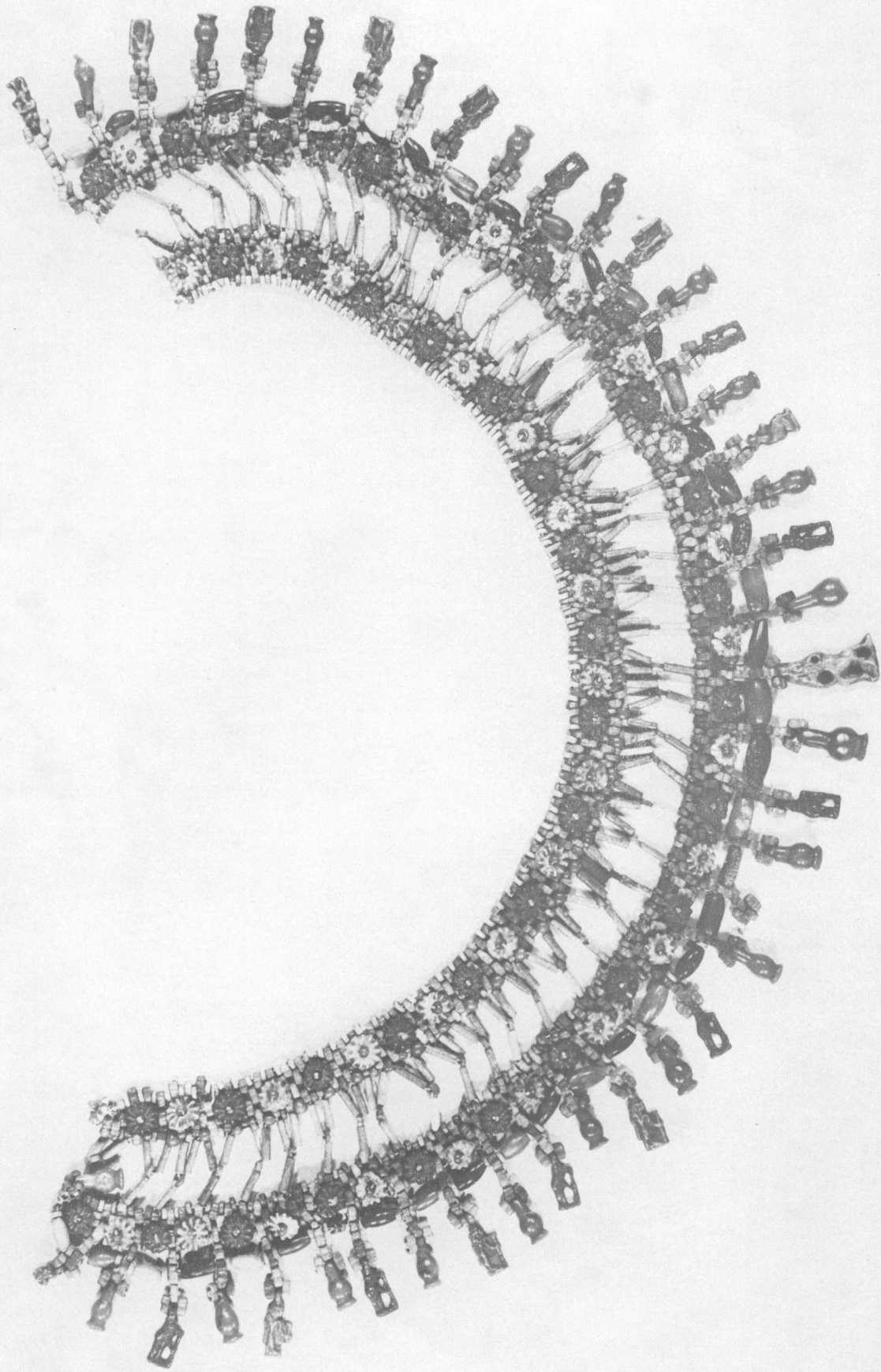


2. Beset amulet and mould for Beset amulet in the Fitzwilliam Museum, Cambridge (FGA 3637-1943)



3. Amulet of a Bes holding his tail, in the Fitzwilliam Museum, Cambridge (FGA 5995-1943)

Courtesy Fitzwilliam Museum



The 'Beset Collar' in the Wellcome Collection at University College, Swansea

Photograph Roger Davies

A BESET AMULET FROM THE AMARNA PERIOD

TUT'ANKHAMŪN'S RAZOR-BOX: A PROBLEM IN LEXICOGRAPHY★

By W. V. DAVIES

AMONG the great wealth of material discovered in Tut'ankhamūn's tomb, one of the more interesting, if, at the time, less publicized, categories of object was that consisting of containers of various kinds, bearing hieratic docketts or labels identifying their contents. For many years the hope was held that the proper study of this material, in that it seemed to offer a rare opportunity for the direct equation of name with object or substance, would yield a rich fund of new information on Egyptian terminology. In his eventual publication of these inscriptions, Černý indicated that this hope 'has unfortunately proved unjustified'.¹ The primary reason for this disappointing outcome was the fact that 'when after the intrusion of robbers soon after the king's death the tomb was again tidied up the majority of objects were placed in the wrong containers'.² On top of this, an unascertainable number of objects were stolen by the robbers, and thus irretrievably lost; further, several of the containers had never in the first place borne their designated contents.³ Consequently, it can be readily appreciated that the process of equating name with object in the case of this Tut'ankhamūn material is beset with difficulties and uncertainties; and it is hardly surprising that Černý was able to achieve only a small number of positive new identifications.⁴ However, he was not without expectation that future attempts might yet make more headway;⁵ it is hoped that the present article may constitute a step, albeit a small one, in this direction.

The word in which I am primarily interested here is *dgꜣ* or *dgꜣw*, which occurs in

* For providing me with photographic and other material for this article from the archives of the Griffith Institute, Oxford, I am indebted to Miss Helen Murray, Miss Fiona Strachan, and Mr. Dilwyn Jones. I would also like to thank Mr. T. G. H. James for his invaluable criticisms, and Mrs. E. Hopkin for typing my manuscript.

¹ *Hieratic Inscriptions from the Tomb of Tut'ankhamūn* (Tut'ankhamūn's Tomb Series ii, Griffith Institute, Oxford, 1965), p. vii.

² Černý, loc. cit.

³ This is particularly true of the boxes containing prepared foods; see Černý, *ibid.* 17–18.

⁴ Curiously, he actually over-estimated this number. The inscription on box no. 54 (Černý, *ibid.* 9, § 48), which contained a number of spouted ewers, labels the contents as '... *nmst*-ewers'. Černý, loc. cit., concluded that 'our hieratic inscription supplies therefore the useful information that vessels of this type were called *nmst* in the New Kingdom'. In fact this information had long been available from numerous New-Kingdom temple scenes, where the said form of ewer is depicted and explicitly labelled *nmst* and/or the word *nmst* itself is determined by this same kind of ewer; see e.g. Calverley and Broome, *Temple of King Sethos I at Abydos*, III, pl. 9, a, lower left; pl. 22, lower right; pl. 55, upper left; pl. 60, e; IV, pl. 71, s; pl. 74, N; and Hughes *et al.*, *Medinet Habu*, v, pls. 258, B; 273, B.

⁵ Černý, *op. cit.*, p. viii.

the label text on wooden casket no. 68,⁶ numbered 50 in Černý's publication.⁷ For the sake of clarity, Černý's transcription and translation are here reproduced:

- (1) 
 (2) 

'(1) The bag of His Majesty, LPH, when he was a child. (2) What is therein: copper razors, *dg*₃, and alabaster ewers.' Although the original contents of the box were missing, this label by itself is enough to indicate that they consisted of shaving equipment and accessories. But before attempting to identify the precise nature and form of the object termed *dg*₃, I should like first of all to consider another point of difficulty in this 'puzzling' inscription. Černý was unable to explain the occurrence of the word *tnfy(t)* in this and similar labels from the tomb.⁸ He asked 'Was *tnfyt* the original container for the objects and does it mean that *tnfyt* too was placed in the casket? If so, one would rather expect it to follow the expression "what is in it".'⁹ He had earlier stated¹⁰ that 'The meaning of *tnfyt* as "bag" is well established (see *Wb.* v, 380, 12. 13) and is again confirmed in the present case by the determinative δ . *Tnfyt* cannot therefore be the ivory casket itself; for this we must suppose a masculine word to which the suffix *·f* of *nty im·f*, "what is in it", refers.'¹¹ This statement contains two assumptions, one of which is certainly erroneous, the other highly questionable. In the first place, it is surely a mistake to limit the application of *nty im·f* to a masculine antecedent. Throughout these inscriptions *nty im·f* (together with its feminine equivalent *nty im·s*) is used as an independent substantival expression meaning 'contents'. This is conclusively demonstrated by inscription no. 46¹² where we have *t3 dbt kdt* (feminine) 'the box of *kdt*-wood' followed by *nty im·f* (masculine) 'contents'. There can, therefore, be no objection to understanding *nty im·f* as referring back to *tnfyt* in similar fashion in inscription no. 50. The second assumption concerns the meaning of *tnfyt*. Černý, clearly influenced by its determinative, considers it only in its literal or central sense of 'bag'.¹³ However, *tnfyt* is known to have been capable of other more developed and specialized meanings,¹⁴ one of which seems to have been 'tackle', 'equipment', or the like. This has been the meaning very plausibly assigned to the term in a royal inscription of the late Eighteenth Dynasty,¹⁵ in the expression



⁶ See Murray and Nuttall, *A Handlist to Howard Carter's Catalogue of Objects in Tutankhamūn's Tomb* (Tutankhamūn's Tomb Series i, Griffith Institute, Oxford, 1963), 5. The box was found in the Ante-chamber, on the ground in front of the cow-headed couch no. 73.

⁷ Op. cit. 9-10, 26, and pl. 8.

⁸ *tnfyt* occurs in three other labels; see Černý, op. cit. 13, § 57; 14, § 59; 15, § 63; 27-8; and pl. 9.

⁹ *Ibid.*, p. 10.

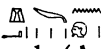
¹¹ In his (unpublished) translations of these inscriptions (now in the Griffith Institute, Oxford) Gardiner had suggested that *tnfyt* in some of the labels might mean 'linen chest', and he was followed in this by Carter, *The Tomb of Tut-ankh-Amen*, III, 119.

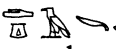
¹² Černý, op. cit. 7, 25, and pl. 7.

¹³ Cf. *Wb.* v, 380, 12; Caminos, *Late Egn. Miscellanies*, 409; also the masculine *tnf*—Wente, *Late Ramesside Letters*, 73 nn. e and g.

¹⁴ *Wb.* v, 381, 1-3.

¹⁵ *Karnak Decree of Horemheb*, line 13 (= *Urk.* IV, 2143, 16).

wr n imw hr t3y:f tnfyt, lit. 'a boat and its "bag"', i.e. 'a boat and its equipment'.¹⁶ There is no reason why this usage should have been confined to the nautical sphere. It probably owed its origin to the kind of semantic process whereby a word for a container or similar is, by extension, used to denote the things contained. This phenomenon is common in many languages,¹⁷ including ancient Egyptian.¹⁸ A particularly pertinent example is to be found among the *frises d'objets* on the outer coffin of Sepi in the Louvre (pl. XVII, 1).¹⁹ Here the word *hr-c*, which is the term commonly used in the *frises* for the 'nécessaire à rasoirs',²⁰ is, by extension, applied to the razors themselves. This occurs in the label  'razors of the head' written above a group of five razors which are not encased. (A razor-case is, in fact, figured next to these razors but it is clearly and quite separately labelled *wrmyt*.)²¹ In this instance the 'knife' determinative removes the element of ambiguity which often attends upon such extended usages. However, it is clear from many examples²² that the Egyptians did not always feel it necessary to be so explicit, so that many words, when used in an extended or secondary sense, are still written only with their usual or primary determinative. Once this possibility is recognized for *tnfyt*, its occurrence in the Tut'ankhamūn label becomes explicable, 'The bag of His Majesty' indicating in all probability 'The equipment (i.e. in this case, perhaps, "the personal necessities") of His Majesty'. This interpretation makes excellent sense when taken with the inscription as a whole: (1) 'The equipment of His Majesty, as a youth. (2) Contents: copper razors, *dgj*, and alabaster ewers', and similar good sense is obtained in the three other labels where *tnfyt* likewise occurs.²³

We may now turn to consider the precise meaning of *dgj*. Černý knew of only two examples of this word, the one here in question and the other, written , in a list of objects comprising the inventory of a tomb on a Ramesside ostrakon, where again (as in the Tut'ankhamūn label) it is associated with a *mhck*-razor.²⁴ These two examples, taken together, allow the conclusion that *dgj* was the name for a metallic, edged implement associated with shaving. This is now confirmed by a third example from among the inscriptions accompanying the *frise d'objets* on a Middle-Kingdom coffin.²⁵ At the very beginning of this *frise*, three different types of metal razor are figured.²⁶ The first

¹⁶ Pflüger, *JNES* 5 (1946), 261; Helck, *ZÄS* 80 (1955), 117; id., *Übersetzung zu d. Heften*, 17-22, p. 417.

¹⁷ Good examples in English are 'wardrobe', and, of course, 'bag' (in the sporting sense).

¹⁸ e.g. *imw* 'ship' and 'ship-load' (Caminos, op. cit. 311); *pr* 'das Haus = die Bewohner des Hauses' (*Wb.* I, 512, 4); *mdt* 'Stall in Sinne von Vieh, Herde' (*Wb.* II, 185, 4); *hst* 'quarry' and 'thing quarried' (Harris, *Minerals*, 23); *šnc* 'storehouse' and 'Inhalt des šnc' (*Wb.* IV, 508, A II); and the many varied kinds of container which came by similar extension to denote commodity measures (see Gardiner, *Egn. Gr.*, § 266 for a selection).

¹⁹ Louvre E. 10. 779 (unpublished; see Boreux, *Guide—Cat. sommaire*, I, 175). I am grateful to Mme Desroches-Noblecourt for permission to publish the relevant portion of the coffin.

²⁰ Jéquier, *Frises*, 128.

²¹ I have not been able to examine the inner coffin of Sepi, also in the Louvre, but have been kindly informed by Mme Desroches-Noblecourt that, on this, similar razors and a case are labelled *hr-c n ct* 'razors of the body' and *hr-c n djdj* 'razors of the head' respectively.



²² See the refs. given in n. 18 above.

²³ See n. 8 above.

²⁴ Cf. Goedicke, *WZKM* 59/60 (1963-4), 2, taf. i, line 7.

²⁵ Outer coffin of *Dhwtj-nht* from El-Bersha (Boston 20.1822-7).

²⁶ See Terrace, *Egyptian Paintings of the Middle Kingdom*, pls. 15 and 21. I am grateful to Dr. E. Brovarski of the Museum of Fine Arts, Boston, for checking the readings for me.

type, four examples of which are depicted with their wooden handles protruding from a holder, is of the splayed-blade, hafted form commonly referred to elsewhere as *hḥkt* or *hḥkt nt ḏḏ* 'razors of the head';²⁷ in this case the label reads *wrmyt*  'holder (of *hḥkt*-razors)'.²⁸ The second type, of which again there are four, is shown having a simple rectangular form without handle;²⁹ these are labelled *ḥsbt 4* 'four *ḥsbt*-razors'.³⁰ The third and final form, of which one example only is shown, is the rather rudimentary, knife-like type of razor consisting of a simple sheet of metal with one pointed end and an inclined cutting edge. For illustration, an actual example of this type from among the collections of the British Museum is figured on pl. XVII, 2.³¹ On the coffin, it is labelled *dgꜣw* .³² This, of course, is first-class lexicographical evidence—not only confirming the nature of the *dgꜣ*-implement but actually allowing its precise form to be identified. It does not, however, offer a complete solution as to the identity of the implement termed *dgꜣ* on Tut'ankhamūn's box. The reason for this is straightforward: shaving implements of the New Kingdom have different forms from the simpler, less evolved, types of the previous periods. To complete our identification, therefore, we need to isolate the New-Kingdom descendant of the slant-edged *dgꜣ*-razor of the Middle Kingdom and earlier.

This ought, in fact, to be not too difficult to achieve. Only two types of razor are commonly known from the New Kingdom.³³ The first consists of a broad, oblong blade of thin metal, provided with a curved wooden or metal handle attached by means of rivets to the side of the blade.³⁴ The second type is a slender, knife-like implement, made entirely of metal, with a slanting, slightly curved edge at its upper end, and a secondary, chisel-like edge at its butt.³⁵ There can be little doubt that the first type is that termed *mḥrk* in the New Kingdom, since it is this form of razor which invariably occurs either as a determinative or ideogram in writings of the word *mḥrk*.³⁶ It is not

²⁷ Jéquier, op. cit. 126 and 128; Montet, *Kémi* 4 (1931), 184–9.

²⁸ For *wrmyt* cf. the Sepi example mentioned above, which is also quoted by Jéquier, op. cit. 128.

²⁹ Extant examples show that in reality this type had the form of a shallow, truncated pyramid; see e.g. Reisner, *Giza Necropolis*, ii, fig. 45; Hassan, *Giza*, vi, Part ii, p. 43 (19); Vandier d'Abbadie, *Cat. des objets de toilette*, 164, 743.

³⁰ *ḥsbt*, only here in this sense, though it is tempting to see it also in Petrie, *Medum*, pl. 15, in the label conventionally rendered as *ḥsbt grgwt*—see Barta, *Opferliste*, 38. The three signs read as *grgwt* are identical in form to the razor type in question, and might equally therefore be understood as determinatives of *ḥsbt* meaning 'ḥsbt-razors', an interpretation which gains force from the fact that nearby in the same register more razors, of a different kind, are depicted. It must be admitted, however, that the following 'town'-sign is a problem, though it may not be insuperable. (Dr. H. G. Fischer has suggested to me that it seems feasible to understand the 'town'-sign in this case as the result of an unthinking error by the artist or scribe owing to the close similarity of the *grg*-sign and the razor-form.) The word *ḥsbt* may also be connected with the *ḥsbt*-knife of *Wb.* III, 168, 5, citing *Totb.* ed. Nav. 153 B7 (nach Pb), to which may be added *CT* VI, 6e; 18f; 25p; 27j; 35k.

³¹ BM 62546 (= Brunton, *Mostagedda and the Tasian Culture*, 108, pl. 61, 13).

³² The type is elsewhere (Cairo 28083; BM 30839) labelled *swbw* 'cleanser', which was erroneously taken by Jéquier, op. cit. 122 as a word for 'soap'. (*Wb.* IV, 67, 5, is non-committal.)

³³ Cf. Hayes, *Scepter of Egypt*, II, 189.

³⁴ Cf. Petrie, *Tools and Weapons*, pls. 60, 80–1; 61, 74–9; Vandier d'Abbadie, *Cat. des objets de toilette*, 164, 736–42.

³⁵ Cf. Vandier d'Abbadie, loc. cit. 744–7. The implement was misinterpreted by Petrie, op. cit., pls. 62, 14–26; 63, 30–47, as a 'cutting-out knife'.

³⁶ Janssen, *Commodity Prices*, 299.

unlikely, therefore, that the second type is none other than the New-Kingdom *dgʹ*-razor. There can certainly be no objection on typological grounds. The *dgʹ*-razor of the Middle Kingdom and earlier and the second type of New-Kingdom razor have in common a knife-like quality; it does not seem unfeasible to see in the one a rudimentary prototype of the other. For more tangible evidence, however, we must turn to the testimony of the Tut'ankhamün box itself.

In its interior arrangement (pl. XVIII, 1) this box consists of a central piece made of a solid block of wood, containing four parallel, evenly spaced slits with four round holes at exactly the same point in each. On each side of this centre piece there is a compartment, the one on the left partitioned into three and the one on the right into two smaller compartments. Mace³⁷ suggested that the centre slits were designed for the insertion of the razors (*mḥk*) and that the three left-hand compartments would have held the alabaster ewers. This is certainly correct. The holes in the slits were obviously designed to accommodate the circular handles of the *mḥk*-razors, while the narrow, longitudinal division of the right-hand compartments clearly makes them unsuitable for holding *nmst*-ewers. By elimination, therefore, these right-hand compartments were intended for the *dgʹ*. According to Mace's scale drawing (pl. XVIII, 1), each of these compartments measures 20 by 3 cm. The *dgʹ*-razor must, then, have been a relatively long slender implement. Once again, the slender knife-like type of razor is an obvious, if not irresistible, candidate. Fortunately for our purposes just such a razor was discovered in the tomb lying on the floor of the Annexe (pl. XVIII, 2).³⁸ The dimensions of this particular razor (18.1 × 2.5 cm maximum),³⁹ with due allowance for space for insertion and removal, make it a perfect fit for the right-hand compartments of box no. 68. The depth of these compartments (about 9.5 cm) suggests that each one held a number of these razors, of which only the one discovered on the floor of the Annexe survives.⁴⁰ The others of this type, together with the four *mḥk*-razors from the same box, were presumably stolen for their metal by the tomb-robbers.⁴¹

There is a final point of interest. The identification of *dgʹ* with the knife-like razor allows a further etymological equation; it is surely very probable that in the term *dgʹ* we have the hitherto unrecognized ancestor of Demotic *tk* 'Messer, Rasiermesser',⁴² Coptic τΟΚ^s, ΘΩΚ, ΘΟΚ^b, 'knife, razor'.⁴³

³⁷ On the Carter index-card in the Griffith Institute, Oxford.

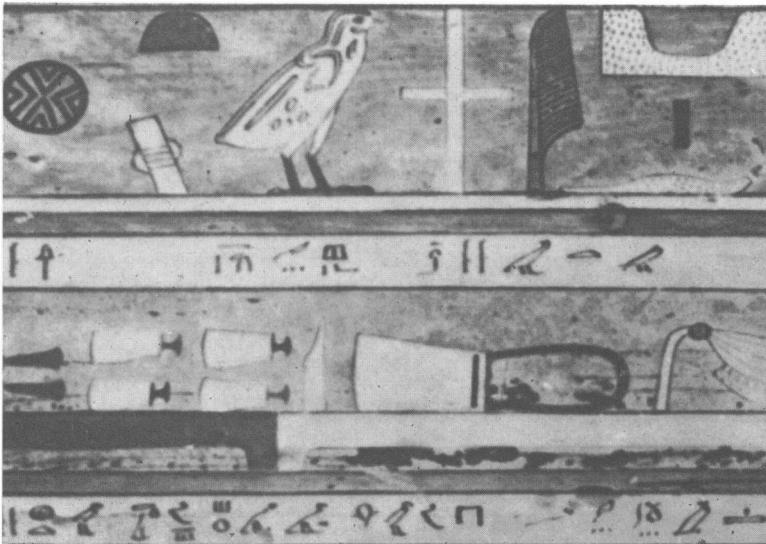
³⁸ See Murray and Nuttall, op. cit. 18, no. 620 (53).

³⁹ A full-scale drawing of this razor is contained on the relevant Carter index-card.

⁴⁰ That objects originally in one part of the tomb were moved to another, either by the robbers or during the subsequent 'tidying up', is clearly shown by the presence in the Annexe of a lid (no. 574) from box no. 79 in the Ante-chamber.

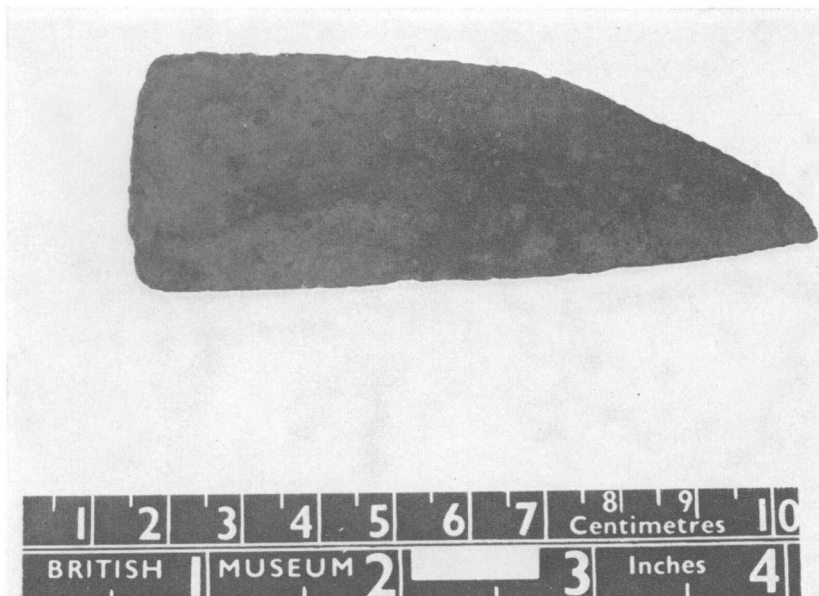
⁴¹ Unless they be among the group of razors (no. 12, g—see Murray and Nuttall, op. cit. 1) found in the fill of the passage leading to the Ante-chamber, which are simply referred to on the index-card as 'Bronze Razors (? Model)'.
⁴² Erichsen, *Demotisches Glossar*, 659.

⁴³ Crum, *Coptic Dict.* 403; Černý, *Coptic Etymological Dictionary*, 184.



1. Part of outer coffin of Sepi in the Louvre

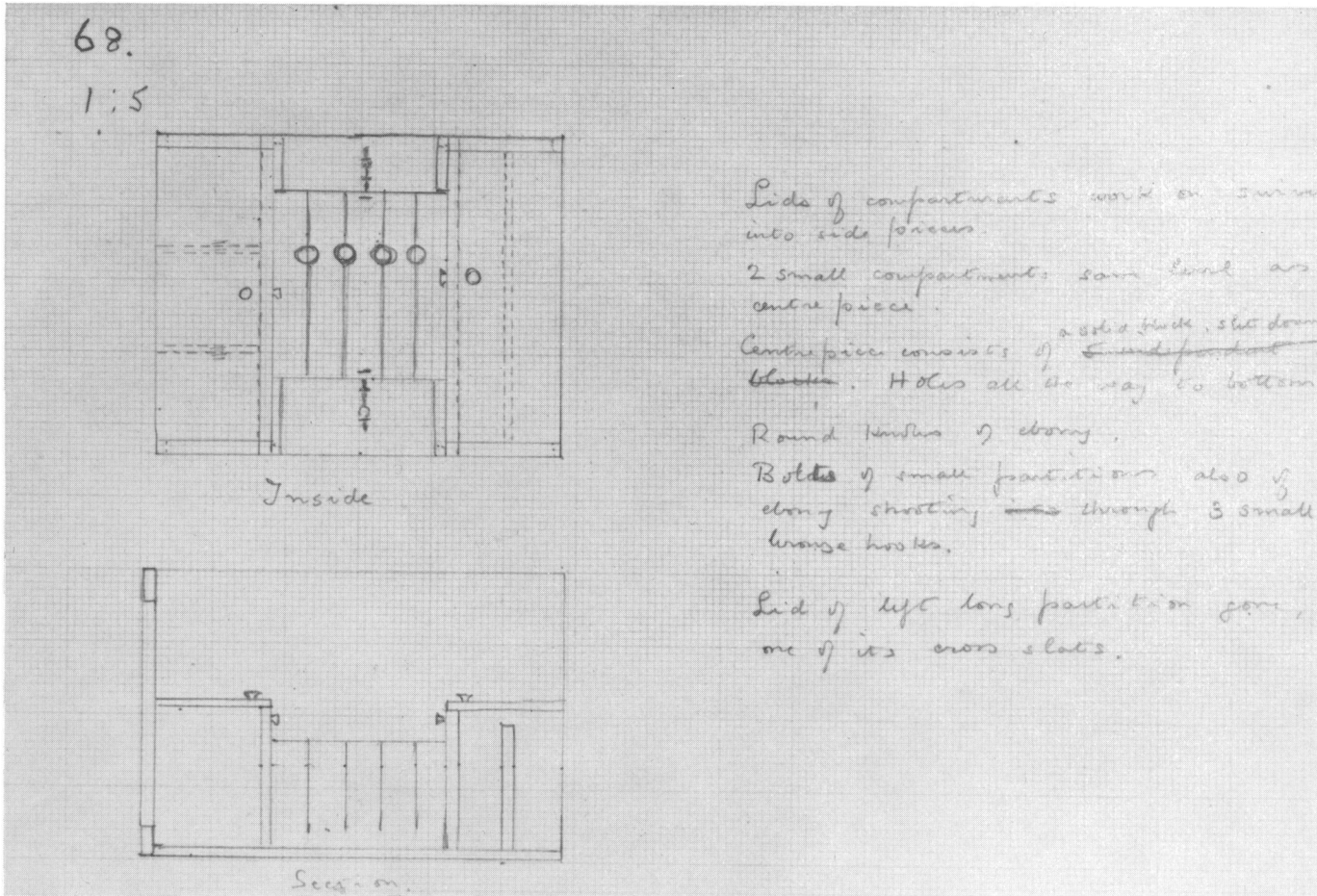
Courtesy Griffith Institute, Oxford



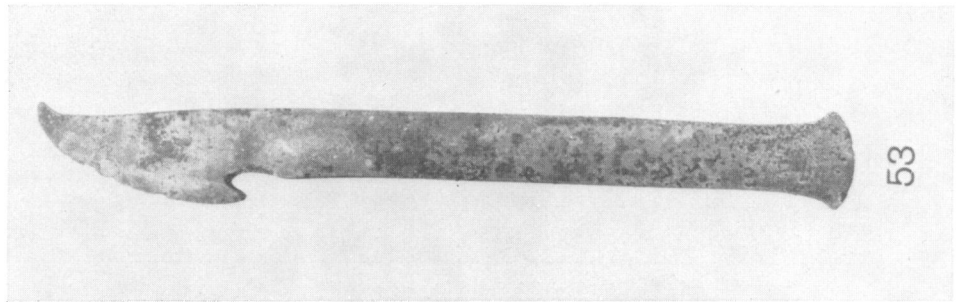
2. British Museum 62546

Courtesy British Museum

TUT'ANKHAMÜN'S RAZOR-BOX



1. Mace's drawing and notes relating to the razor-box



2. Razor found in Annexe of Tomb
 Courtesy Griffith Institute, Oxford

HOW OLD WAS TUT'ANKHAMŪN?

By F. FILCE LEEK

THE ageing of skeletal material and mummified human tissue presents a number of problems and usually a different approach has to be made with each case in order to arrive at an approximate answer. In the former respect, a visual examination can usually supply all the relevant data, whilst in the latter the use of radiology is normally essential. The result is then a calculation of the mean of a number of observations.

In the very young, the degree of ossification of the wrist bones gives valuable information, whilst up to early adult life it is the mean of the varying extent of the ossification of the epiphyseal joints of the knee, elbow, and those of the head of the humerus and femur, on which the result is judged.¹ Recent research has shown that the pelvis not only provides invaluable data concerning the sexing of various samples but provides reliable evidence for dating between adolescence and middle age. The three bones of the hip, the pubis, ilium, and ischium are almost completely united by the age of seventeen years. Then, between that age and twenty-four years, the iliac crest unites with the body of the ilium, beginning in the ventral region and gradually extending dorsally. For individuals between that upper age and forty years it is the changes that take place in the morphology of the pubic symphysis that have been shown to provide extremely reliable data and a chronological table has been developed whereby the changes in its ossification provide accurate ages to within narrow limits.²

It is accepted by many physical anthropologists and anatomists, however, that the most important single criterion that can be used for ageing up to early adult life is that of tooth eruption sequence.³ It is true that variations do occur in the timing of the eruption of teeth between individuals, between the sexes, and between races. These variations can be quite drastic in this present era, when often there is considerable interference with the deciduous dentition, because of caries and other reasons. In earlier times, when the calcification of teeth was particularly good and caries as we know it today practically non-existent, the eruption sequence could well be expected to have been more consistent.

Except for the results of the recent research into the ossification of the pelvis, all the foregoing would have been known to Professor Douglas E. Derry, when he collaborated with Howard Carter in the original examination of the mummy of Tut'ankhamūn. As already stated, most of the necessary data are comparatively simple to obtain by direct observation of a skeleton, but when the object is a mummified body they can only be

¹ W. M. Krogman, *The Human Skeleton in Forensic Medicine* (Springfield, Ill., 1962).

² T. McKern and T. D. Stewart, *Skeletal Age Changes in Young American Males*, Tech. Rep. Headquarters Quartermaster Research and Development Command (Natick, Mass., 1957), 179.

³ D. R. Brothwell, *Digging up Bones* (London, 1963), 58.

obtained by a radiological examination. No such facilities were available during the 1925 examination and all Derry's observations had to be made by visual inspection. As events in course of time proved, he was extremely fortunate, because he was able to assemble most of the vital data without recourse to radiology. This was because the results of the embalming process varied in different parts of the body. The head, as can be seen in Harry Burton's photograph, is wonderfully preserved, even the hole in the lobe of the ear, some 7.5 mm in diameter, is still obvious.⁴ There are a few cracks on the skin but these do not extend deeply. The trunk is also well maintained, but due to the removal of the contents of the abdomen through an incision some 86 mm long and filled to excess with linen impregnated with resin, examination of this area was without profit. The story, happily for Derry's investigation, is a very different one as far as the limbs were concerned. These were detached from the trunk and the soft tissue, i.e. the skin and muscles, were very shrunken, cracked, and brittle, and rarely more than 2-3 mm in thickness; and frequently pieces were lying unattached to the bone. Again Derry was extremely fortunate, because not only was the left patella lying loose and could be lifted off without damage, thus exposing the end of the femur, but other epiphyseal joints were also exposed. In his report he uses these data to the full when assessing the age of the Pharaoh and giving his estimation of the age as eighteen years.⁵

He also, in his report, emphatically and succinctly pronounces on the state of eruption of the wisdom teeth. He states, "The right upper and lower wisdom teeth had just erupted the gum and reached to about half the height of the second molar. Those on the left side were not so easily seen but appeared to be in the same stage of eruption."⁶ As previously stated, the soft tissue of the face was excellently preserved, and consequently this would have made it absolutely impossible to open the mouth by any means without leaving visible and permanent damage.

Readers of *The Human Remains from the Tomb of Tut'ankhamūn* will remember that when I examined the head of the mummy during the 1968 examination, I found the tissue of the face quite intact, but that the area of soft tissue behind the chin and towards the neck, had been covered with a shiny layer of resin or, as I now suspect, a layer of paraffin wax.⁷ As Dr. Zaki Iskander, the Director at that time of the Egyptian Department of Antiquities, thought that this layer would be shattered if it were penetrated by a finely pointed 1 mm needle, I was not allowed to place the radio-active isotope Iodine 125 in a favourable position in order to obtain a panoramic radiograph of the dentition. At the time I was at a loss to explain this shiny layer, especially as it had not been mentioned in Derry's report. After returning to this country, and giving the subject much consideration, I evolved the theory that in order to obtain this almost essential knowledge of the state of eruption of the third molars, Derry had made a vertical incision behind the inner border of the mandible and carried it from one

⁴ Howard Carter, *The Tomb of Tut-Ankh-Amen*, II (London, 1933), 112 and pl. 31.

⁵ Ibid. 159.

⁶ Ibid. 155.

⁷ F. Filce Leek, *The Human Remains from the Tomb of Tut'ankhamūn*, Tut'ankhamūn Series, 5 (Oxford, 1972), 17.

posterior end to the other: that he then deflected downwards the tongue and the floor of the mouth, with the soft tissue at the top of the neck acting as a hinge. This would have given access to the lingual side of the mandibular and the palatal side of the maxillary teeth. Then Derry, after ascertaining the amount of eruption of the teeth in question, must have replaced the tissue and in order to obliterate the line of the incision, covered the area with a coating of molten resin.

Ever since I published that theory, I have awaited an opportunity to conduct a similar procedure in order to prove or disprove its veracity. During the recent examination of the mummies held in the Manchester Museum, an opportunity was afforded me to carry out such an investigation.⁸ When I saw the mummy no. 1976/51a, with its hard shrunken layer of soft tissue lining the skeleton, I instantly realized the impossibility of seeing any teeth by using this particular technique. Nevertheless, feeling that under similar circumstances Derry had made the same approach, I made a vertical incision behind the inner border of the mandible and extended it to the posterior ends. The depth of the incision was easily judged because the height of the lower incisor teeth was plainly visible through the open lips. As expected, the disappointment came when trying to deflect downwards the tissue from immediately behind the symphysis of the mandible. The tissue in the area of the top of the neck was so hard and unyielding that it simply would not act as a hinge. However I was still so firmly convinced that somehow, by basically using this technique, Derry had obtained this much desired information, that I decided to see whether by a further extension of the incision, I could obtain this coveted result. I then made another semicircular incision into the soft tissues at the top of the neck, just where I had formerly expected it to act as a hinge, and joined it to the first one at the angle of the mandible. Almost without any encouragement, the whole piece, comprising the tongue and the floor of the mouth, fell downwards. In most cases this would have exposed the inner sides of the mandibular and maxillary teeth, but in this instance the embalmers had forced linen impregnated with molten resin between the open lips into the oral cavity, completely filling any empty spaces therein, and this had set cinder hard. This was found firmly adhering to the inner sides of the teeth that were present, but as the actual dental information was of no importance, only sufficient was removed to expose the enamel surface of a molar tooth in order to take a confirmatory photograph. The semicircular piece of tissue was returned to its original position as easily as it fell from it and the only evidence to show of the interference was in the lines of the two incisions. See pl. XIX.

In order to complete my idea of the procedure that Derry followed, some pieces of a resin-like material that had been removed from the abdominal cavity of the mummy 'Asru' no. 1777 were heated in the hope that they would liquefy and in this state could be painted over the incisions, thus completely obliterating them. These cinder-like pieces resisted prolonged heating and so recourse had to be made to some modern material. When this was painted over and between the lines of the incisions the effect was identical with that seen on the head of Tut'ankhamūn. I am now convinced that this was

⁸ By kindness of Dr. A. Rosalie David, Manchester University Museum, to whom I offer thanks for facilities provided and for the opportunity to carry out the investigation.

the technique that Derry used in order to see the position of the third molars and obtain his dental information.

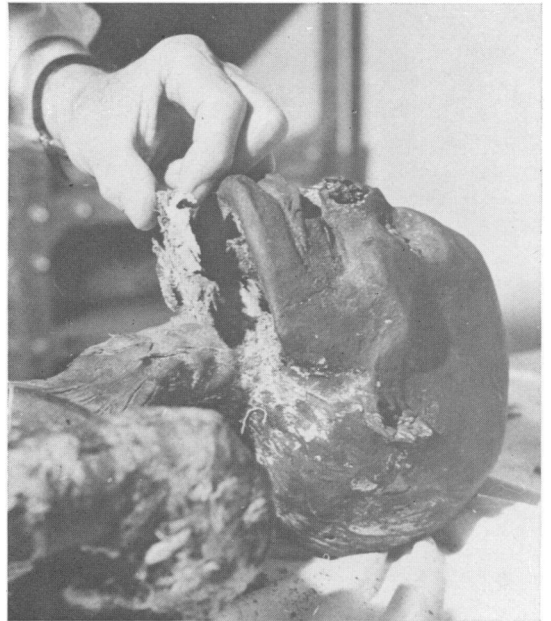
I would like to conclude by making two observations: (*a*) in his estimation of Tut'ankhamūn's age when he died, Derry made no use of the knowledge he had derived from his observation of the amount of eruption of the third molars, but he confined his calculations to the amount of ossification of the epiphyseal joints; (*b*) if it is true, as he states in his report, that there is evidence that in Egypt the epiphyses tend to unite somewhat earlier than is the rule in Europe, and should this also apply to the times of eruption of the teeth, then I offer the thought that there should be a revision of the age at which this Pharaoh met his death and instead of some eighteen years it should be reduced to sixteen or, at the most, seventeen years.⁹

⁹ I. Shour and M. Massler, 'The Development of the Human Dentition,' *J. Amer. Dent. Ass.* (Chicago) 28, 1153-60.



1. The initial incision around the inner border of the mandible
2. The semi-circular piece of tissue, comprising the tongue and floor of the mouth, being removed following the second incision
3. The exposed mandibular molar showing the bifurcation of its roots. This denotes a recession of the alveolar bone, which is the result, individually or in combination, of advanced age, gum disease, or occlusal stresses, i.e. abnormal stresses of mastication

Courtesy Manchester Museum



HOW OLD WAS TUT'ANKHAMÜN?

MEDICAL REINTERPRETATION OF CASE FOUR OF THE EDWIN SMITH SURGICAL PAPYRUS

By BRUCE LAWRENCE RALSTON

BREASTED encountered several problems in his translation of the Edwin Smith Surgical Papyrus. There was no comprehensive treatment of the ancient Egyptian medical papyri and no glossary of the highly specialized words dealing with pathology, physiology, and anatomy.¹ Several of the terms found in the Smith Papyrus appear for the first and, currently, the last time. Some help was received from Gardiner, Sethe, and Grapow, and the use of the Berlin *Wörterbuch*, complete to *snb* at that time. A second problem was Breasted's admitted lack of knowledge of the human body.² The material was translated to the best of his ability and then turned over to Dr. Arno B. Luckhardt, Professor of Physiology at the University of Chicago, for his evaluation. As the treatise covers a wide range of technical and clinical problems, it was inevitable that certain errors would arise. For example: Smith Case 8 is rendered *Compound Comminuted Fracture of the Skull Displaying No Visible External Injury*.³ As a compound fracture is one which communicates with the exterior through a laceration of overlying soft tissues and skin, the title is self-contradicting.

Difficulties were encountered from a completely unexpected quarter. Breasted never doubted that the diseases described by the ancient physician were known to modern medicine, and given proper translation, could be identified.⁴ This reasonable premiss will be shown to be invalid for Case 4 and others of the Papyrus which deal with a particular type of fracture designated as *pšn* and translated as a 'split'.

Classification of fractures of the skull

The skull may be bruised, cleanly perforated by an arrow, or even split by a blade, and remain unfractured.⁵ A fracture is a propagated crack in the bone set up as a result of stresses and extending beyond the point of impact. The most common type of skull fracture is known as *linear*, radiating or bursting. This is a hairline break in the bone, up to 6 or more cm in length, which usually occurs when the moving head strikes a broad flat object. The poles of the skull briefly approach each other and meridional stress patterns are created.⁶ As there is no necessary external wound, the ancient

¹ J. H. Breasted, *The Edwin Smith Surgical Papyrus* (Chicago, 1930), xix.

² Loc. cit.

³ Op. cit. 201.

⁴ Op. cit. 139.

⁵ H. Cushing, 'Surgery of the Head', in *Surgery its Principles and Practice*. W. W. Keen, ed. (Philadelphia, 1908), 60 ff.

⁶ Occasionally, linear fractures may radiate from a central point and are then described as *stellate*.

physician would be unaware of this lesion, unless a super-imposed laceration converted it into a *compound linear fracture*. A compound linear fracture familiar to the author of the Smith Papyrus would result from a chopping injury by a sharp sword or axe. This would cleanly part the scalp and create an incised wound of the skull, tending to extend itself near either end by fracture. Such an injury is illustrated in fig. 3 of Breasted's monograph.

When the stationary head is struck by a discrete blunt object such as a stone or mace head, a local bending injury results. The scalp is lacerated in varying degree and the bone is *comminuted* into several fragments as a result of forces differentially applied to the two tables of the skull. If the trauma is strong enough, these fragments are driven inwards against the brain.⁷ There is no mistaking the description of these *compound comminuted depressed fractures* of the skull in Smith Cases 5 and 6.⁸ This fracture, designated as *sd* and translated as a 'smash', is perhaps the only one recognized with certainty by Breasted.⁹

It is the purpose of this paper to deal with another large group designated as *pšn* or split and first encountered in Smith Case 4. Before beginning an analysis of Case 4 it is necessary to introduce a description and discussion of another type of skull fracture, either omitted or neglected in modern textbooks of neurological surgery.¹⁰ It may best be described as a *compound elevated fracture of the skull*, and has only recently been redefined.¹¹ In almost all cases of displaced skull fracture the force is applied externally and the bone fragments are depressed towards the centre of the head. Fractures in which the bone fragments are displaced outwards are rare. The prerequisites for such a fracture are (i) penetration by a long, sharp-edged object; (ii) the force is applied almost tangentially so that the penetration is superficial and almost parallel to the surface; (iii) an external or outwards component is added either by a lateral pull on the penetrating object or by rotation of the head. The documentation of these injuries is very incomplete in the medical literature and two cases are here reported in some detail so as to permit comparison with Smith Case 4.

Case A

The patient was a sixteen-year-old left-handed girl who, while water skiing, lost her balance and fell. She became fouled in the lines of the returning boat and was struck in the head by its propeller. She was amnesic for the episode and complained of severe headache. The neurological examination was normal. There was a 12 cm coronal scalp laceration in the right mid-parietal region. X-rays of the head (pl. XX, 1) showed that a large fragment of bone had been broken off and rotated away from the skull. It apparently hinged posteriorly and was elevated about 5 cm above the calvaria.

⁷ Cushing, loc. cit.

⁸ Breasted, op. cit. 156, 164.

⁹ Another large category, *thm* or 'perforation', proves on examination to be heterogeneous and will be the subject of another communication.

¹⁰ E. S. Gurdjian, *Head Injury from Antiquity to the Present with Special Reference to Penetrating Head Wounds* (Springfield, 1973), 107 ff.

¹¹ B. L. Ralston, 'Compound Elevated Fractures of the Skull', *Journal of Neurosurgery* 44 (1976), 77 ff.

She was taken to the operating room and, under general anaesthesia, the parietal wound was enlarged. The bony plate (which could not be seen externally before surgery) was almost free of the cranium and adherent to the overlying scalp. A large amount of clot and indriven hair were removed from beneath it. It was temporarily removed. The cranial defect crossed the midline of the skull and exposed the longitudinal venous sinus. At this place there was a small amount of depressed bone which was removed. The dural membrane over the brain was intact, but tense, and incision yielded clear subdural fluid which was drained. Because the inner table of the bone flap had been fractured over a larger area than the outer table, it was necessary to sculpt the edges with an air drill to permit reposition and wiring in place. The post-operative course was uneventful. An electroencephalogram done prior to discharge showed some irritation in the operative area, but this disappeared in later tracings. Postoperative head X-ray films (pl. XX, 2) disclosed the satisfactory repositioning of the elevated fracture.

Case B

The patient was a seventeen-year-old boy who, under conditions of poor visibility, crashed his car against a retaining wall. He remained unconscious from the moment of impact. A 20-cm linear coronal laceration was found in the mid-frontal region. A huge fragment of bone (the size of which may be gauged by the bony defect) had been broken away and rotated outwards. The remarkable location and extent of the injury can be seen in pl. XXI, 1 and 2 (post-operative films). Both cerebral hemispheres were in full view as the dura had been torn away. Operation was carried out immediately. Both frontal lobes were markedly contused but not severely lacerated. The major longitudinal venous sinus was avulsed. The bone fragment was found to be completely free of the skull and attached to the overlying scalp. Because of the marked field contamination with indriven dirt and debris, it was necessary to discard the huge fragment.¹² The post-operative course was complicated but he gradually became more alert, tracked with his eyes, but did not vocalize. He was spastic in all extremities at the time of discharge to a rehabilitation centre, where over a six months span he became fully ambulatory with limited understanding and verbal response.

Comment: The lesion, in each case (assuming a blow from the reader's left), involves a linear diagonal wound passing through the scalp. At its bottom on the right, the skull is breached and the blade travels tangentially under a large section of bone which is cut across only at its upper and lower edges due to the natural curvature of the skull.¹³ The lateral rotation of the blade easily fractures the three-sided bone fragment at its base on the right¹⁴ and permits the weapon to withdraw through its initial linear scalp laceration. The result is a tipped up plate of bone presenting in the wound but lying predominantly under the intact scalp to the right of the incision, elevating and remaining attached to it (pl. XX, 1).¹⁵

With this lesion as our model, we now turn to an analysis of Smith Case 4 entitled

'A gaping wound of the head penetrating to the bone and splitting the skull'

'If thou examinest a man having a gaping wound in his head, penetrating to the bone, (and) splitting his skull, thou shouldst palpate his wound. Shouldst thou find something

¹² Cranial repair with a metal plate was carried out six months later.

¹³ The blade, by not penetrating as far, may slice off lesser pieces of bone, down to wafer thickness and, of course, not entering the intracranial cavity. Cf. Cushing, op. cit. 62.

¹⁴ This manoeuvre is carried out frequently with very little required force, during neurosurgical procedures in which a trapdoor or flap of bone is raised to give access to an area of the brain.

¹⁵ The natural tendency of an elevated bone fragment to adhere to the undersurface of the overlying scalp is due to fibrous areolar connective tissue bridges between them. This principle is also utilized during neurosurgical procedures to stabilize the elevated bone flap to its overlying scalp flap during the procedure.

disturbing therein under thy fingers, (and) he shudders exceedingly, while the swelling which is over it protrudes . . .

Gloss A—Explaining: ‘*Splitting his skull.*’ ‘*As for “Splitting his skull”, it means separating shell from shell of his skull, while fragments remain sticking in the flesh of his head and do not come away.*’

The word *pšn* is an archaic one, rarely encountered.¹⁶ In one usage it has as a determinative, an axe splitting wood. According to Breasted, this is the kind of wound that would be inflicted by an Egyptian long-handled battle axe. A sword might produce a similar injury although it was little used in Egyptian warfare of the period.

The criteria for the diagnosis of a *pšn* are clearly indicated by the ancient physician: (1) a gaping scalp wound; (2) the separation of shell-like fragments of the skull from each other; (3) bone fragments remain firmly attached to the scalp and do not come away; (4) there is something disturbing in the wound; (5) the swelling over it is large, rising upwards.

(1) All compound skull fractures, of any type, require an overlying scalp laceration. As described in Smith Case 8, comminuted depressed skull fractures may occur in the absence of a wound, whereas no instance of *pšn* is given in the papyrus without a laceration. Therefore, as in the case of elevated fractures, a laceration may be essential for its formation.

(2) Separation of large fragments of bone may occur in both depressed and elevated skull fractures. The description excludes the compound linear fracture illustrated by Breasted in figs. 3 and 4, as there are no fragments, only an incised and propagated crack in the bone.

(3) The gloss which describes this characteristic contributes perhaps the most important statement in the delineation of *pšn*. The compound linear fracture illustrated by Breasted would be directly overlaid by a scalp gash with retraction laterally of the wound edges. There would be no bone fragments to remain firmly attached to the scalp, and no adherence of the scalp to the skull. In a depressed fracture or *sd*, the scalp laceration, if present, gapes in varying degree and the bony fragments are driven inwards, actually moving away from, and not attached to, the scalp. The only skull fracture in which the bony fragments maintain a constant attachment to the scalp is the compound elevated fracture. Here it is requisite that there exist a linear diagonal scalp gash with the rotation outwards of bone fragments remaining adherent to the adjacent scalp.

(4) The statement that there is something disturbing in the wound refers to something in the *wbnw*, specifically to *only* the soft-tissue part of the wound. In compound linear, perforating, comminuted, and depressed fractures, nothing disturbing is encountered in the *wbnw* but only *after* the bony plane of the skull is reached. It is clear from pl. XX, 1 that the sharp edge of the bone fragment presents an unusual sensation to the examining finger in the *wbnw*. Breasted prefers the translation ‘disturbing’ for *nh* but indicates that ‘rough’ or ‘foreign’ might be equally applicable.¹⁷ Lloyd,¹⁸ after much investigation, prefers ‘rough’ which would fit best with the tactile sensation conveyed by the elevated bone fragment and serves to rule out soft tissue lesions.

If the subject of the verb *nry* (to shudder) is the patient, as Breasted translated it, then little information is gained. If, however, it is the wound itself, as Lloyd believes,¹⁹ then the sensation may yield some information. Lloyd states that the feeling is one of crepitus. Crepitus is a tactile,

¹⁶ Breasted, *op. cit.* 140; H. von Deines and W. Westendorf, *Wb. der medizinischen Texte* 180 (Berlin, 1961), 300.

¹⁷ Breasted, *op. cit.* 143.

¹⁸ ‘Once More Hammamat Inscription 191’, *JEA* 61 (1975), 60 ff.

¹⁹ Lloyd, *loc. cit.*

sometimes auditory, sensation produced by bone fragments rubbing against each other. This is recognized and described five times in the Smith Papyrus as *nhbbh*, in unequivocal context.²⁰ Therefore, *nry* probably does not refer to crepitation. A fragment of bone, upended and attached only to soft tissue, might on palpation be ballotable and appear to shudder.

(5) Gloss B explains this as the 'swelling which is over this *pšn* is large, rising upward'. This description would tend to eliminate the compound linear fracture where the scalp is parted over and down to the fracture. Case 4 is the only instance of skull fracture where the swelling is described as large. Reference to the X-ray of pl. XX, 1 will demonstrate that the outwardly displaced bone fragment, covered over by scalp, must produce a remarkable wound swelling. Comminuted depressed skull fractures and perforations occur much more frequently than splits in the Smith Papyrus. Despite this, of eight cases of such wound swellings, four were associated with splits.²¹

As indicated previously, case reports of compound elevated fracture are seldom seen in the current medical literature. This is because of their rarity in civilian life and the vanishing use of axe-like weapons in modern warfare. Earlier reports had described them with sabre wounds of the head.²² At the time of Breasted's translation in 1930, the lesion was virtually unknown.

Breasted correctly indicated that the injury was due to a splitting of the skull rather than by crushing or perforating. He then used the compound linear fracture illustrated in his figs. 3 and 4 as an example of *pšn*.²³ This fracture, however, satisfies only one of five essential criteria defined by the text. The compound elevated fracture (a result of a different angulation of the splitting force) satisfies all five and deserves to be equated with the *pšn*.

Because the major force vector is tangential to the surface of the brain rather than against it, injury to the parietes is more extensive than to the cerebral cortex. This explains how Case B could survive such a massive and apparently fatal accident, utilizing current surgical techniques. Case A might have survived in ancient times because the dura was not breached. Dural laceration invariably resulted in fatal meningitis. More likely, the extent of the injury and infection would have precluded recovery.

The better prognosis of these lesions as contrasted to that for the compound depressed fracture is reflected in the verdict of the ancient physician. For the former, '*an ailment with which I will contend*', for the latter, '*an ailment not to be treated*'.²⁴

Conclusions

Case 4 of the Edwin Smith Surgical Papyrus is shown to be a description of a type of skull fracture designated as *compound-elevated*. This results from a glancing blow delivered by an axe or blade-like object. The scalp is lacerated and a fragment of bone is split away from the skull and elevated under the scalp, to which it remains attached.

²⁰ Breasted, op. cit. 254.

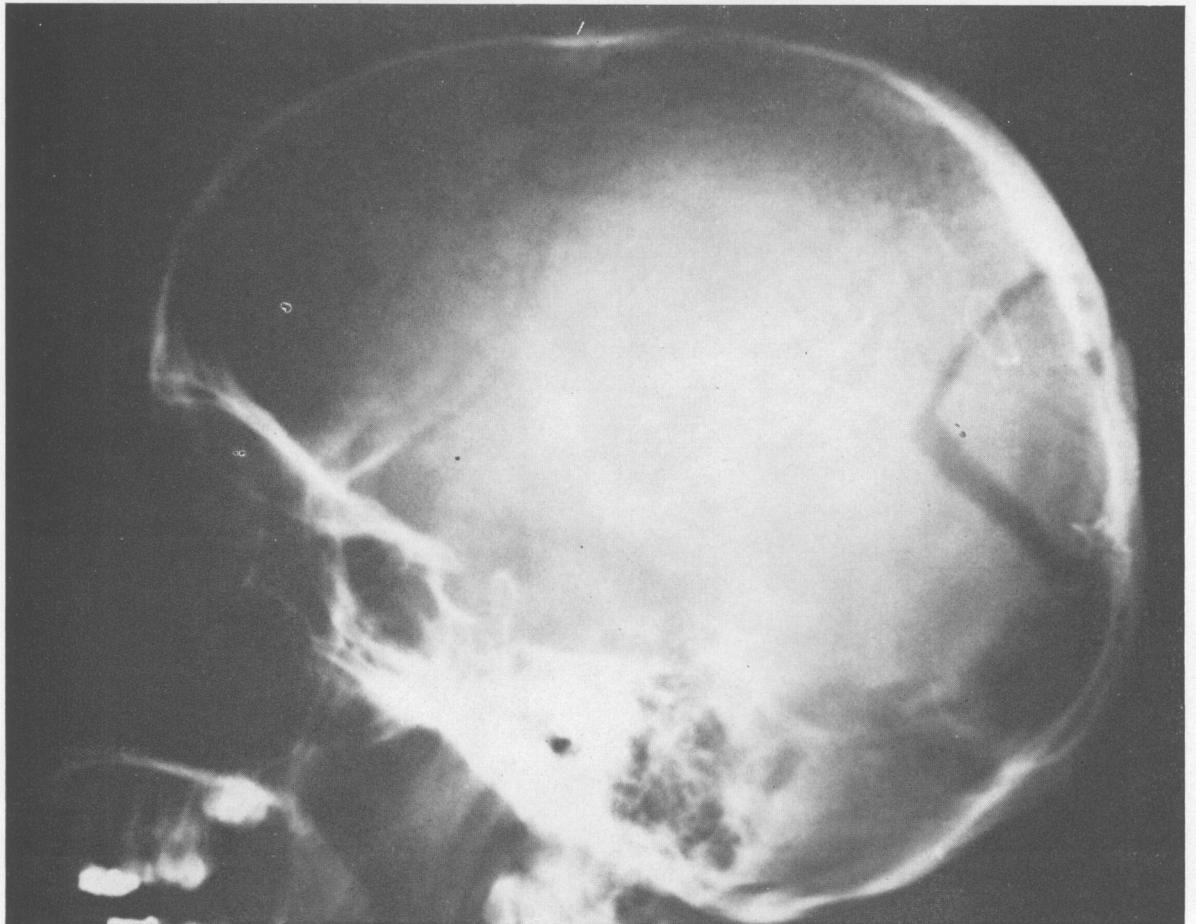
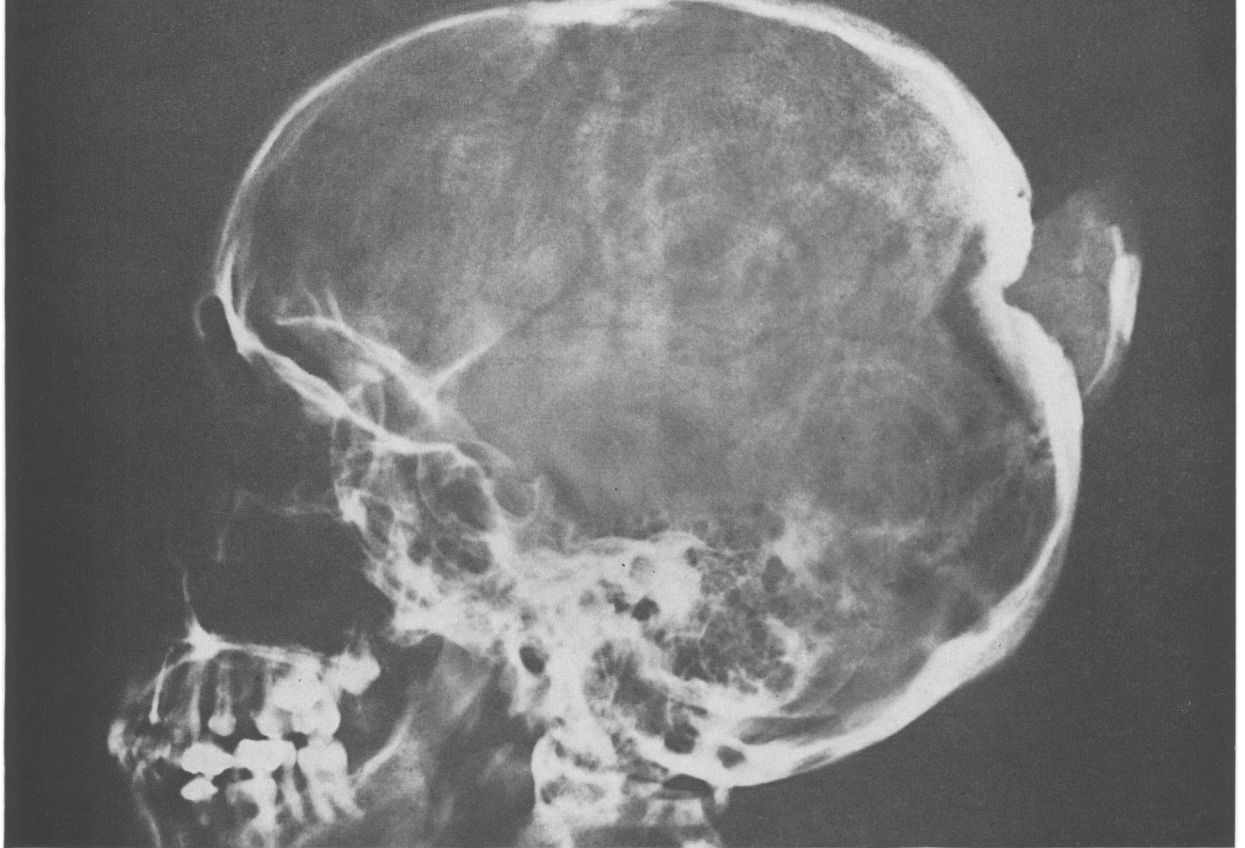
²¹ Ibid. 146.

²² L. B. Rawling, *The Surgery of the Skull and Brain* (London, 1912), 111; Cushing, op. cit. 62.

²³ Breasted, op. cit. 140.

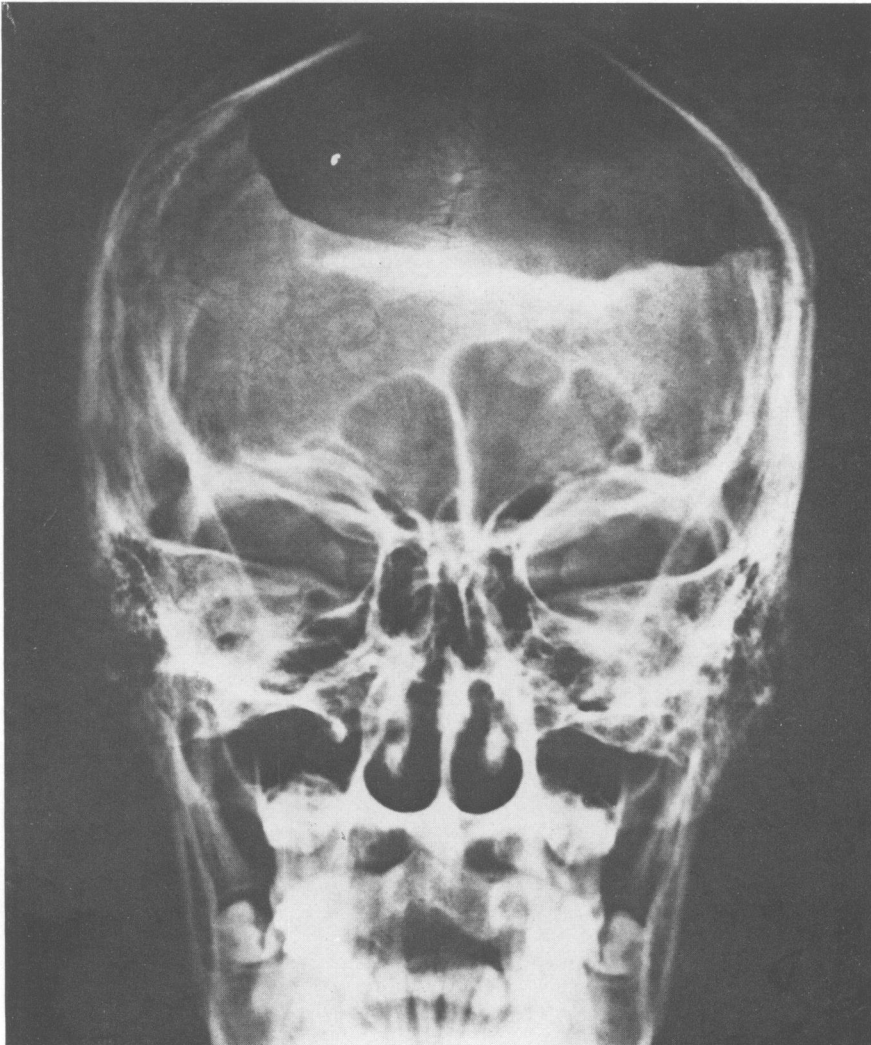
²⁴ Ibid. 148, 159.

The inability to identify correctly the *pšn* or split in 1930, the time of Breasted's translation, was due to its disappearance from the medical literature. This was a result of its rarity in civilian life and the vanishing use of such weapons in contemporary warfare. Apparently, with respect to the *pšn*, the ancient physician knew more than his modern counterpart.



Lateral X-rays of Compound Elevated Fracture of the Skull: (1) pre-operative; (2) post-operative

MEDICAL REINTERPRETATION OF SURGICAL POPYRUS



X-rays of Compound Elevated Fracture of the Skull (post-operative), bony fragments having been removed: (1) lateral view; (2) antero-posterior view

MEDICAL REINTERPRETATION OF SURGICAL PAPYRUS

THREE ACEPHALOUS STELAE

By G. A. GABALLA

THE attention of scholars tends to be drawn in the first instance to monuments that have obvious points of interest such as being precisely dated to the reigns of specific kings, or by attribution to well-attested higher dignitaries. However, many a monument that lacks such criteria for dating can yield information of importance for a variety of interests. Incomplete or fragmentary monuments deserve publication in the hope that missing portions can be found to join them and therefore enhance their scientific contribution. Cairo Museum boasts many such pieces which are published incompletely, inaccessibly, or not at all. In the present paper are published further monuments which are kept in Room 19, on the ground floor; each incomplete, but none without its particular interest.

1. A Private Poetical Stela Honouring the King and the Sun-God (pl. XXII)

Kept under the *JdE* no. 28569 (formerly *Temporary Register* 8.6.24.21), this stela is said to have come from Saqqâra. It measures 50 cm in height by 65 cm in length. It was evidently found in two pieces, then rejoined; apart from this break and some rubbing the stela is in good condition. However, as the first preserved line begins in mid-sentence and no proper names are preserved, it is evident that what we have here is only the lower half of a larger stela. This monument has received singularly little attention in Egyptology. Hitherto only a hand-copy has been published by W. M. Muller in 1906,¹ with a few notes on its contents. I know of no other treatment of this stela.

Text

($x+1$) . . . fashioned as images which [*thy? . . .*] son inspected, (namely) the lord of the Two Lands, appearing on his throne. He causes to come to him great inundations, ($x+2$) to multiply grain in this land, to provision their offerings, to build up the flocks, he created the people who came ($x+3$) forth from his eye. He causes to come to him the tribesmen of Nubia, their tribute being gold in its ore, ebony, ivory, red jasper, ($x+4$) green felspar and leopard skins, to multiply monuments in the temples of all the gods. There come to him^a the Asiatics, ($x+5$) travelling southwards, their tribute, it has filled this land, silver from its deserts, real lapis lazuli, turquoise, every (kind of) noble precious stone; ($x+6$) copper and lead according to their abundance, their horses, their chariots, slaves, male and female together with^b the children of the chiefs; ($x+7$) wine, incense, fresh moringa-oil; cedar and

¹ *Egyptological Researches I* (Washington, 1906), p. 24 and pls. 14-15.

resin^c of the best of the hillsides; . . . sesnedjem-wood (?); all kinds of (x+8) sweet smelling herbs, ladanum (ibr) of the god's . . .^d, every foreign country with their tribute to pacify Egypt for its lord. Thou art the god who made (x+9) all men^e; they live by the strength of thy arm . . . my body, may it be united with the earth, (x+10) my tomb being stable bearing my name upon the earth, . . . a ka-priest offering for me as is done (for) a favoured one, who has no blame.

Notes

- (a) Note the deliberate change of style from *dī·f* plus the *t* form of prospective *sdm·f*, to simple *sdm·f*, cf. Gardiner, *Egn. Gr.*, § 452: 1, and § 459.
- (b) For the use of the preposition *m* meaning 'together with' see Faulkner, *Dict.*, 99.
- (c) *Mrḥiw* as a form of *mrḥ* or *mrḥt*: cf. *Wb.* II, 111; also J. R. Harris, *Lexicographical Studies in Ancient Egyptian Minerals* (Berlin, 1961), 173-4.
- (d) The identity of the circular sign and the reading and interpretation of this group alike remain an enigma.
- (e) The \ominus under the \oplus is presumably the initial *t* of *tmw*.

Commentary

The essential nature of this stela is indicated by the contents of the last two lines. Here we find that the tomb-owner, although unnamed, uses the ordinary seated man-sign for the first person suffix, not the god or king sign. Furthermore, he seeks a safe burial and preservation of name and tomb and claims to be both favoured and blameless in phraseology typical of private tomb inscription in the New Kingdom. Therefore in all probability the stela came from a tomb-chapel of some high official. Within the New Kingdom no exact date is possible, but the well-formed, well-grouped hieroglyphs may suggest the height of the Eighteenth Dynasty when officials showed interest in the exotic products of the world around them.²

The main text revolves around two characters, a god and a king. The deity brings abundance and foreign tribute, evidently for the Egyptian sovereign. The king we cannot identify, but the deity would seem to be the sun-god. This we may derive from the reference in $x+2$, $x+3$ to his creating the people who came forth from his eye, a concept attested for the god *Rē*.³

A remarkable feature of this stela is the poetical form of its text. The repeated introit '*he causes to come to him*' and its variant '*there come to him*' show a regular structure of verses, ending with a long list of products of Asia. This poetic feature reminds one of the famous Karnak poetical stela of Tuthmosis III.⁴

² Cf., for example, the Theban tombs of Puimrē^c (no. 39), Amenhotep (Ḥuy) (no. 40), Amenmose (no. 47), Rekhmirē^c (no. 100), etc., Porter and Moss, *Top. Bibl.*, 1/1 (1960), *ad loc.*

³ From the Middle Kingdom, cf. de Buck, *CT*, VII, spell 1130, 465a (cf. Pritchard, *ANET*, 8); Middle Kingdom/New Kingdom, Cairo Hymn to Amūn, 6: 3 (*ANET*, 366); New Kingdom, 'Destruction of Mankind', Sethos I, lines 8-9, de Buck, *Egyptian Reading Book* (Leiden, 1948), 124, and *ANET*, 11; finally for the Late Period cf. Faulkner, *P. Bremner-Rhind* (Brussels, 1933), 61, xxvii: 2-3, and *JEA* 23 (1937), 172.

⁴ Cf. Sethe, *Urk.* IV, 611-19, and Breasted, *Ancient Records*, II, §§ 655 ff.

The products listed in this text are well attested in other lists of foreign products, particularly inscriptions of the Tuthmoside period.⁵ The list includes less common products such as red jasper and green felspar.⁶

A Royal Stela (pl. XXIII, 1)

This second stela bears the *Temporary Register* no. 26.2.25.1. It is of sandstone and measures 66 cm in length by 50 cm in height. Its original provenance is not known. Unfortunately big portions of it are missing from the top, bottom, and two sides.

Text

‘. . . (x+1) [*He*] *pleases the hearts (of) the glorified ones thereof(?)* . . . [*with*] *wine and milk(?)* . . . (x+2)^a . . . [*a tai*] *l-in-mouth of Rēc; gold which comes forth from him/it, eye-paint as sweet(?)* . . . (x+3) . . . *a man(?) with myrrh, beloved as the lotus like the son of Teeth-and-lips^b* . . . (x+4) . . . *he . . . yesterday, he announced what shall come, he welcomed those who come from^c* . . . (x+5) . . . *Opet. He is Rēc again as that image of him who is within his disc at the head of* . . . (x+6) . . . *from Sehel (or Asia) since the people of old,^d he being like a terrifying lion in(?)* . . . (x+7) . . . *who eli[minates] opposition, he banishes the abomination of Thebes, the city he loves, the resting place* . . . (x+8) . . . *annua[lly], who identifies the chiefs of the secrets of the estate of Amūn and who beholds^e Mut and Khonsu . . .*’.

Notes

- (a) Traces of the beginning of line (x+2) are difficult to interpret; one might understand *rwd m r Rēc* [*going forth*] *strong from the mouth of Rēc*. Professor H. W. Fairman has suggested the epigraphically attractive restoration *sd-m-r* (for which cf. *Wb.* IV, 364, 4-7) with the meaning ‘sacrifice’—presumably to Rēc in this context.
- (b) *Son of Teeth-and-lips*: this is reminiscent of the mode of creation used by Ptaḥ in the Memphite Theology, cf. Sethe, *Dramatische Texte* (*Unters.* 10, Leipzig, 1928), lines 55 ff., pp. 57 f., and Wilson in Pritchard, *ANET*, 5 and n. 14.
- (c) Or . . . ‘for him . . . who announces for him . . . who welcomes for him’, i.e. taking *n·f* as Dative rather than in a *sdm·n·f* form.
- (d) This term with such a determinative is unknown to *Wb.*; perhaps it derives from *h·w*, ‘time’ (*Wb.* II, 478), and may mean ‘those of old time’ like *tpy·w·r*.
- (e) *hf*, ‘to behold’, cf. *Wb.* III, 271, 8 which has only one New-Kingdom example, from P. Anastasi I, 11, 5-6, cf. Gardiner, *Egyptian Hieratic Texts*, 14* n. 12, p. 20. All its other examples are Late Period. This present monument gives us a second New-Kingdom occurrence, for a third see the great stela of Setau, K. A. Kitchen, *Orientalia Lovaniensia Periodica* 6 (1975), 295 ff.

Commentary

From the internal evidence of the text (the last two lines) Thebes would seem to be the place of origin for this monument. In line (x+7) Thebes is spoken of as a city

⁵ For convenience see the Annals of Tuthmosis III in Breasted, *Ancient Records*, II, §§ 406 ff., and Sethe, *Urk.* IV, 647 ff.

⁶ For red jasper, *mḥnmt*, see Harris, *Lexicographical Studies*, 111-13, and for green felspar, *nšmt*, *ibid.* 116.

beloved, while in the last line reference is made to personnel of the estate of Amūn as well as to Mut and Khonsu. We may further note the mention of Opet at the beginning of line (x + 5).

As for its nature, this block once formed part of a large royal stela. This one may deduce from the unknown subject of the stela being described as *beloved like the lotus* (i.e. Nefertum) and being a Rē^c and image of the god in the solar disc. Identification of the subject as a king would also be supported by such epithets as the terrifying lion, and as one who removes oppositions and abominations, and deals with temple personnel. However, these seven lines do not permit us to define the precise function of the stela. This block may have come from the poetical introduction of a much larger historical stela,⁷ or else simply from a large poetical composition in honour of the king as protégé of the gods.⁸ This may suggest that the document originates from a Theban temple.

From the present evidence it is impossible to assign the stela to a specific reign. But the general style of hieroglyphs would strongly suggest a Ramesside date, especially when compared with the crisper cutting of the previous stela, just considered.

Even with its limited compass, this fragment does not lack unusual terms of phrase and allied features. Particularly striking is the allusion to Ptaḥ's mode of creation in the Memphite Theology (*Teeth-and-lips*), perhaps unique in this ideographic form. For the New Kingdom rare and *recherché* terms occur, such as *sd m r* and the verb *ḥf*, both far better attested in the Ptolemaic epoch. Entirely new is the term *ḥyḡw* and the spelling of *msdmt*.

A Stela of Aniy, Overseer of the Goldsmiths (pl. XXIII, 2)

Discovered in Saqqāra at the beginning of 1861, this stela first bore the *Temporary Register* no. 14.1.25.5, but now has the *JdE* no. 15115. It measures 62 cm in length by 75 cm in height, and is made of limestone. The top which once contained the scene is completely lost, nevertheless the text has survived in perfect condition. A hand-copy is given by Mariette in his *Mastabas*, 450 and in his *Mon. Div.* 20 and pl. 62[b]. Part of the text is published by De Rougé, *Inscriptions hiéroglyphiques*, LV, ccci[2]. It has attracted little attention since.

Text

(1) *A boon which the king gives (to) Osiris, chief of the West, Wennefer, lord of the Sacred Territory (and to) Anubis who is in the place of embalming (2), who is upon his mountain and residing in the necropolis, (to) the Great and Lesser Enneads, (3) the lords of the necropolis, that they may give glory in heaven, (4) with Rē^c, and power on earth with Geb, and justification (5) with the lords of eternity, for the ka of one greatly praised by the good god, whom his lord loves because of his character, (6) overseer of the workshops in the South and North, and who knows secrets in the mansions of gold, (7) overseer of the goldsmiths of the lord of the Two Lands, Aniy, and his sister, lady of the house, Wiay.*

⁷ See, for example, the Gebel Barkal Stela of Tuthmosis III, Helck, *Urk.* IV, 1228–30, and First Beth Shan stela of Sethos I, Kitchen, *Ramesside Inscriptions*, I, 12.

⁸ Compare the large double stela of year 20 of Ramesses III, Helck, *ZÄS* 82 (1958), 27–38.

Commentary

This is an ordinary funerary stela from Saqqâra and therefore from a Memphite tomb-chapel. Although the name Aniy is securely attested in the New Kingdom, we cannot determine the exact date of the monument. However, the general style of the hieroglyphs points to a period that might include the later Eighteenth and early Nineteenth Dynasties.

Of more interest are Aniy's titles and functions. He is the chief of workshops in Upper and Lower Egypt and chief of the goldsmiths of the lord of the Two Lands. On the face of it these titles sound common, but in fact, on published monuments at least, they occur much less than might be imagined. For the first title (chief of the workshops in South and North), just one other occurrence comes readily to mind, i.e. that of the chief of workshops, Rē^c, owner of a model sarcophagus and a statuette in Cairo Museum.⁹ For an overseer of the goldsmiths (*imy-r nbyw*) there is the Florence stela Inv. No. 2570 of a certain Mery.¹⁰ In contrast to *imy-r nbyw*, the title *hry nbyw* is more frequent, perhaps suggesting that an *imy-r nbyw* held higher rank than a *hry nbyw*. Two brothers Qenamûn and Saroy are each entitled chief goldsmith (*hry nbyw*) on a Leiden stela.¹¹ Another such man, Khonsu, officiates on an Abydos stela,¹² while Ipuia had a chapel and a fine stela at Saqqâra.¹³ Of much greater interest is the British Museum stela no. 141,¹⁴ which belonged to a whole family of goldsmiths including an Aniy. There are three chief goldsmiths (*hry nbyw*), Paneḥsy, Parē'emḥeb, and Khonsu-hotep; also four ordinary goldsmiths: Aniy, Amenrekhau, Suta, and Ptaḥmose, who is also a priest. Described as the goldsmith of the mansion of gold, who fashions the gods, Aniy is explicitly called son of the chief goldsmith (same epithets) Parē'emḥeb. Might we envisage the possibility that the Aniy of the British Museum stela could just be the Aniy of the Cairo stela at an earlier stage in his career? At present, of course, proof is impossible for this tempting suggestion.

⁹ *Cat. Gén.* 48483 in Newberry, *Funerary Statuettes and Model Sarcophagi*, 370, 372.

¹⁰ S. Bosticco, *Museo Archeologico di Firenze, Le Stele Egiziane del Nuovo Regno* (Rome, 1965), 34-5, no. 37, with pl.

¹¹ Stela Leiden v. 107, in Boeser, *Beschreibung der Aegyptischen Sammlung . . . Leiden*, vi (The Hague, 1913), 2 and pl. 8: 5.

¹² Cairo, *Cat. Gén.* 34089, in Lacau, *Stèles de la XVIII^e Dynastie*, 138 and pl. 43.

¹³ Firth and Quibell, *Teti Pyramid, North Side*, 33 and pl. 11 (below).

¹⁴ T. G. H. James, *The British Museum Hieroglyphic Texts from Egyptian Stelae*, pt. 9 (London, 1970), 23-4 and pl. 19.



x+1
 x+2
 x+3
 x+4
 x+5
 x+6
 x+7
 x+8
 x+9
 x+10

A private poetical stela in the Cairo Museum (JdE no. 28569)

THREE ACEPHALOUS STELAE



1. A Royal Stela, Cairo Museum (*Temporary Register*, no. 26.2.25.1)

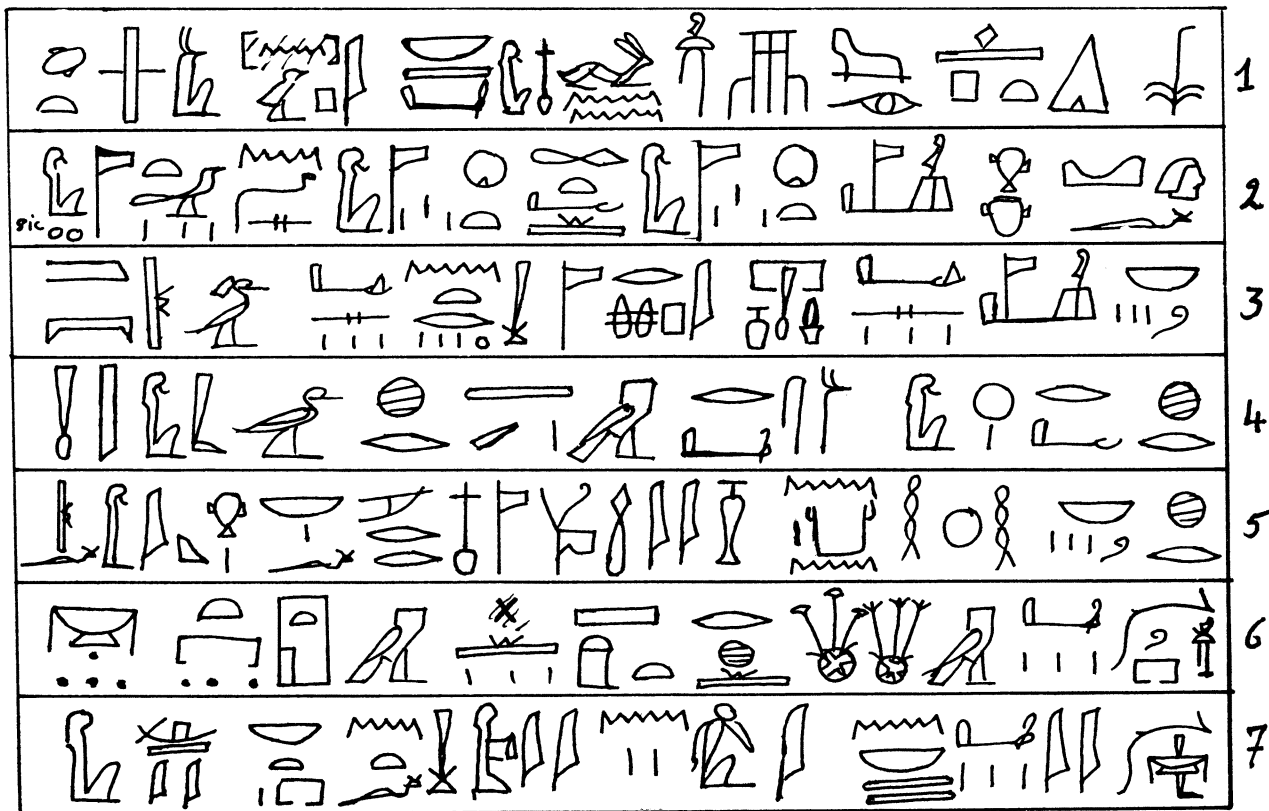


2. Stela of Aniy, Cairo Museum (*JdE* no. 15115)

THREE ACEPHALOUS STELAE



1. A Royal Stela, Cairo Museum (*Temporary Register*, no. 26.2.25.1)



2. Stela of Aniy, Cairo Museum (*JdE* no. 15115)

MERYET-AMŪN ON A LIMESTONE FRAGMENT IN CAMBRIDGE

By ANNE MILLARD

ONE of the objects from the Gayer-Anderson Collection, which is now in the Fitzwilliam Museum, Cambridge,¹ is a fragment of limestone (see pl. XXIV), whose widest dimensions are 10 by 9 cm, with a depth varying between 1·3 and 2·3 cm. The fragment shows the head, shoulders, chest, and right arm of a royal female, above whom are the remains of five vertical columns of inscriptions, with perhaps traces of a sixth column on the extreme left-hand edge, as one looks at the piece. The figure of the woman is in raised relief, while the hieroglyphs are in sunken relief, which in places is deeply cut. Although the fragment is small, the existing details of style and content would indicate the Nineteenth Dynasty as its probable date.

The face of the woman is shown, according to custom, in profile, and she has the aquiline nose characteristic of the family of Ramesses II. She faces left as one looks at the fragment. It is difficult to say whether she is standing, seated, or kneeling, but the first is perhaps the most likely because, while the right arm is brought across her body at the waist, the left arm appears to hang straight down at her side, which is more characteristic of a standing pose. An unusual, though not unique, feature² is that the breasts are shown from the front, instead of in profile. She is wearing a broad bead collar, and some pleats from her robe are visible at the top of her left arm.

The woman has a wig composed of numerous small plaits, terminating by the side of the face in curls. The wig is short at the back, being on a line with her jaw, but at the sides of her face it falls to the shoulders.³ On her head she wears a flat-topped diadem of a type that enjoyed great popularity among the royal women of the New Kingdom.⁴

¹ E.GA 4354.1943. I should like to express my thanks to Mr. R. V. Nicholls, Keeper of Antiquities in the Fitzwilliam Museum, for allowing me to publish this object.

² e.g. N. de Garis Davies, *The Tomb of Nakht at Thebes*, frontispiece, the lute player; also Cooney, *Amarna Reliefs of Hermopolis in American Collections*, 28-9, no. 16.

³ This particular style of wig was popular during the Nineteenth Dynasty, though it is more usually shown on men—e.g. Sethos I in his tomb, Champollion, *Monuments de l'Égypte et de la Nubie*, III, pl. 251. However, there is no reason why men and women should not have worn wigs of similar design at this period, for, at the end of the Eighteenth Dynasty, a short wig had been popular with both sexes, see Aldred, 'Hair Styles and History', *Bull. MFA*, 15 (1957), 141-7.

⁴ This diadem is sometimes shown as being made of snakes with a plain band supported by their heads (e.g. Lepsius, *Dkm.* III, 5, Bl. 70 bis, worn by Mut-em-wiya), but it is not to be confused with the circlet of uraei that was in fashion at the same time. That these are two separate diadems is clearly illustrated on the small gold shrine of Tut'ankhamūn, where the queen is shown wearing both diadems in separate panels. See Edwards, *The Treasure of Tutankhamun*, no. 25, Golden Shrine, photograph of the back.

She also wears a fillet with a pendent snake hanging, one each side of her face, and a uraeus with horns and a sun disc on her forehead.⁵ There is a line across the forehead, just below the line of the wig, which may indicate the woman's real hair line. Partially visible under the wig is a large ear-ring with a floral design.⁶

On the left-hand edge of the fragment are traces of what may be the pendent elements of a flail. If correctly identified, this flail is presumably being carried by the monarch whose cartouches appear on that side of the object, but it is difficult to decide whether he is facing the woman, with the flail held in front of him, or whether he has his back to her, with the flail held over his shoulder.

The hieroglyphic inscriptions are in five vertical columns. The bases of four columns are visible, and, of these, three have a line drawn across the bottom. The tops of all the columns are missing, as is the bottom of the first column, and the fragment is too small to make a satisfactory reconstruction possible. All the hieroglyphs face right. The first two columns, beginning on the right side, must surely refer to the woman described above. The first column reads . . . (*w*)*rt ḥswt nb[ṯ] im[ṯ]* . . ., 'great of favour, possessor of charm', which is one of the standard elements in the titularies of queens of the New Kingdom.⁷ The top of the second column is damaged, but part of the *nsw* sign is just legible in the title . . . *hm(t) nsw wrt Mrt Imn 'nhtṯ dd[ṯ]*, 'the King's Great Wife, Meryet-Amūn, may she live and flourish'. The use of the double *dd* is unusual, but not without precedent, and may be found, for example, in a titulary of Toui, the wife of Sethos I.⁸

The third column is wider than the rest. It has no line across the bottom, but this may be because an element of the queen's diadem is in the way. It reads . . . *mī Rē dt*, 'like Rē^c for ever'. These words normally form part of a Pharaoh's titulary, but they cannot belong to the king named in columns four and five, because they are always the last elements in the titulary and never precede the cartouches. These words could, in theory, form part of the titulary of a second king, which might be fitted in a horizontal line across the top, and then in a vertical line down the side of the queen's name and titles, but this would be an unusual arrangement. Moreover, if they did refer to a second king, presumably Ramesses II, if the queen has been correctly identified (see below), it is difficult to see where his figure was placed. He would not be shown behind the queen, and he can hardly be in front of her, because the cartouches there refer to another Pharaoh. It therefore follows either that Ramesses was named, but his figure was not shown, or that the words 'like Rē^c for ever' refer to Meryet-Amūn,⁹ which would appear the more reasonable explanation on the evidence as it stands. Theoretically, though none of the extant inscriptions refer to him, a figure of Ramesses II might have appeared on the original monument, for this piece could have been part of

⁵ For an identical fillet, see Desroches-Noblecourt and Kuentz, *Le Petit Temple d'Abou Simbel*, II, pl. 33, where it is worn by Nefertari.

⁶ For similar ear-rings, see *ibid.*, pl. 99, also worn by Nefertari.

⁷ e.g. Gauthier, *Le Livre des Rois*, II, 183-4: XXXIV, nos. I and IIA.

⁸ *Ibid.* III, 29: LXXXIIIA. Also II, 184, IIA.

⁹ There are a few examples where these words form part of a queen's titulary, e.g. *ibid.* II, 287: LII, 3, referring to Meryetrē^c Ḥatshepsut. and 329: C, I, referring to Mut-em-wiya.

a scene showing the deity twice, with his two figures standing or seated back-to-back, and receiving homage from the king on one side and the queen on the other.

Column four reads *ntr nfr* (*Dsr-ks-Rc*), 'the Good God (Djeser-ka-Rē)', and column five reads *nb tswy* (*Imn-htp*), 'the Lord of the Two Lands (Amenophis)'—i.e. Amenophis I. There are traces of what may be a sixth column on the left-hand edge, but it is illegible.

The problem of the identification of Meryet-Amün is an interesting one. There were three royal females of the Eighteenth and Nineteenth Dynasties who bore the name Meryet-Amün, and whose claims must be considered here. The first lived at the beginning of the Eighteenth Dynasty and was the daughter of Aḥmōsis I and Aḥmes Nefertari. The second lived in the mid Eighteenth Dynasty, during the reign of Tuthmosis III, and the third was a daughter of Ramesses II.

The second of these ladies will be considered first, because she is the least likely candidate. This Meryet-Amün appears in the chapel of the Hathor shrine at Deir el-Bahari. She stands directly behind a figure of Tuthmosis III, and she bears the titles King's Daughter, King's Sister, God's Wife, and God's Hand.¹⁰ If Winlock¹¹ was correct in identifying this princess with the queen whose burial was excavated by the Metropolitan Museum of Art expedition in 1929/30, then, towards the end of her life, she also acquired the title of King's Great Wife,¹² and so becomes eligible to be identified with the queen of the Fitzwilliam Museum fragment. However, such an identification lacks credibility, for it is extremely unlikely that a Nineteenth-Dynasty king or official would chose to erect a monument commemorating an obscure, mid-Eighteenth Dynasty queen who, at most, was King's Great Wife for only a very limited period of time, and had, as far as we know, no direct connection with the cult of Amenophis I.

A more promising candidate is to be found in the person of the Meryet-Amün who was the daughter of Aḥmōsis I and Aḥmes Nefertari. Bandages found on a mummy from one of the royal caches named a King's Daughter and King's Sister Meryet-Amün, but there has been some dispute as to the identity of the actual body. Maspero¹³ claimed that it was an intrusive mummy of Middle-Kingdom date, but Elliot Smith¹⁴ considered that it had been prepared in the style of the early Eighteenth Dynasty. Hayes¹⁵ identified the Meryet-Amün found by the Metropolitan Museum of Art with this earlier princess, making her a wife of Amenophis I, not Amenophis II, and if he was correct, it would mean that the first Meryet-Amün attained the rank of King's Great Wife, and might be the queen of the Fitzwilliam fragment. However, apart from the coffin in this tomb, whose date is disputed, there is no contemporary record of Meryet-Amün being married to her brother Amenophis I.

In Ramesside times, Amenophis I was shown, almost invariably, with his mother, Aḥmes Nefertari, though sometimes the King's Great Wife Aḥhotep accompanies them, and on a few monuments a queen Sit-Kamose is also shown. Occasionally such

¹⁰ Naville, *The Eleventh Dynasty Temple at Deir el Bahari*, I, pl. 28B.

¹¹ Winlock, *The Tomb of Queen Meryet-Amün at Thebes*, 57 ff.

¹² Recorded on the outer coffin, see *ibid.*, pl. 22.

¹³ Maspero, *Les Momies royales*, 539-40.

¹⁴ Elliot Smith, *The Royal Mummies*, 6-8.

¹⁵ Hayes, *The Scepter of Egypt*, II, 53.

monuments also name Meryet-Amūn, and she is shown with Amenophis I and other members of their family.¹⁶ However, when her titles are recorded on Ramesside monuments she is never awarded a higher rank than King's Daughter and King's Sister. It would seem, therefore, that even if Hayes was correct and the first Meryet-Amūn was a King's Great Wife, the Ramessides knew her only as the sister, not the wife, of Amenophis I, so the Fitzwilliam fragment is unlikely to represent her.

The Great Royal Wife illustrated on this fragment must therefore be a member of the Nineteenth-Dynasty royal family, paying homage to the deified Amenophis I. The most likely candidate is the King's Daughter and King's Great Wife Meryet-Amūn. Relatively little is known about her, but she was the child of Ramesses II and Nefertari Mery-en-Mut, and she appears with her parents on the façade of the Hathor temple at Abu Simbel.¹⁷ Later in her father's reign, probably after the death of her mother, Meryet-Amūn apparently married her father, and it is as the King's Wife and King's Great Wife that she is portrayed on a statue of Ramesses II found at Tanis¹⁸ and in her tomb in the Valley of the Queens.¹⁹

It is not known where Gayer-Anderson obtained this piece, but the scale is too small for it to have come from her tomb, and the subject certainly does not correspond with those listed for the tomb.²⁰ The back of the fragment is smooth, but this could have been done after it had been cut from a thicker piece, such as, for example, the side of a naos, or the top of a private stela. The latter hypothesis is perhaps the more likely, in which case, as has been suggested above, this fragment may have been part of the right-hand side of a double scene, showing the king and queen worshipping two separate figures of the same deity. On the other hand, it is possible that the queen alone was shown, perhaps because the owner of the monument was one of her personal servants. This, however, must remain speculation, because it is impossible to determine, from so small a fragment, either the format of the original composition, or the nature of the monument from which it was taken.

¹⁶ See Černý, *BIFAO* 27 (1927), 173 and 174, and pl. 4; Bruyère, *Tombes thébaines de Deir el Médineh à décoration monochrome*, 37-8 and 46, and pl. 9; Lepsius, *op. cit.*, III, 5, Bl. 2, a and d.

¹⁷ Desroches-Noblecourt and Kuentz, *op. cit.*, pl. XIX.

¹⁸ Petrie, *Tanis*, I, 24 and pl. 5: 35D.

¹⁹ *Top. Bibl.* I, *The Theban Necropolis*, Part 2, 765-6, no. 68.

²⁰ *Ibid.*



Limestone fragment in the Fitzwilliam Museum (E. GA 4354, 1943) slightly enlarged

Courtesy Fitzwilliam Museum

MERYET-AMŪN ON A LIMESTONE FRAGMENT IN CAMBRIDGE

THE LADY WALLIS BUDGE FELLOWSHIPS IN EGYPTOLOGY

THE Master and Fellows of Christ's College, Cambridge, and the Master and Fellows of University College, Oxford, present the following report upon their trusteeship of bequests made by the late Sir Ernest Wallis Budge to found Fellowships in Egyptology in memory of his wife, Lady Wallis Budge. It gives a list of holders at each college with notes upon their scientific work during their tenure and subsequent appointments, and accounts of expenditure from the trust funds by the college bursars. It has been compiled with the help of past and present Fellows of the colleges at the request of Sidney Smith, the executor of Sir Ernest Wallis Budge's will, and is published here to record the contribution the endowments have made to Egyptological scholarship since their inception in 1936.

CHRIST'S COLLEGE CAMBRIDGE

Lady Wallis Budge Fellows and Scholars in Egyptology

C. R. C. Allberry, Research Fellow 1936–9

Allberry, a classical scholar of the college, became interested in Gnostic and Manichaean literature under the influence of M. R. McLean, M. C. Burkitt, and Sir Stephen Gaselee. He learnt Coptic with help from W. E. Crum and Sir Herbert Thompson, and made major contributions to the translation, interpretation, and publication of the new Manichaean documents in the Chester Beatty Collection in the Sub-Akhmimic dialect of Coptic. In this he co-operated with a distinguished group of European scholars including C. Schmidt, H. J. Polotsky, and T. Säve-Söderbergh. He published one major work, *A Manichaean Psalm-Book (Manichaean Manuscripts in the Chester Beatty Collection, volume II)*, Stuttgart, 1938, and a number of philological notes. He also made valuable contributions to W. E. Crum, *A Coptic Dictionary*. Before the Second World War he studied hieroglyphs with Sir Alan Gardiner, and was invited to become editor of the *Journal of Egyptian Archaeology*. Allberry died on active service in 1942. His library is now part of the Egyptological library of the Faculty of Oriental Studies at Cambridge.

H. S. Smith, Scholar 1950–5; Research Fellow 1956–60; Fellow 1960–3

Smith, a classical scholar of the college, read Egyptology for the B.A. degree (1953), and subsequently studied demotic under S. R. K. Glanville. He presented as his Fellowship dissertation a glossary of *The Instructions of 'Onchsheshonqy* (British

Museum Papyrus 10508), and published demotic legal texts in journals, some in collaboration with A. F. Shore. In 1953-4 he worked as an epigraphist on Theban tombs and as an archaeological assistant to W. B. Emery at Saqqâra. From 1959 he contributed to British archaeological work in Nubia, acting as epigraphist and field assistant to the Egypt Exploration Society under W. B. Emery at Buhen and Qaṣr Ibrîm, and leading the archaeological survey of Egyptian Nubia in 1961. As a result of this work, he published reports on *The Egypt Exploration Society's Nubian Survey*, Service des Antiquités, Cairo, 1962; *The Fortress of Buhen*, volume 2: *The Inscriptions*, E.E.S., London, 1976; and with the late W. B. Emery and A. Millard, *The Fortress of Buhen*, volume 1: *The Archaeological Report*, E.E.S., London (in press). During his tenure he lectured on Egyptology for the Faculty of Oriental Studies of Cambridge University. He is now Edwards Professor of Egyptology at University College London, and Field Director for the E.E.S. of excavations in the Sacred Animal Necropolis at North Saqqâra.

D. B. O'Connor, Research Scholar 1963-4

O'Connor, a graduate of Sydney University, Australia, who had obtained the Postgraduate Diploma in Egyptology at University College London, was awarded a scholarship while writing a thesis on the relationships between the C-group, Kerma, and Pan-Grave peoples of ancient Nubia, for which he was eventually awarded the Ph.D. degree. He took an active part in the Egypt Exploration Society's excavations at Buhen and Qaṣr Ibrîm and in the archaeological survey of Nubia, and is to publish the archaeological report on *Buhen: The Old Kingdom Town*. In 1964 he was appointed an Assistant in the Egyptian Section of the Pennsylvania University Museum, Philadelphia, of which he is now head with the rank of Associate Professor. Since that time he has directed excavations, both jointly and alone, for the Pennsylvania University Museum at Abydos and at Malqata in western Thebes, and has written papers on Egyptian and Nubian archaeological subjects for journals and conferences.

G. T. Martin, Research Fellow 1966-70

Martin, a graduate in Ancient History of University College London (1963), and later a Research Scholar of Corpus Christi College, Cambridge (1963-6), presented as his Fellowship dissertation a catalogue of scarabs and seals, which he subsequently utilized as the basis of his Cambridge Ph.D. thesis on Egyptian administration in the Middle Kingdom and published as *Egyptian Administrative and Private-Name Seals*, Oxford, 1971. Throughout his tenure as Lady Wallis Budge Fellow Martin worked in Egypt for the Egypt Exploration Society, both as an excavation assistant to W. B. Emery at Saqqâra and upon his own researches. The former has led to his being appointed to publish *The Tomb of Hetepka and other Reliefs and Inscriptions from North Saqqâra*, 1964-73, E.E.S., London (in press), and the archaeological report upon *The*

Sacred Animal Necropolis: the Southern Dependencies, E.E.S., London (in press). He is now a Lecturer in Egyptology at University College London, and Field Director for the E.E.S. of excavations in the New-Kingdom Necropolis at Saqqâra, undertaken in co-operation with the Leiden Museum of Antiquities.

W. J. Tait, Research Fellow 1972–

Tait became interested in Greek papyrology and Egyptology while reading classics at Wadham College, Oxford, and subsequently studied Egyptology and especially demotic under J. W. B. Barns, as Laycock student at Worcester College (1970–3). He presented as his Fellowship dissertation part of his Oxford D.Phil. thesis (1974), now to be published by the E.E.S. as *Papyri from Tebtunis in Egyptian and Greek* (in press). During his tenure as Lady Wallis Budge Fellow Tait has worked as a papyrologist for the E.E.S. at Saqqâra, and is publishing with H. S. Smith two volumes of the Saqqâra Demotic Papyri, *Literary Texts* and *Letters*. He has published demotic literary texts in journals, and has worked in the demotic papyrus archive at Copenhagen University and on the Greek Zenon Archive project at the Papyrologisch Instituut der Rijksuniversiteit te Leiden. In 1976 he lectured on Egyptology at Durham University. He is preparing a volume on game-boxes and gaming-pieces for the Griffith Institute series on the tomb of Tut‘ankhamûn.

Travel and Research Grants

| <i>Name</i> | <i>Date</i> | <i>Purpose</i> |
|-------------------|-------------|---|
| C. R. C. Allberry | 1938 | Research on Coptic Gnostic MSS. in Europe. |
| H. S. Smith | 1950 | Study tour of Egyptian monuments. |
| | 1960 | Archaeological and epigraphic work at Buhen, Sudan. |
| | 1961–2 | Direction of the archaeological Survey of Egyptian Nubia. |
| G. T. Martin | 1967–9 | Work as archaeological assistant and epigraphist at Saqqâra. |
| | 1970 | Work in the Cairo Museum cataloguing objects from the royal tomb at El-Amarna. |
| A. M. Bakir | 1972–3 | A. M. Bakir, Emeritus Professor of Egyptology at Cairo University, spent the academic year 1973–4 at Christ’s College, while studying the Sallier <i>Calendar of lucky and unlucky days</i> in the British Museum and undertaking other philological work. This will appear in his <i>Introduction to the study of the Egyptian language: a Semitic approach. No. 1: Middle Egyptian</i> . He was supported on the Budge Foundation and was a member of the Senior Common Room while doing this research, and taught for the Faculty of Oriental Studies. |
| W. J. Tait | 1975 | Work as a demotic papyrologist at Saqqâra. |

Lady Wallis Budge Fund

Expenditure 1936-76

| <i>Purpose</i> | <i>Expenditure</i> |
|--|--------------------|
| Fellows | £16,425 |
| C. R. C. Allberry (deceased) 1936-9 | |
| H. S. Smith 1956-63 | |
| G. T. Martin 1966-70 | |
| W. J. Tait 1972- | |
| Scholarships and Research Studentship | £ 1,899 |
| H. S. Smith 1950-6 | |
| D. B. O'Connor 1963-4 | |
| Travel and other grants for research | £ 2,836 |
| C. R. C Allberry | |
| H. S. Smith | |
| G. T. Martin | |
| Professor A. M. Bakir | |
| W. J. Tait | |
| Other payments, including help with publications | £ 550 |
| TOTAL | £21,710 |

UNIVERSITY COLLEGE OXFORD

Lady Wallis Budge Fellows in Egyptology

A. N. Dakin, Junior Research Fellow 1936-42

Dakin began his Egyptological studies under Battiscombe Gunn in 1935, after completing the Lit. Hum. course at Oxford. When the Budge Fellowship was created in 1936 he was the first to be elected, though still very much an apprentice in the field. For this reason he had little opportunity, prior to the outbreak of war, to indulge in advanced research, and he served primarily as an assistant to Gunn, particularly in his work as editor of the *JEA*. In 1939 he became responsible for the *Bibliography of Pharaonic Egypt* that was a feature of the *Journal*, and contributed articles to successive volumes. He worked for a while under Dr. (later Sir) Alan Gardiner, and in the early part of 1939 travelled in Egypt. The war, however, cut short his Egyptological studies, and when he left the War Office in 1946 he turned to teaching, much to Gardiner's recorded regret.

J. W. B. Barns, Research Fellow 1945-53

Barns came to Egyptology with a Classical background, obtained at Bristol and Oxford Universities, and a period spent on papyrological studies. He profited from working under both Gunn and Gardiner, and his tenure of the Fellowship was made noteworthy by the publication in 1952 of *The Ashmolean Ostrakon of Sinuhe* and by his

subsequent work, with Gardiner's encouragement, on a collection of papyri from the Ramesseum, eventually published as *Five Ramesseum Papyri*. His diverse Egyptological interests resulted in the appearance, during his Fellowship, of a number of articles on textual and linguistic matters, covering most stages of the Egyptian language. One finds at this time the first evidence of his interest in Coptic Egypt, an interest that became increasingly apparent in later years. He became Senior Lecturer in Papyrology at Oxford in 1953 and succeeded to the Chair of Egyptology in 1965. He died in 1974 and his library was distributed among several recipients, notably the Peet Memorial Library at Queen's College.

P. E. Kahle, Research Fellow 1954-5

Kahle, son of the well-known Arabist and Hebraist Ernst Kahle, was introduced to Coptic by Battiscombe Gunn, and his doctoral dissertation centred on the editing of a large collection of literary and documentary material from the monastery of Deir el-Balaizah, discovered by Sir Flinders Petrie in 1907 and stored in the Bodleian Library. In its published form Kahle's work included a valuable discussion of Coptic dialectal problems. Kahle was Laycock Student at Worcester College for a while before being elected to the Budge Fellowship in 1954. Sadly he was already a sick man, and he died less than a year later at the age of thirty-one. His final contribution to Coptic studies was to assist in the publication of an Old Coptic horoscope, which appeared in the *JEA* after his death.

J. Gwyn Griffiths, Research Lecturer 1957-8

A Classics graduate from Cardiff University College, he studied Egyptology at Liverpool University under A. M. Blackman, and at Oxford under Battiscombe Gunn. His election to the Budge Fellowship enabled him to work on a commentary to Plutarch's *De Iside et Osiride*, though final publication of this was delayed until 1970. He also took the opportunity to revise and prepare for publication his *Conflict of Horus and Seth*, which had been the subject of his doctoral dissertation, and this also served as the inspiration for several articles. He subsequently became Senior Lecturer and Reader in Classics at Swansea University College and then Professor of Classics and Egyptology, a post he still holds.

W. H. Bell, Junior Research Fellow 1958-62

Bell was a Fulbright Scholar whose tenure of the Fellowship enabled him to complete his researches on Late Egyptian influences on the language of New Kingdom royal stelae, for which he was awarded a B.Litt. in 1962. During this period he studied under Jaroslav Černý, but he also combined with J. W. B. Barns to publish some early Coptic hymn fragments. His subsequent career has led him into the field of Nubian studies, and he has published many articles on this subject, particularly on matters connected with Nubian linguistics. He is at present Senior Research Fellow in the Institute of African and Asian Studies at the University of Khartoum.

J. R. Harris, Research Lecturer 1964-9

Harris, a graduate of Oxford, presented a doctoral dissertation on *Lexicographical Studies in Ancient Egyptian Minerals*. He subsequently edited a new edition of Lucas's *Ancient Egyptian Materials and Industries*, as well as producing a book on Ancient Egyptian art. He also published a number of articles on a wide range of subjects. During his tenure of the Fellowship he rendered invaluable assistance in the teaching of the undergraduate course. He later became Reader in Egyptology at Durham University, and, since 1971, has been Professor of Egyptology at Copenhagen.

C. C. Walters, Research Fellow 1971-

Walters, a graduate of Liverpool University, has published, during his tenure, an *Elementary Coptic Grammar* and a book devoted to *Monastic Archaeology in Egypt*, which had formed the basis of his doctoral dissertation. He is currently working on a *Cultural History of the Copts*. While Budge Fellow he has accompanied E.E.S. expeditions to Qaşr Ibrîm, and has also assisted in the teaching of the undergraduate course, for the organization of which he assumed responsibility following the death of Professor Barns.

Sir Ernest Wallis Budge Fund*Expenditure 1945-76*

| <i>Purpose</i> | | <i>Expenditure</i> |
|-------------------------------|---------|--------------------|
| Fellows and Lecturers | | £29,534 |
| Dr. J. W. B. Barns (deceased) | 1945-53 | |
| Dr. J. Gwyn Griffiths | 1957-8 | |
| W. H. Bell | 1959-63 | |
| Dr. J. R. Harris | 1964-70 | |
| Dr. C. C. Walters | 1970- | |
| Grants and Scholarships | | £ 1,555 |
| P. E. Kahle—grant | 1954-5 | |
| J. A. B. Drescher—Scholar | 1965 | |
| Professor A. M. Bakir | 1971-2 | |
| Other | | £ 484 |
| W. H. Bell—visit to Nubia | 1961-2 | |
| W. H. Bell—visit to Moscow | 1960 | |
| Help with publications | | |
| TOTAL | | £31,573 |

SHABTIS OF PEDAMENOPE (THEB. TB. 33) IN THE ASHMOLEAN AND FITZWILLIAM MUSEUMS

By JAROMÍR MÁLEK

Remembering Caspar Fleming, 1952–1975

HYBRID shabtis of the owner of tomb no. 33 at 'Asâsîf, the Chief Lector Priest Pedamenope, are famous for their large number¹ and their robust appearance, and notorious for being mostly fragmentary, scattered over many museums and private collections, and with some exceptions unpublished.² Pedamenope's shabtis thus do credit to the tomb and the owner himself. The tomb is claimed to be the largest at Thebes and has been known for a long time (a plan was published by Richard Pococke as early as 1743) and this has resulted in the wide dispersion of its original contents. Pedamenope's exact dating has not yet been established but the consensus of opinion is in favour of late Dynasty XXV or early Dynasty XXVI.³

The wealth of objects and their distribution has so far precluded a study of the whole complex of Pedamenope's funerary statuettes. The recent acquisition of two fragmentary shabtis by the Ashmolean Museum in Oxford and the existence of four hitherto unreported figures in the Fitzwilliam Museum in Cambridge provide an opportunity briefly to review the problem, *faute de mieux*.

As far as material is concerned, three main varieties of Pedamenope's funerary statuettes are usually found. The most common is the large type (as much as 33 cm in height) made of variously identified unglazed stone (steatite, serpentine, granite) with carefully engraved text *en creux*. The figures made of glazed stone are somewhat

The Ashmolean shabtis have been presented by Mrs. Ian Fleming. They used to be in the possession of her son Caspar whose tragic death was a grievous blow to all his friends who had known him from his Egyptological studies at Oxford. Collecting small Egyptian antiquities was Caspar's hobby, and I hope that he would have approved of this attempt to rescue some of them from obscurity. For information I am grateful to Mrs. B. Adams, Miss J. Bourriau, and Dr. H. Satzinger; for permission to study the British Museum pieces to T. G. H. James, W. V. Davies, and Miss C. Andrews, and for help while preparing this article to Mrs. J. Crowfoot Payne, Miss H. V. Murray, and Dr. P. R. S. Moorey. The photographs are published with the permission of the Visitors of the Ashmolean Museum, Oxford, and the Syndics of the Fitzwilliam Museum, Cambridge. The text was completed in August 1976.

¹ The recent estimates of 60 (J.-F. and L. Aubert, *Statuettes égyptiennes, chaouabtis, ouchebtis*, 201, from J. Yoyotte) and 70 (R. Giveon in the article cited in n. 5) are too conservative by far. In the British Museum alone I have counted about sixty lower parts and complete shabtis in addition to which there are other fragments which might or might not adjoin.

² Below I give the bibliography of the more completely published shabtis but refrain from quoting publications in which they are merely mentioned. The two earliest published figures are found in Caylus, *Recueil d'Antiquités* [etc.], v (1762), 11 and pl. iii, the first probably being the same as that in *Description de l'Égypte*, v, pl. 89 [29].

³ e.g. J. Leclant, *Recherches sur les monuments thébains*, p. xii n. 3.

smaller (some of these are similar to the shabtis of the previous group while others, only about 16 cm, have their text incised in simple lines). Less common are the faïence shabtis (about 14 cm high) with summarily incised text. Particularly within the first two groups there is considerable diversity, notably in size but also in detail because separate carving gave to each figure individual features. In addition to these A. Piankoff has reported one pottery shabti.⁴ The workmanship of these figures is a little crude but competent.

The most important features characterizing Pedamenope's shabtis are as follows:

(1) the broad face without a beard; (2) a massive wig with two lappets which envelop the face instead of falling straight down on the chest but leave the rather large ears exposed; (3) the low maximum height: width ratio (about 3), i.e. they give the impression of a more squat figure, as compared, for example, with much slimmer Ramesside or typical Saïte ushebtis; (4) the absence of the back pillar; (5) the arms crossed right over left and the two *mr*-hoes; (6) the fifth version of the formula arranged in eight or unusually nine lines.

Less obligatory are the following characteristics:

(7) one small basket of varying shape suspended from a cord over the left or right shoulder (shabtis without a basket are also known); (8) the base with a slightly curved front edge, narrowing towards the back (shabtis without a base are not uncommon); (9) the division of the beginnings and endings of the horizontal lines of the text at the back by a double vertical line, brought about by using the whole available space for the text (these two lines occasionally merge into one or, exceptionally, are absent).

Though rare, complete shabtis of Pedamenope do exist and so the fragmentary state of most of the figures will be due to natural causes rather than intentional practices.

Stone (serpentine) shabtis⁵

A. Ashmolean Museum 1976.45. Pl. XXV, fig. 1

The present height of the middle part is 8 cm, its width is 6.2 cm measured across the upper break and 5.6 cm across the lower break, and the corresponding thickness is 4.5 and 3.6 cm respectively. Four lines (5 to 8) of the original nine lines of the text are well preserved. The finely engraved signs are about 1.3–1.5 cm high with the framing lines about 1.7–1.8 cm apart. Bibliography: none.

B. Fitzwilliam Museum E. 61.1932. Pl. XXV, fig. 2

The present height of the lower part is 9.3 cm, the maximum width and depth of the base is 5.2 cm and its height about 1 cm, and the width and thickness of the figure when measured across the

⁴ *BIFAO* 46 (1947), 90 with fig. 8 [upper left].

⁵ Upper parts: Budapest, Mus. of Fine Arts, 51.2226, Z. Oroszlán and A. Dobrovits, *Az Egyiptomi Gyűjtemény. Vezető* (1939), 111 [117] and pl. 19; Cassel, Staatl. Kunstsammlungen, Ae. 25, M. Bieber, *Die antiken Skulpturen und Bronzen* [etc.] (1915), 35–6 and Taf. 35 [60], and A. Krug, *Ägyptische Kleinkunst* (1971), 28–9 [25] and Taf. 11; Munich, Staatl. Sammlung, ÄS 281, *Staatl. Samml. Äg. Kunst* (1976), fig. on p. 160; Michaelidis Collection, A. Piankoff, op. cit. 91 with fig. 8 [upper right]. Middle parts: two at University College London, F. Petrie, *Shabtis* (1935), pls. 42 [533–4], cf. 12. Lower parts: Wilfried Israel House in Hazorea, Israel, R. Givon in *The Shmuel Yeivin Volume* (Publication of the Israel Society of Biblical Research, vol. 20, Jerusalem 1970), pl. 4 [4, 5], with text on p. 347 (the first two signs of the text in line 1 are to be amended); Michaelidis Collection, A. Piankoff, op. cit. 91 with fig. 8 [lower left].



FIG. 1. Text of Shabti A (Ashm. Mus. 1976.45). Facsimile, reduced to about two-thirds.



FIG. 2. Text of Shabti B (Fitzw. Mus. E.61.1932). Facsimile.

break is 4.8 and 2.9 cm. Remains of five lines (4 to 8) of the original eight lines of the text contain engraved signs about 1.1 cm high and the framing lines are 1.4 cm apart. The fragment was bought at Sotheby's sale of June 12, 1882, and before passing into the Fitzwilliam Museum Collection was in the possession of E. Towry Whyte (no. 376 of the unpublished catalogue kept in the Department of Antiquities). Bibliography: *Sotheby Sale Cat.* June 12, 1882, no. 77.

Glazed stone shabtis⁶

C. Ashmolean Museum 1976.46. Pl. XXV, fig. 3

The present height of the middle part is 7 cm, its width measured across the upper break is 4 and 3.4 cm across the lower break, and the corresponding thickness is 2.7 and 2.2 cm respectively. The glaze is of brown colour. Seven lines of the original eight of the text are preserved (lines 1 and 7 incompletely). The summarily incised signs are about 0.8–0.9 cm high with the framing lines 1.1–1.2 cm apart. Bibliography: none.

D. Fitzwilliam Museum E. 43.1932. Pl. XXV, fig. 3

The shabti is preserved in its full original height and measures 15.5 cm, its width at the elbows is 4.9 cm, and its maximum thickness is 3.4 cm. The text is arranged in eight lines with the hieroglyphs incised in simple lines about 0.8–0.9 cm high and framing lines about 1.1 cm apart. Most of the face of the figure as well as the wig at the back are missing. The shabti was acquired by E. Towry Whyte on August 1, 1891 (no. 377 of the unpublished catalogue where the provenance is given as 'el Awagah Derut') from G. W[illoughby] F[raser].⁷ Bibliography: none.

Faïence shabtis⁸

E. Fitzwilliam Museum E. 49.1932. Pl. XXV, fig. 3

Although broken in two parts, the shabti is preserved in its full original height of 13.5 cm, with the width at the elbows 4.3 cm, and maximum thickness 2.5 cm. The text is arranged in eight lines, with incised signs about 0.7–0.8 cm high and framing lines about 0.9 cm apart. The figure is of whitish colour with a green tinge in the upper part at the back. It was acquired by E. Towry Whyte from the same source and at the same time as the preceding shabti (no. 392 of the unpublished catalogue). Bibliography: none.

F. Fitzwilliam Museum E. 42.1932. Fig. 3

The shabti is complete and apart from some chips off the base perfectly preserved. Its height is 14 cm, width at the elbows 4.2 cm, and maximum thickness 2.4 cm. The figure differs in some details from the preceding shabti: the texture of the basket, unequal distance between the two vertical lines at the back, different arrangement of the text, and a different width of the base of the wig. The first three dissimilarities are due to the craftsman finishing the figures by hand, but the last might indicate that two moulds were used in the manufacture of the shabtis. The text is written in

⁶ Upper part: University College London, F. Petrie, op. cit., pls. 42 [532], cf. 12. Middle part: Michaelidis Collection, A. Piankoff, op. cit. 91 with fig. 8 [lower right].

⁷ Warren R. Dawson and E. P. Uphill, *Who was Who in Egyptology* (1972), 109.

⁸ Complete: shabti at one time with C. Ede (dealer in London), *Small Sculpture from Ancient Egypt* (1972), no. 45 with fig.; probably also the figure formerly in the Miramar Collection, S. Reinisch, *Die aegyptischen Denkmäler in Miramar* (1865), 153 (191) and Taf. 17 [left], and another which used to be in the Museum of the Société Jersiaise at St. Heliers, Jersey, part of the text of which was given by A. E. Weigall in *PSBA* 23 (1901), 13. Fragments: Loukianoff Collection, G. Loukianoff in *Ann. Serv.* 37 (1937), pl. v [2], 230–1 (the text should have been reconstructed as having eight lines) and pl. 5 [2]; two in the Michaelidis Collection, texts, A. Piankoff, op. cit. 91 [lower].

eight lines, with the incised signs 0.7–0.8 cm high and framing lines about 0.9 cm apart. The colour of the figure is similar to that of the preceding one. It was acquired by E. Towry Whyte from the same source and at the same time as the preceding two shabtis (no. 391 of the unpublished catalogue). Bibliography: E. Towry Whyte in *PSBA* 18 (1896), 145 and pl. vii [right upper] (front view); mentioned by G. Loukianoff in *Ann. Serv.* 37 (1937), 232 [xvii].

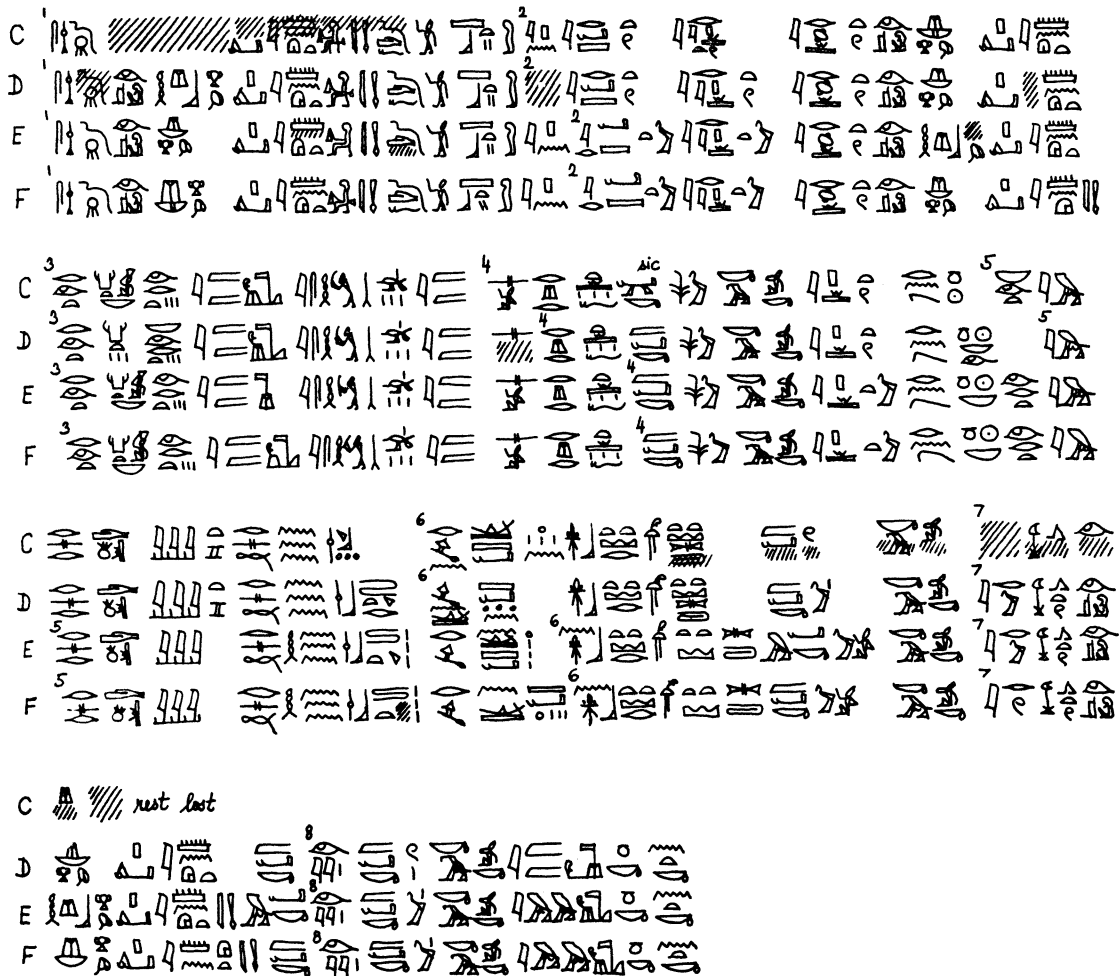
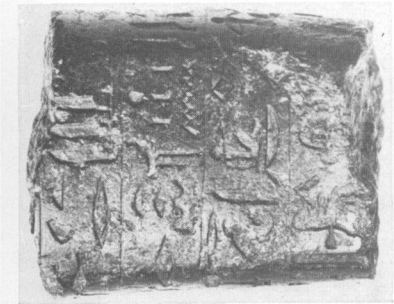
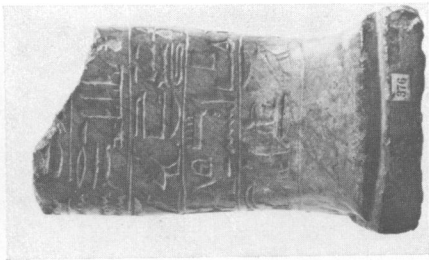
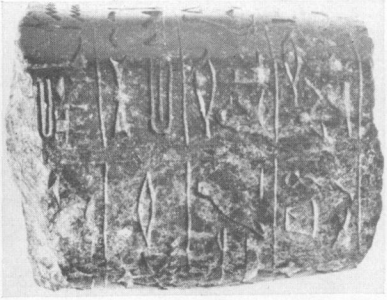
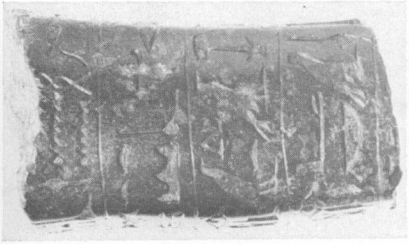


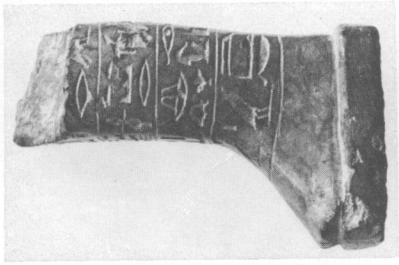
FIG. 3. Texts of Shabtis C (Ashm. Mus. 1976.46), D, E, F (Fitzw. Mus. E.43.1932, 49.1932 and 42.1932). Transcriptions turned left to right (not facsimiles).



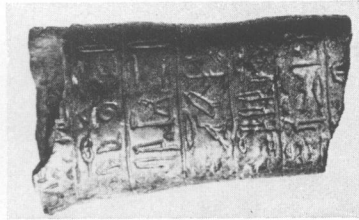
A



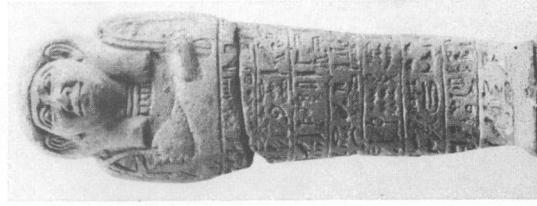
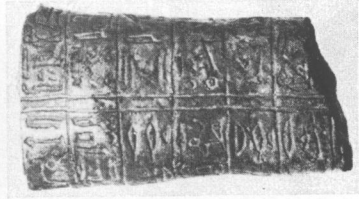
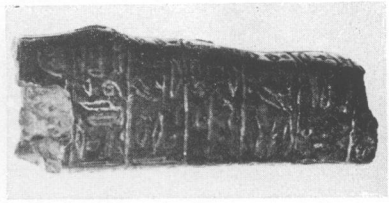
B



D



C



Left: A (Ashm. Mus. 1976.45)
B (Fitzw. Mus. E. 61.1032)

Right: D (Fitzw. Mus. E. 43.1032)
E (Fitzw. Mus. E. 40.1032)

NECHO AND THE RED SEA: SOME CONSIDERATIONS

By ALAN B. LLOYD

THE matter of this paper is perplexity and suggestion. In view of the nature of the evidence it can be nothing more. My excuse for producing it at all must be that it poses questions which have remained unasked and raises issues which have been discussed, if at all, with scant regard for their full implications.

Ancient sources attribute to Pharaoh Necho II (610–595 B.C.) three activities connected with the Red Sea: the attempted construction of a waterway between the Nile and the Gulf of Suez, the building and operation of triremes in the Red Sea, and an expedition to circumnavigate Africa. All of these have been dealt with in some form before, the last frequently and sometimes at great length. Notwithstanding, much remains to be said on the precise nature of the traditions, the relationship, if any, of the three actions, and their place within Necho's over-all policy. My intention is to remedy some of these deficiencies by submitting the reports to a detailed analysis against the background of Late-Period Egypt. Since the first is the least opaque I shall begin with that.

The Red-Sea Canal

According to Herodotus 2. 158 Necho began the construction of a canal between the Nile and the Red Sea which was subsequently finished by Darius I. The Persian canal is described as running from the Nile above Bubastis via Patoumos¹ into the Red Sea, passing through the Wadi Tumilat and then southwards into the Gulf of Suez. Herodotus was informed that Necho was compelled to desist by an oracular response after losing 120,000 men but he evidently regarded Darius' achievement as an accurate reflection of his predecessor's intentions.

There is no firm linguistic² or archaeological³ evidence from Egyptian sources to In the course of writing this study I benefited greatly from discussions with Mr. W. G. G. Forrest of Wadham College, Oxford, and Mr. Dilwyn Jones of The Queen's College. The views expressed are, however, my own.

¹ Egn. *PrItm*, the Biblical מִיָּתֵן, mod. Tell el-Maskhutah (E. Naville, *The Store-City of Pithom*, 4th edn., London, 1903, 3 ff.). This identification has recently been assailed by E. Uphill ('Pithom and Raamses: their Location and Significance', *JNES* 27 (1968), 291 ff.; *ibid.* 28 (1969), 15 ff.) but a close scrutiny of all available evidence will make it quite clear not only that Naville's identification is much the most likely but that Uphill's could not possibly be correct. (I shall discuss this point in detail in vol. iii of my *Herodotus, Book II.*)

² In the canal-stelae Darius speaks of reconnoitring a waterway before beginning work (G. Posener, *La Première Domination Perse en Égypte*, Cairo, 1936, p. 57, line 17). This may be a reference to Necho's unfinished canal (*idem*, 'Le Canal du Nil à la Mer rouge avant les Ptolémées', *CdÉ* 13 (1938), 272) but, since there would have been a fresh-water canal there anyway, this suggestion must remain no more than an attractive possibility.

³ Naville (*op. cit.* 2) observed the remains of a canal to the south-east of Tell el-Maskhutah, but it is impossible to establish their date. It is, however, improbable that the line would have differed very much at any period.

confirm the historicity of this abortive Saïte canal. Subsequent classical references there are⁴ but they all probably derive from Herodotus and, therefore, have no independent authority. There is, however, no reason to doubt the substantial accuracy of the account since it is corroborated by three pieces of circumstantial evidence: the statements on Darius' canal agree with Egyptian evidence⁵ and this creates a strong presumption that the information on Necho is also accurate; the project would conform with other indications of Necho's deep interest in the Red Sea;⁶ since there is unimpeachable evidence of such a canal in the Persian Period⁷ and later,⁸ the scheme was evidently well within the technological resources of ancient engineering. In fact, much of the work probably consisted in little more than widening and deepening an old fresh-water canal supplying the Wadi-Tumulât area.⁹

Accepting the historicity of Necho's attempt, therefore, excites no qualms. The question of his precise motives is a rather different matter. Since traditionalism is the *Leitmotif* of the age, the answer is best sought by attempting to place Necho's activities within the wider context of earlier Egyptian history. Just as Necho's interest in Asia can be interpreted as a means of resuscitating the glories of the Egyptian Empire¹⁰ and Psammetichus II's invasion of Nubia beyond the Third Cataract can be seen, at least in part, as the reassertion of ancient claims to control the country as far as the Gebel-Barkal area,¹¹ so it is reasonable to assume that Saïte involvement in the Red Sea is likely to reflect past interests. Establishing the latter creates no problem. Traditionally the Red Sea had given access to two areas—Sinai, where turquoise¹² and copper¹³ had been obtained, and the land of

⁴ Diodorus Siculus, I. 33. 8 ff.; Strabo, 17. 1. 25 (C804). We should beware of the temptation to use Hecataeus' reference to Phacoussae (F. Jacoby, *FgrH* I, F. 303) as evidence that he had discussed the canal (cf. Jacoby, op. cit., *Kommentar ad loc.*; L. Pearson, *Early Ionian Historians*, Oxford, 1939, 89). This was certainly the starting point of Ptolemy II's canal, but Herodotus makes it quite clear that the canal in the time of Necho and Darius began to the south of Bubastis. It is, of course, not at all unlikely that Hecataeus mentioned the subject but we have not a shred of evidence to prove it.

⁵ *Vide infra*, n. 7.

⁶ *Vide infra*, p. 145 ff.

⁷ Herodotus, 2. 158 and 4. 39 are confirmed by the canal-stelae (Posener, *La Première Domination Perse en Égypte*, 48 ff.). Aristotle (*Mete.* I. 14 (352b)), Diodorus Siculus (I. 33. 9 ff.), Strabo (17. 1. 25 (C804)), and Pliny (*HN* 6. 165 ff.) were evidently mistaken in denying Darius' success. The error will derive in part from the fact that sand and sediment would quickly lead to the canal's becoming blocked up if untended (cf. Suetonius, *Augustus*, 18) and also to anti-Persian propaganda from Egyptian sources on which see Posener, 'A propos de la stèle de Bentresh', *BIFAO* 34 (1934), 78 ff.; H. Kees, *RE* IIIA, 1861 ff., 1870; M. Braun, *History and Romance in Graeco-Oriental Literature* (Oxford, 1938), 15 ff.; M. Malaise, 'Sésostriis, Pharaon de légende et d'histoire', *CdÉ* 41 (1966), 255 ff.

⁸ The cutting of a canal is mentioned in the Pithom Stele for Regnal Year 16 of Ptolemy II (K. Sethe, *Urk.* II, 95; cf. Diodorus Siculus, I. 33. 11 ff.; Strabo, 17. 1. 25 (C804), cf. 16. 4. 23 (C780); Pliny, *HN* 6. 165 ff.). This was apparently reopened by Trajan (Ptolemy, 4. 5. 54; R. P. Longden, *CAH* XI, Cambridge, 1936, 209 ff.; H. I. Bell, op. cit. 650) and again by the Arabs immediately after the conquest and was in working order by 644 (P. K. Hitti, *History of the Arabs*, London, 1964, 165).

⁹ On the geography of the area see C. Kùthmann, *Die Ostgrenze Ägyptens* (Leipzig, 1911), 34 ff., J. Clédât, 'Notes sur l'Isthme de Suez', *BIFAO* 23 (1924), 54, 61 ff., and P. Montet, *Géographie de l'Égypte ancienne*, I (Paris, 1957), 218 ff.

¹⁰ A. B. Lloyd, 'Were Necho's Triremes Phoenician?', *JHS* 95 (1975), 58.

¹¹ Lloyd, *Herodotus, Book II. Introduction* (Leiden, 1975), 21.

¹² J. Černý, *The Inscriptions of Sinai*, II (London, 1955), 3 ff.; A. Lucas (rev. J. Harris), *Ancient Egyptian Materials and Industries* (4th edn. London, 1962), 404.

¹³ Copper was certainly obtained from W. Sinai (Černý, loc. cit.; Lucas, op. cit. 202 ff.), but the major workings exploited by the Egyptians in the New Kingdom lay at Timna where recent excavation has revealed conclusive evidence of their presence (B. Rothenberg, *Timna*, Aylesbury, 1972, 63 ff., 125 ff.).

Punt, i.e. the coast of Africa in the general vicinity of modern Eritrea and its hinterland.¹⁴ Sinai can safely be discounted for the Saïte Period since there is no evidence either in the turquoise mines of W. Sinai or in the Timna copper mines of Egyptian workings at that time. Punt, however, is a different matter.

It would be likely on purely general grounds that the Pharaohs of the Egyptian Renaissance should have been anxious to reopen the ancient trade with the fabulous 'God's Land', source of incense, precious woods, and strange animals, which had been visited by Egyptian expeditions since at least the Old Kingdom, but there are other pointers of a more precise nature. In the first place, whatever may have been the situation with such commodities as giraffes, leopards, ebony, and pygmies, there was one Puntite product which the Egyptians could not do without, i.e. incense, for the simple reason that it was essential for many crucially important religious purposes. Now, up to and including the Ramesside Period, Egyptian expeditions to the area were not uncommon but after that time there is no trace for centuries of any such activity. The Egyptians were, therefore, presumably obtaining their supplies in other ways. There would appear to be three possibilities: from the south by the Nile route;¹⁵ from Asia tapping the incense trade which passed by land up the west coast of Arabia through Eilat to the Mediterranean;¹⁶ by trading with Puntites, or other Red-Sea peoples, who had ferried their goods northwards to a point on the Red-Sea coast where they could be met by Egyptian officials, e.g. Koseir.¹⁷ There can surely be little doubt that in the years immediately preceding the rise of Saïs the first channel was of a major importance. However, the hostility between the Twenty-sixth Dynasty and the deposed Twenty-fifth (Ethiopian) was so great—indeed it led to open conflict in the reign of Psammetichus II—that this source must have been effectively cut after c. 660. The second was dependent on political and military conditions over which the Egyptians had very little control and would also have been expensive. The third source would have suffered from the same disadvantages as well as being, in all probability, rather unreliable. Another route was evidently advisable.

Several considerations, therefore—antiquarian sentiment, religious needs, and the

¹⁴ Substantially I am in agreement with K. Kitchen, 'Punt and How to get there', *Orientalia* 40 (1971), 184 ff., but would add three points: (1) The Daphnae Stele, which appears to speak of rain in the land of Punt causing the Nile to flood, strongly favours an African Punt; cf. Lloyd, 'Once More Hammamât Inscription 191', *JEA* 61 (1975), 54 ff.: the point is fleetingly referred to by K., p. 185; we may doubt whether even the Egyptians could have spoken in these terms if Punt had been in Arabia. (2) The Hamito-Semitic appearance of many of the Puntites (Naville, *Deir el Bahari*, III, London, 1898, 12 ff.) needs to be accounted for. It may reflect an early Arabian interest, or even settlement, in the area: see Abdel-Aziz Saleh, 'The Pwenet Reliefs at Deir el-Bahari', *JEA* 58 (1972), 150; *vide infra*, p. 147. Alternatively we may argue that they are Hamites 'who shared a mixture of characteristics with the South Arabians but differed somewhat from them in cultural patterns'. (3) It is unwise to be too rigid in the use of modern evidence on fauna, flora, and ethnography to establish frontiers for Punt since it is clear that there have been considerable changes in all three in North-East Africa since antiquity. We cannot, therefore, be confident that Punt did not extend rather beyond Kitchen's limits; cf. W. Vycichl, 'Lag das Land Punt am Meer oder im Sudan?', *CdÉ* 45 (1970), 318 ff.

¹⁵ Frankincense could come down the Nile as early as the VIth Dynasty (Sethe, *Urk.* I, 126~*BAR* I, § 336; *Urk.* I, 137~*BAR* I, § 369). Possibly the myrrh used by Tanutamun at Napata came the same way (*Urk.* III, 68~*BAR* IV, § 929).

¹⁶ Ezekiel 27: 22; Strabo, 16. 4. 18 (C776), 23 (C780-1); Hitti, *op. cit.* 50. Egyptian statements on incense obtained from Retjenu, Djahi, and Naharin (Lucas, *op. cit.* 91) presumably reflect this trade.

¹⁷ That Puntites were capable of such enterprises is proved by New-Kingdom paintings which show them bringing their merchandise in flat, raft-like boats, the ubiquitous Red-Sea *σχεδιαί* of which classical authors so frequently speak, e.g. Strabo, 16. 4. 18 (C777), 19 (C778); *Periplus of the Erythraean Sea*, 7. 27; Pliny, *HN* 7. 206, propelled by sails that look suspiciously like primitive lateens; cf. N. de Garis Davies, 'The Egyptian Expedition 1934-5', *B MMA* November (1935), Section II, 46 ff. Such coastal trading is often mentioned in classical texts, e.g. Strabo, 16. 4. 4 (C769), 19 (C778); *Periplus of the Erythraean Sea*, 7, 14.

parlous state of international relations¹⁸—justify us in suspecting that the Saïtes would have been keen to reopen commercial relations with Punt. How would this be done? The time-honoured method of getting there was to send expeditions across the Eastern Desert, usually along the Wadi Hammamât and then by water down the west coast of the Red Sea, where the Egyptians could take advantage of the prevailing northerly wind. The goods would then be sailed back to the point of departure and then taken overland to Egypt.¹⁹ The major inconvenience of this route was the land journey both ways which was fraught with very considerable dangers, both from natural causes²⁰ and marauding tribesmen.²¹ A water link between the Nile and the Red Sea would enable the outward journey at least to be made with considerably less expense and danger, though wind conditions would have demanded that normally the return journey should end at the old stopping-point.²² Can there be any reasonable doubt that it was precisely this function that Necho's canal was designed to serve?

Triremes in the Red Sea

At the beginning of 2. 159 Herodotus writes as follows:

When he had desisted from the canal Necho turned his attention to military campaigns, and triremes were constructed, some for the Mediterranean and others in the Red Sea for operations in the Erythrian Ocean.²³ The slipways of the latter are still to be seen. And these ships he put to use when the need arose.

¹⁸ I hesitate to invoke the Daphnae Stele, which belongs to the Saïte Period. It certainly speaks of rain in the land of Punt; cf. Petrie, *Tanis*, 11 (London, 1888), pl. 42, and Lloyd, 'Once More Hammamât Inscription 191', op. cit. 54; and it *may* reflect activities in the far south, but the statement could simply be theology. Punt is a land of *bi:yt* and, therefore, a suitable source for a miraculously felicitous downpour; on the concept of *bi:yt* see E. Graefe, *Untersuchungen zur Wortfamilie bj:-* (Diss. Cologne, 1971), 113 ff. I also exclude from consideration the British Museum's alleged head of Psammetichus II which is supposed to have been found near the southern end of the Suez Canal: see *British Museum. A Guide to the Egyptian Galleries: Sculpture* (London, 1909), 222, no. 803; *PM* IV, 52. If the date were correct, the head, in such a find-spot, might be taken to reflect Saïte interest in an easy point of access to the Red Sea. Unfortunately, the attribution is highly suspect: (1) Stylistic features suggest an earlier date; (2) Budge's statement that it was found together with remains of a statue-base bearing the name of Psammetichus II (loc. cit.) is not confirmed either by published material (E. A. Wallis Budge, *By Nile and Tigris*, 1, London, 1920, 151 ff.) or by British-Museum records. This, united with Budge's well-known unreliability, must make the claim extremely dubious. In view of these uncertainties the monument becomes useless for historical purposes. (I am indebted to Mr. W. V. Davies of the British Museum for information on this piece.)

¹⁹ Kitchen, op. cit. 188 ff.

²⁰ Water-supplies were a perennial problem; cf. J. Couyat and P. Montet, *Les Inscriptions hiéroglyphiques et hiératiques du Ouâdi Hammâmât* (MIFAO 34, Cairo, 1912), no. 114, 81 ff.; W. Schenkel, *Memphis, Herakleopolis, Theben* (*Äg. Abh.* 12, Wiesbaden, 1965), 253 ff.

²¹ e.g. a VIth-Dynasty expeditionary force was massacred by the 'Amu (Sethe, *Urk.* 1, 134 ff.).

²² Unweathery vessels like those of the Ancient Egyptians could have made little headway against the prevailing northerly wind. Consequently even in Ptolemaic and Roman times cargoes were unloaded at such points as Berenice and Myos Hormos and transported overland to the Nile; cf. Strabo, 17. 1. 45 (C815); Solinus, 54. 7 ff.; H. Kees, *Ancient Egypt* (London, 1961), 120 ff.; A. Bernand, *Le Paneion d'El-Kanâts. Les Inscriptions grecques* (Leiden, 1972), *passim*.

²³ Herodotus uses *'Epyθpós* not *'Epyθpaïos*. I have, therefore, preferred here, as in previous studies, to employ the form 'Erythrian' rather than the standard 'Erythraean' when translating. For Herodotus' use of the term see Lloyd, 'Triremes and the Saïte Navy', *JEA* 58 (1972), 268 n. 2.

This passage has given rise to considerable discussion both for its relevance to the early history of naval architecture in the east Mediterranean and for its information on Necho's Asiatic policy. Strangely enough the statement on the use of triremes in the Red Sea has excited very little comment. Yet the longer one broods about it, the odder it seems. Whether we take the view that the word 'triremes' reflects the use of Greek triremes,²⁴ or the view that they are Phoenician,²⁵ or whether we adopt the minimalist interpretation that the term is anachronistic and simply reflects the introduction of the most up-to-date ramming war-galleys available, we are still confronted with the situation that Necho has considered it worth his while to place a squadron of the most advanced warships of his time in an area where, to an Egyptological or Classical eye, they appear completely superfluous. Yet such vessels were expensive, particularly in high-quality timber resources with which Egypt was very ill endowed. They were also, in the light of current ambitions, worth their military weight in gold in the Mediterranean. Necho must have had what he thought was a very good reason for this move. What was it?

Willi Müller²⁶ regarded the action as part of Necho's over-all strategy for dealing with the expansion of the young and vigorous Chaldaean Empire arising to the north-east, and suggested that the ships were intended to meet a possible attack by naval forces operating against the east coast of Egypt. This seems extremely improbable. Given all available precedents as well as the prevailing military and naval situation, this would surely have seemed to Necho the remotest of all possibilities—so remote, in fact, that omitting to station a fleet in the Red Sea against the Chaldaeans could surely not have arisen even to the level of a calculated risk. The solution must lie elsewhere.

We have already given reasons for believing that Necho was interested in reopening trade with Punt. It seems justifiable to suspect that there is a connection between that policy and the triremes. Once we begin to think along these lines, several possible explanations present themselves.

First, and most obviously, piracy was a major hazard of navigation in the Red Sea during the Ptolemaic,²⁷ Roman,²⁸ Axumite,²⁹ and Arab Periods.³⁰ In particular we are informed that when the Ptolemies (pre-eminently Ptolemy II) opened up trade in the area—a policy which included reopening the Red-Sea canal—the Nabataeans living around the Gulf of Eilat and on the offshore islands took to plundering Egyptian shipping. Indeed, a glance at a map will make it clear that ships using the Gulf of Suez *en route* from the canal to the south would have been a particularly easy prey to any pirate force operating from the islands off the southern tip of Sinai. So serious did this situation become that it proved necessary to mount a large-scale naval expedition to deal with them.³¹

²⁴ Lloyd, *op. cit.* 268 ff.; *id.*, *Herodotus, Book II. Introduction*, 32 ff.; *id.*, 'Were Necho's Triremes Phoenician?', *JHS* 95 (1975), 45 ff.

²⁵ L. Basch, 'Phoenician Oared Ships', *The Mariner's Mirror* 55 (1969), 139 ff., 227 ff.

²⁶ *Die Umseglung Afrikas* (Rathenow, 1891), 17.

²⁷ Diodorus Siculus, 3. 43; Strabo, 16. 4. 18 (C777); H. Kortenbeutel, *Der ägyptische Süd- und Osthandel in der Politik der Ptolemäer und römischen Kaiser* (Berlin, 1931), 44 ff.; M. Rostovtzeff, 'Foreign Commerce of Ptolemaic Egypt', *Journal of Economic and Business History* 4 (1932), 742. Both Diodorus and Strabo derive their material, directly or indirectly, from Agatharcides who, in turn, probably used a *periplous* of Ariston (third century B.C.: W. W. Tarn, 'Ptolemy II and Arabia', *JEA* 15, 1929, 14).

²⁸ Pliny, *HN* 37. 107.

²⁹ Cosmas Indicopleustes: J. McCrindle (trans.), *The Christian Topography of Cosmas, an Egyptian Monk* (Hakluyt Society, London, 1897), 64.

³⁰ G. W. van Beek in R. Le Baron Bowen and F. P. Albright, *Archaeological Discoveries in South Arabia* (Baltimore, 1958), 141 ff.

³¹ Diodorus Siculus, *loc. cit.*; Strabo, *loc. cit.*

There is no reason to believe that similar conditions could not have arisen in the seventh and sixth centuries B.C. Certainly triremes would not have been the most suitable vessels for coping with small and nimble pirate ships,³² but Diodorus Siculus describes the Ptolemaic fleet used against the Nabataeans as consisting of τετρηρικὰ σκάφη, 'quadriremes',³³ which must have been at least as powerful as Necho's triremes. There can be little doubt that a peremptory warning in the form of a well-equipped squadron of up-to-date warships would have discouraged all but the most hardy freebooter from attacking any merchant fleet which Necho might wish to dispatch into the Red Sea. There are, however, two other factors also worth considering.

During Necho's reign the Edomite city of Ezion-geber at the head of the Gulf of Eilat was a flourishing commercial centre engaged in large-scale maritime activities.³⁴ The range and context of these activities are far from obvious, but there are pointers which give food for thought:

1. In the reign of Solomon (c. 970–930), when the city was in Israelite hands, a fleet was built there, manned by expert Phoenician sailors supplied by Hiram, King of Tyre, and dispatched to the land of Ophir³⁵ (probably southern Arabia³⁶). In the reign of Jehoshaphat (873–849) a similar expedition was projected, but came to nothing.³⁷

2. The Edomites are known to have been trading with Tyre in the sixth century B.C.³⁸

3. Puntite products (ebony and ivory³⁹) were finding their way to Tyre during the same period. The implications of the rather vague literary evidence suggest that they had come by water from Africa to Sheba and then north by land,⁴⁰ but that need not exclude the parallel existence of a direct sea route,⁴¹ though the earliest unequivocal evidence of such a link known to me belongs to the sixth century A.D.⁴²

Open-ended though these pointers are, they justify us in at least suspecting that the undoubted maritime activity of Ezion-geber in Necho's time could have been far more than a local phenomenon and that Phoenicians could have played a significant role in it. If this were the case, Necho will have had in Ezion-geber a long-established rival to be reckoned with and might well have felt it politic to protect his interests with a squadron or two of the best warships available.

If we cast the net a little wider, yet another possible rival is suggested. The expansion of Sabaeen commercial power from its centre in the Yemen during the first millennium B.C. was by no means confined to the Arabian peninsula. There is incontrovertible epigraphic evidence that it also embraced Abyssinia *in precisely the area where the land of Punt is believed to have lain*. The date is, however,

³² Strabo describes the Nabataean boats as σκεδια 'improvised boats' on which see L. Casson, *Ships and Seamanship in the Ancient World* (Princeton, 1971), 217.

³³ The phrase is a strange one but cf. Diodorus Siculus, 1. 55. Ptolemy II maintained a large fleet of ships rated between the quadrireme, a common type of warship in the early Hellenistic Period (Casson, op. cit. 97 ff.), and the trieremiolia (Athenaeus, 5. 203c ff.). Interestingly enough Aelius Gallus built δίκροτα, which could have included quadriremes, for his disastrous expedition to Arabia; see Strabo, 16. 4. 23 (C780).

³⁴ N. Glueck, 'The First Campaign at Tell el-Kheleifeh (Ezion-geber)', *BASOR* 71 (1938), 3 ff.; id., 'Ezion-geber', *Biblical Archaeologist* 28 (1965), 86; id., *The Other Side of the Jordan* (Cambridge, Mass., 1970), 126 ff.

³⁵ 1 Kings, 9: 26 ff.; 10. 11 ff., 22.

³⁶ F. Hommel, *Ethnologie und Geographie des alten Orients* (Munich, 1926), 552 ff.

³⁷ 1 Kings, 22: 48; 2 Chron. 20: 35 ff. (confused).

³⁸ Ezekiel 27: 16. On the historical context see G. A. Cooke, *The Book of Ezekiel (The International Critical Commentary)*, Edinburgh, 1951, 296.

³⁹ Ezekiel 27: 15. Africa is much the most plausible source for the ebony and *ipso facto* for the ivory.

⁴⁰ They are brought by the men of Dedan (Al-'Ula) (Hitti, op. cit. 42). Trade across the Red Sea between Africa and Sheba was a brisk and profitable affair in classical times: see Strabo, 16. 4. 4 (C769); 19 (C778); *Periplus of the Erythraean Sea*, 16, 21, 24, 27.

⁴¹ Cf. R. Delbrueck, 'Südasiatische Seefahrt im Altertum', *Bonner Jahrbücher* 155–6 (1955–6), 12 ff.

⁴² Cosmas Indicopleustes, op. cit. 54.

a problem. The inscriptions in question are written in the archaic boustrophedon style of the Mukkarib Period (715–410 B.C.)⁴³ and the general opinion inclines to a date in the fifth–sixth centuries,⁴⁴ though they could be earlier. It should, however, be observed that the inscriptions must have been preceded by a period ‘in der Saba’ als Staat den Norden des Hochlandes von Äthiopien in ihr Reich einverleibten und dort kolonisierten . . .’⁴⁵ and that phase must, in turn, have been preceded by a period, probably lengthy, of commercial exploration. Therefore, even if we take the lowest date proposed for the epigraphic material, it is a very distinct possibility that, when the Egyptians were reviving their interest in Punt in the early Saïte Period, they found the trade of the area pre-empted by Sabaeen merchants. Armed conflict would by no means be inevitable but a large number of historical parallels would suggest that it is, at the very least, a distinct probability. Necho would have been well advised to build up Egyptian naval strength to meet such an eventuality.

We may, then, summarize as follows. While there is no denying that the shape of things in the Red Sea in the Saïte Period is murky, Necho’s triremes are almost certainly to be seen as part of the same policy as the Red-Sea canal, i.e., in all probability, the resumption of trade with the Land of Punt. The military needs which they were designed to fulfil could be several. Pirates must surely have been a problem and Ptolemaic measures indicate that large warships could well have been maintained and used against them. There are, however, hints—no more—that the military and political situation in the Red Sea, like that in other areas in which Necho was interested, had changed radically since the palmy days of the New Kingdom. Edomite traders could well have been embroiled in the area and there is a distinct likelihood that the Sabaeans were also deeply involved there. If these suggestions even approximate to the truth, we have a more than satisfactory explanation for the only serious Egyptian naval commitment in the Red Sea in pre-Ptolemaic times.

The Circumnavigation of Africa

In his lengthy discussion of world geography in Book 4 Herodotus informs us that, after Necho had given up his plans for the Red-Sea canal, he sent a Phoenician expedition of several ships around Africa. They sailed down the Red Sea into the Indian Ocean and returned to Egypt via the Straits of Gibraltar after a voyage of two to three years. The supply problem was solved by disembarking, sowing seed, and harvesting the crops. We are also told that, as they sailed around Africa, they had the sun on their right-hand side.⁴⁶

⁴³ Dates after H. v. Wissmann, *Zur Geschichte und Landeskunde von Alt-Südarabien* (Vienna, 1964), 387 ff.

⁴⁴ G. van Beek, ‘Recovering the Ancient Civilization of Arabia’, *Biblical Archaeologist* 15 (1952), 6; W. F. Albright, ‘The Chaldaean Inscriptions in Proto-Arabic Script’, *BASOR* 128 (1952), 45 n. 26; id., *Archaeology and the Religion of Israel* (3rd edn., Baltimore, 1953), 134; v. Wissmann, ‘Geographische Grundlagen und Frühzeit der Geschichte Südarabiens’, *Saeculum* 4 (1953), 99 ff., 102; id., *Zur Geschichte und Landeskunde von Alt-Südarabien*, 34 ff.; Delbrueck, op. cit. 21; A. Grohmann, *Arabien* (Munich, 1963), 25.

⁴⁵ v. Wissmann, *Zur Geschichte und Landeskunde von Alt-Südarabien*, p. 34.

⁴⁶ 4. 42. 2–4. According to Strabo, 2. 3. 4 (C98), quoting a polemic of Poseidonius against Polybius, Herodotus spoke of Darius sending a successful expedition around Africa. This tradition finds no place in our received text of Herodotus and is best explained as a lapse of memory on the part of Strabo or his source.

This remarkable narrative has excited, and will continue to excite, considerable discussion, some championing its historicity,⁴⁷ others refusing to accept it.⁴⁸ The arguments in favour are as follows:

(a) The voyage is said to have lasted between two and three years. The circumference of Africa is approximately 15,000 miles and the average sailing speed in antiquity in good conditions was about 5 knots.⁴⁹ Since the waters would have been for long stretches totally unknown, it is extremely improbable that any sailing would have been done at night. We can, therefore, assume that an average days' sailing was probably about 12 hours. The average day's run would then amount to about 70 miles. If we allow for agricultural activities and frequent stops for water and other necessities, a voyage in excess of two years would not seem implausible.

(b) Winds and currents are favourable for an east-west circumnavigation.⁵⁰ Winds in the Red Sea generally blow from the north, and after C. Guardafui had been doubled, the Phoenicians could have picked up the north-east monsoon. Having passed through the Mozambique Channel, they would have been into the Agulhas Current and once around C. Agulhas at the southern tip of Africa they would have moved into the south-east trades and the Benguela Current. Further north sailing-conditions are not as good but perfectly manageable, even for ancient ships.⁵¹

(c) It has often been claimed that the information on the sun's position as the expedition circum-navigated Africa could only have been obtained by experience.⁵²

These arguments are easily met:

(a) It is true that the expedition could have been completed within three years, but it should be remembered that three, like seven, is a 'formulistic' or 'typical' number.⁵³ If we were dealing with an unhistorical tradition which had congealed out of many disparate elements, the number 'three' would be much more likely to be chosen for the number of years needed than most others. Such a situation must deprive the datum of much of its apparent force.⁵⁴

(b) Certainly conditions are favourable, but all *that* proves is the physical possibility of a circum-navigation. It does not prove that it took place.

(c) The sun-argument is not as strong as it looks. There was in Herodotus' time a clearly defined concept of the earth's layout and the sun's course over it which may be tabulated so:⁵⁵

⁴⁷ e.g. J. Talboys Wheeler, *The Geography of Herodotus* (London, 1854), 334 ff.; W. Müller, op. cit.; M. Pieper, *RE* xvi, 2, 2168 ff.; R. Hennig, *Terrae Incognitae*, 1 (2nd edn., Leiden, 1944), 63 ff.; J. Thiel, 'De Vaart om de Zuid in de Oudheid', *Ant. Class.* 17 (1948), 529 ff.; H. de Meulenaere, *Herodotos over de 26ste Dynastie* (Louvain, 1951), 62 ff.; E. Drioton and J. Vandier, *L'Égypte* (4th edn., Paris, 1962), 584; M. Cary and E. H. Warmington, *The Ancient Explorers* (revised edn., Penguin, 1963), 119.

⁴⁸ J. O. Thomson, *History of Ancient Geography* (Cambridge, 1948), 71 ff.

⁴⁹ Cary and Warmington, op. cit. 14 ff. For a detailed discussion of the speeds attained by ancient shipping see W. Müller, op. cit. 73 ff., and Casson, op. cit. 281 ff.

⁵⁰ Cf. Müller, op. cit. 65 ff., and Cary and Warmington, op. cit. 117 ff.

⁵¹ A. Villiers, *The Indian Ocean* (London, 1952), 14 ff., 59 ff.

⁵² e.g. Pieper, op. cit. 2168, Hennig, op. cit. 64, 66, and de Meulenaere, op. cit. 62 ff.; cf. Müller, op. cit. 97 ff., and Cary and Warmington, op. cit. 118.

⁵³ J. W. S. Blom, *De typische Getallen bij Homeros en Herodotos. I. Triaden, Hebdomaden en Enneaden* (Nijmegen, 1936), 1 ff., 57 ff.; S. Thompson, *A Motif-Index of Folk-Literature*, vi (Copenhagen, 1958), 791 ff.

⁵⁴ Note that Hiram's fleet returned with products of Ophir at intervals of *three* years (1 Kings 10: 22).

⁵⁵ Thomson, op. cit. 94 ff.

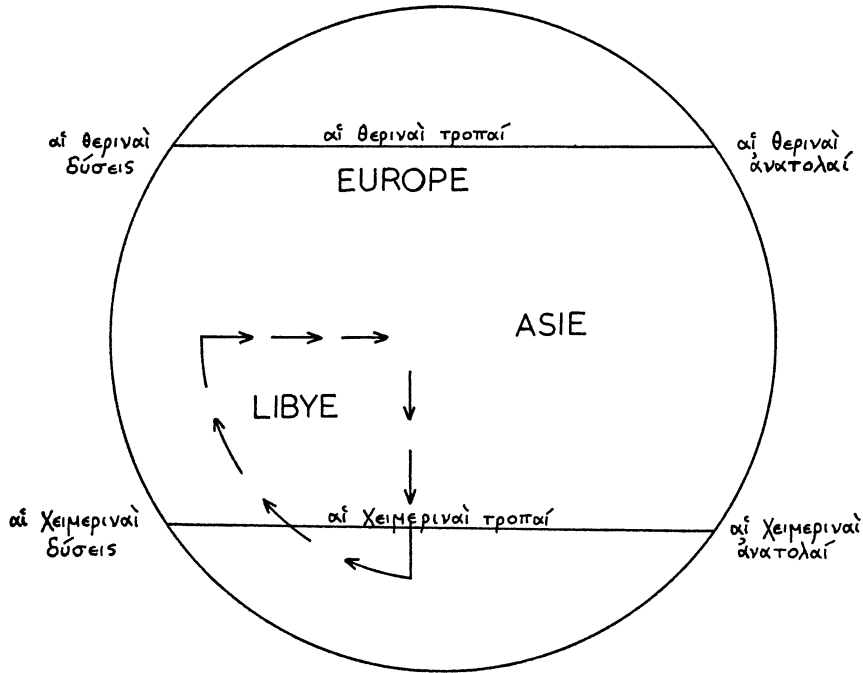


FIG. 1

If, therefore, a Greek were told of an expedition which was alleged to have passed around Africa, he would have *expected* the participants to voyage beyond αἱ χειμεριναὶ τροπαί, providing that they went far enough south, and could then have inferred that, as they moved through an arc south, west, and north, as indicated by the arrows, they would have had the sun ἐς τὰ δεξιὰ. That being so, the sun-sighting could be mere assumption and cannot be held to prove the historicity of the circumnavigation.⁵⁶ It might be countered that, if such a theoretical possibility had been recognized, Herodotus could not have been so forthright in his disbelief of this element in the narrative (καὶ ἔλεγον ἐμοὶ μὲν οὐ πιστά). But what precisely was it that excited his incredulity? He must surely have realized that anyone who travelled far enough would have passed the tropic and on turning west would have found the sun on his right-hand side. It was not, therefore, the absolute feasibility of such an experience which he refused to accept, but simply the allegation that Africa extended far enough south for the phenomenon to be observed.

So much for arguments in favour. The arguments *contra* are much more powerful. We shall deal first with the internal objections:

(a) It is extremely unlikely that an Egyptian king would, or could, have acted as Necho is depicted as doing. Here we have an Egyptian ruler presented to us, like some philosopher-king, forming the notion of circumnavigating the continent of Africa and setting up an expedition for that purpose. This would surely have been a psychological impossibility for any Pharaoh, however able, for the simple reason that it would have involved a radical departure from basic Egyptian thought-processes—a contingency all the more unlikely since the Saïtes were distinctly prone to following well-worn paths.⁵⁷ If an Egyptian king, at any period, organized and dispatched an expedition, he did so for

⁵⁶ Cf. *op. cit.* 72.

⁵⁷ The arguments of Müller to the contrary (*op. cit.* 14 ff.) are easily met: the use of Greek mercenaries as the backbone of the Egyptian army is exactly paralleled by the earlier use of Libyans; Saïte intercourse with

specific practical ends to meet specific practical needs. Disinterested inquiry or plain curiosity were always amongst the least evident of Egyptian habits of mind. What possible end could an *Egyptian king* have thought an enterprise of this sort might have served? To anyone familiar with Pharaonic ways of doing things the reply immediately prompted is an emphatic 'None at all!'.⁵⁸ Given the context of Egyptian thought, economic life, and military interests, it is impossible for one to imagine what stimulus could have motivated Necho in such a scheme and if we cannot provide a reason which is sound within Egyptian terms of reference, then we have good reason to doubt the historicity of the entire episode.⁵⁹

(b) Mariners in sail were, with good reason, a conservative breed. Consequently, in ancient and modern times maritime exploration proceeded in a relatively slow and hesitating fashion. Hanno's expedition off the west coast of Africa *c.* 500 B.C.⁶⁰ was punctuated in its later stages by a series of fearful experiences and eventually abandoned, allegedly *τῶν σίτων ἡμᾶς ἐπιλιπόντων*, but, in view of what had gone before, we are justified in suspecting that, as with many later Portuguese sailors voyaging in this area,⁶¹ the fear of Hanno's men had grown greater the further south they had gone and that there came a point when everyone had quite simply had enough. The Persian Sataspes attempting to circumnavigate from west to east gave up, despite the strongest personal inducement to continue, *δείσας τό τε μῆκος τοῦ πλοῦ καὶ τὴν ἐρημίην*.⁶² The activities of the Arabs on the east coast present a similar picture. There is certainly some slight evidence to suggest their presence on the East-African coast in the vicinity of Pemba and Zanzibar as early as the sixth–fifth centuries B.C.,⁶³ but even such intrepid and experienced sailors as they proceeded southwards only slowly and with extreme caution. Again, the doubling of Cape Agulhas by the Portuguese Diaz was achieved *more than a quarter of a century* after Prince Henry the Navigator initiated his programme of exploration down the west coast. The pattern here, and in many parallel cases, is absolutely clear and indicates that, *if* a circumnavigation had taken place, it would have been the result of a long process of inching forward and gradual psychological readjustment to each new situation. Against this background, a spectacular leap of 15,000 miles seems absolutely incredible.

(c) Supplies would clearly be a difficulty but the method used to solve the problem is quite extraordinary.⁶⁴ We are seriously asked to credit the spectacle of a band of sailors faring forth into unknown waters along unknown shores and calmly establishing themselves each autumn on suitable agricultural land on coasts which they could have had no good reason to regard as friendly,

foreign nations has many obvious precedents; Amasis' behaviour, as described by Herodotus (2. 173), certainly seems a departure from old habits, if compared with Egyptian official texts, but to do so is not to compare like with like. Irreverent and scurrilous tales deriving from folk contexts were told of Egyptian kings at all periods (Lloyd, *Herodotus, Book II. Introduction*, 100 ff.); the claim that the maintenance of a Greek bodyguard was 'nach alter Anschauung ein Sacilegium an der Würde des Thrones' is quite without foundation (cf. the Rameside Sherden, A. H. Gardiner, *Ancient Egyptian Onomastica*, 1, Oxford, 1947, 194* ff.); as for Saïte 'philhellenism' (H., 2. 154, 178), whatever Greeks may have thought of the matter, the wisest interpretation would be that we are confronted with nothing more than a keen perception of self-interest not dissimilar to such earlier political acts as Ramesses II's treaty with the Hittites, on which see Drioton and Vandier, *op. cit.* 426; R. O. Faulkner, *CAH*² II, ch. xxiii (fasc. 52) (Cambridge, 1966), 15.

⁵⁸ Against de Meulenaere, *op. cit.* 63, and Drioton and Vandier, *op. cit.* 584, who suggest that the expedition may have been ordered to explore the possibility of links between the Red Sea and the Mediterranean or may have had economic motives: cf. Müller, *op. cit.* 18, 44 ff., and Cary and Warmington, *op. cit.* 118.

⁵⁹ Müller's opinion, *op. cit.* 44 ff., that the Phoenicians were the guiding spirits behind the enterprise is as undemonstrable as it is unwarranted by the text.

⁶⁰ K. Müller, *Geographi Graeci Minores*, 1 (Paris, 1882) (hereafter *GGM*), 1 ff.; Cary and Warmington, *op. cit.* 63 ff.

⁶¹ Villiers, *op. cit.* 107 ff.

⁶² Herodotus, 4. 43. 1.

⁶³ Delbrueck, *op. cit.* 22; Grohmann, *op. cit.* 25.

⁶⁴ Against W. Müller, *op. cit.* 78 ff., and many others.

sowing their seed, waiting for the crops, harvesting them, and then taking themselves off!⁶⁵ It would surely be impossible to find in the entire annals of maritime exploration in ancient or modern times more foolhardy behaviour.⁶⁶ Why run such risks? A considerable quantity of supplies could have been taken with them⁶⁷ and these could have been supplemented by fishing,⁶⁸ commerce, or raiding as the need and opportunity arose.⁶⁹ Water-supplies would have been more of a problem but short, sharp expeditions on likely-looking coastal areas would easily make up for any deficiencies here.⁷⁰

This analysis already gives serious grounds for unease, but there is worse to follow. Let us consider the question, 'If the tradition is not genuine, how do we explain its origin?' A careful consideration of the context will suggest two possibilities, both equally sufficient.

It will be observed that Necho's alleged expedition is mentioned in immediate proximity to a Persian failure, i.e. the expedition of Sataspes in the reign of Xerxes. The mere *existence* of an account of such a Persian enterprise would be all that would be needed to trigger off the development of the Necho *lóγος*; for there is a clear tendency within Egyptian tradition as preserved by Herodotus and Diodorus to exaggerate the achievements of native kings in comparison with those of the Persians, the classic example being the Sesostris Legend which developed to a point where the Egyptian's Asiatic conquests and his hegemony in the Red Sea far outstripped even those of the great Darius himself!⁷¹ It is perfectly possible that the Sataspes tradition and the Red-Sea voyages of Darius⁷² stimulated the Egyptians, in precisely the same way, to evolve a grossly inflated narrative of Necho's explorations simply on the basis of his naval and commercial ventures in the Red Sea. This, like the Sesostris *lóγος*, would enable them to place the hated Persians gratifyingly and very firmly in the shade. Once the framework had been thus generated, inference and assumption could then have added all the details:⁷³ Phoenician sailors were an obvious choice, especially if they were to be found operating out of Ezion-geber when the tradition was germinating; since food would have been a problem, the bizarre measures described by Herodotus could have been

⁶⁵ Hanno was welcomed by Lixite nomads living in Morocco on the R. Draa (*GGM* 1, 5 ff.; Cary and Warmington, op. cit. 64), but there he was in territory where Carthaginians had probably been operating previously and had established a *modus vivendi* with the local inhabitants; cf. Cary and Warmington, op. cit. 63. Further south his welcome was usually anything but warm.

⁶⁶ Cf. Hennig, op. cit. 65. Strabo informs us that Eudoxus of Cyzicus in the late second century B.C. intended to use this method of supplying himself on his projected circumnavigation *εἰ βραδύνουτο ὁ πλοῦς* (2. 3. 4 [C100]). This situation is not comparable since the intention was to disembark on an island *already known and explored*.

⁶⁷ On the cargo capacity of ancient ships see Casson, op. cit. 175 ff., 199 ff. There are indications that ships trading to China in the Hellenistic and Roman periods could carry provisions for three years (Cary and Warmington, op. cit. 105).

⁶⁸ Fish caught *en voyage* are the staples on modern Indian-Ocean dhows (Villiers, op. cit. 74) and figured prominently in the diet of sailors in the west down to the end of the sailing-ship era; Villiers, *The Way of a Ship. An Account of the Square-Rigged Sailing Ship* (London, 1974), 182.

⁶⁹ Nearchus found these methods a convenient means of meeting his requirements on the great voyage from India to the Euphrates (Arrian, *Indica*, 21 ff.; Jacoby, *FgrH* 133, F.1, 684; Cary and Warmington, op. cit., 80 ff.). Barter was used by Eudoxus to obtain water and guidance when blown onto the coast of Africa in the reign of Euergetes II; see Strabo, 2. 3. 4 (C99).

⁷⁰ Cf. Hanno, *GGM* 1, 10; Cary and Warmington, op. cit. 66. In later times water was stored aboard ship either in jars or tanks (Casson, op. cit. 177; cf. the wooden tanks used in modern Arab dhows, Villiers, *The Indian Ocean*, 72).

⁷¹ *Vide supra*, p. 143 n. 7.

⁷² *Vide supra*, p. 142 ff. For the wider implications of Darius' activities in the Red Sea see Delbrueck, op. cit. 18 ff., and H. Schiwiek, 'Der Persische Golf als Schifffahrts- und Seehandelsroute in Achämenidischer Zeit und in der Zeit Alexanders des Großen', *ibid.* 162 (1962), 4 ff.

⁷³ The possibility of 'manche fabelhafte Ausschmückung' is admitted even by such an advocate of the historicity of the circumnavigation as Hennig (op. cit. 65).

introduced to solve the problem by someone with little imagination and even less sense; the sun-element could be a natural inference whilst the length of the voyage could reflect nothing more than the importation of a 'formulistic' or 'significant' number.⁷⁴

If this explanation is unacceptable, there is another, less obvious, but needing the closest scrutiny. The account of Necho's circumnavigation occurs in Herodotus' excursus on world geography. This was a subject which exercised the minds of Greek scholars long and hard during the late sixth and fifth centuries B.C. One of the most important aspects of this debate was the theory of continents—their number, boundaries, size etc.⁷⁵ It is in precisely this context that Necho's circumnavigation is described. Necho is, in fact, solving the problem of the size of the continent! It might be pleaded that there is nothing particularly sinister about that, but a little reflection will soon excite grave misgivings; for the Pharaoh-solving-a-major-scientific-crux motif occurs on two other occasions in Herodotus, i.e. in the two famous experiments of Psammetichus.

The first (2. 2) is concerned with the vexed fifth-century crux of the oldest people; the second (2. 28) deals with the equally vexed question of the sources of the Nile. In both cases not only is it quite clear that we are confronted with essentially Greek inventions, even if accepted in some form by the Egyptians themselves, but it is also, in broad outline, evident how they came into existence. The thought-process must surely have been something like the following: the Egyptians were renowned as wise and erudite men; they must, therefore, have attempted to solve these scientific problems that had been worrying the Greeks for decades. Which Egyptian would be chosen? Since wisdom is an integral part of the mystique of the ruler in early Greek tradition (e.g. Solon, Lycurgus, Croesus, Polycrates, Cyrus), a Pharaoh would be a likely candidate. Which one would it be? Evidently one who had made a great impression on Greek historical consciousness. Psammetichus I, the king who had first employed Greek mercenaries and encouraged the foundation of Naucratis, fitted the bill perfectly.

The Constitutions Debate in 3. 80 ff. is a comparable case. It again cannot possibly be historical and can only be the product of a process of evolution similar to that established for the episodes discussed above: the best constitution was a much debated question amongst fifth-century Greeks; the Persians, in the opinion of many, had created an admirable body of institutions; they must have considered this problem; an obvious occasion for such an issue to arise would be the aftermath of the usurpation of the false Smerdis; a tradition of a debate on the best constitution could, therefore, easily have been foisted onto Persian history at that point.⁷⁶

In all three cases there is no doubt that Herodotus believed that he was dealing with genuine historical matter but he, like most of his countrymen, lacked both the cultural perspective and the insight into the deeper springs of historical, or pseudo-historical, tradition which could alone have induced suspicion of what must have seemed *superficially* perfectly plausible narratives.

Surely we can postulate an analogous evolution for the circumnavigation λόγος: the size of Africa was a major problem; the Egyptians, with their reputation for wisdom, must have attempted to solve it. Which Egyptian? For the reasons given above, a ruler would be a likely choice. Which ruler? Since Necho had attempted to build a canal to the Red Sea, had operated triremes, probably Greek,⁷⁷ in the same area and had probably sent commercial expeditions well to the south, he would

⁷⁴ *Vide supra*, p. 149.

⁷⁵ Lloyd, *Herodotus, Book II. Commentary* 1–98 (Leiden, 1976), 78 ff.

⁷⁶ The episode is generally and most credibly regarded as being Protagorean in inspiration; see J. S. Morrison, 'The Place of Protagoras in Athenian Public Life (460–415 B.C.)', *CQ* 35 (1941), 12 ff.; K. F. Stroheker, 'Zu den Anfängen der monarchischen Theorie in der Sophistik', *Historia* 2 (1953–4), 382 ff.; T. A. Sinclair, *A History of Greek Political Thought* (2nd edn., London, 1967), 36 ff.; F. Lasserre, 'Hérodote et Protagoras: Le débat sur les constitutions', *Mus. Helv.* 33 (1976), 65 ff.

⁷⁷ *Vide supra*, p. 146 n. 24.

be the obvious candidate. Once elected, he would be depicted as solving the problem of the size of Africa in the only way possible, i.e. by sending an expedition to find out. Such a process would establish the *Grundriß* and, once that was done, the details could be added in precisely the same way as was indicated above in the alternative explanation.

The results of this analysis are, then, as follows. There is no internal evidence which compels us to accept Herodotus' account of Necho's circumnavigation. On the contrary, the details of the narrative itself, as well as its extreme psychological implausibility, deprive the *λόγος* of any probability. What is more, explaining its existence provides no difficulty. It could easily be the product of Egyptian nationalist propaganda of a well-documented anti-Persian stamp. Alternatively the whole affair could have been generated by current fifth-century geographical preoccupations. In either case, we are amply justified in arguing that we are confronted with little more than a pseudo-historical fabrication of a uniquely seductive kind.

Conclusions

The key to Necho's policy in the Red Sea, like that in Asia, is to grasp the basic point that he evidently saw his role as that of reviving the great days of the New Kingdom. One of the traditional spheres of activity during that period, as in previous centuries, had been the land of Punt whither expeditions had been sent since at least the Old Kingdom to procure the incense which was indispensable for Egyptian ritual, not to speak of other less essential products. It has emerged from the preceding study that the three episodes in which Herodotus mentions Necho in connection with the Red Sea can all easily be interpreted against this general background. The Red-Sea canal would have considerably facilitated the task of getting to Punt, though it would have been of little use for returning ships, and the stationing of triremes in the Red Sea itself can be seen as a corollary of this; for piracy would almost certainly have been a problem and we must also make allowance for the distinct possibility that he had to face competition from Edomites or Sabaeans. It has further been suggested that, although the canal was never finished, Necho's successes in the Red Sea were such as to induce the development of a pseudo-historical *λόγος* that he had been responsible for a circumnavigation of Africa. This notion could have been stimulated immediately by the desire to provide a successful counterpart to the abortive expedition of Sataspes, in which case it will have emanated from the same deep wells of nationalist, anti-Persian propaganda as many of the ingredients in the Sesostri Legend. On the other hand, it could just as easily have evolved in Greek circles during the sixth or fifth century B.C. as a reflection of current geographical preoccupations, Necho being presented as solving one of the major problems of contemporary geography, viz. the size of Africa. If this analysis is accepted, what we would appear to have *in purely historical terms* in Necho's Red-Sea activities is a striking prefigurement of those of the leading light in another Egyptian renaissance, Ptolemy II Philadelphus, in whose reign we appear to have precisely the same pattern of revival of Red-Sea commerce leading to an interest in a Red-Sea canal and the subsequent mounting of large-scale

naval operations to maintain the sea-ways.⁷⁸ On this reckoning Necho must regrettably cease to figure in the chequered story of African exploration but, even so, enough achievement remains—more than enough—to make of his reign a singularly striking proof of the continued vitality of the millennial civilization of Egypt.

⁷⁸ Strabo and Diodorus are not precise in dating the great Ptolemaic pirate expedition in the Red Sea (*supra*, p. 146 n. 27) but the implications of Diodorus' τῶν ἀπὸ τῆς Ἀλεξανδρείας βασιλέων πλωτῶν τοῖς ἐμποροῖς ποιησάντων τὸν πόντον, Ptolemy II's known commercial concern with that area, his well-attested naval prowess, and the date of Ariston (the probable ultimate source for the event: first half of the third century) all point imperiously in Philadelphus' direction (with Tarn, *op. cit.* 14 ff., and Rostovtzeff, *loc. cit.*; against Kortentbeutel, *op. cit.* 45).

PTOLEMAIC REMAINS FROM KALABSHA TEMPLE
 RECONSTITUTED ON ELEPHANTINE ISLAND
 (1974–1975)

By G. R. H. WRIGHT

WITH the work here described the German Archaeological Institute in Cairo has brought to an end the West German commitment to preserve the Nubian Temple of Kalabsha from loss beneath the waters of the High Dam.

The large Temple of Mandulis constructed at Kalabsha in early Roman times was dismantled block by block during 1961–2 and rebuilt during 1962–3 on a new site, now an island near the Western abutment of the High Dam. During the process of dismantling the striking discovery was made of blocks from an earlier Ptolemaic temple reused as filling material in the lower courses of the more massive walls of the Sanctuary and Hypostyle Hall. In some instances these blocks revealed traces of painted plaster well preserved under a coating of mud or mortar.

This discovery recalled the fact that Barsanti in his consolidation of the Temple foundations in 1907–8 had recovered some reused blocks from its masonry substructure. Accordingly efforts were made in 1963 during the short period that the site was accessible at low water to extract further blocks from the masonry foundation platform, left after the dismantling of the Temple. In spite of the difficulties additional blocks were recovered so that eventually a total of some 250 reused blocks were wrapped and stored at a special storage place near the re-erected Temple.

Unfortunately this area then became difficult of access and it was not possible to proceed with further work on the Ptolemaic blocks. In fact it was only after about ten years that the Egyptian authorities indicated that the time was appropriate to complete the operations on Kalabsha Temple. The reused blocks were seen to fall into two almost equal groups of *c.* 120 blocks each, one composing a Sanctuary chamber etc., and the other a gate structure in a mud-brick enclosure wall. In return for the German contribution towards 'saving the Monuments of Nubia', the Gateway blocks were offered for transport to Germany to be displayed in Berlin, while the Sanctuary blocks were made available to the German Government for rebuilding at a site in Egypt.

Since New Kalabsha Island was not freely accessible, an examination was made of several other sites in the vicinity of Aswân, and a site at the southern point of Elephantine Island was approved as being the most suitable and convenient. A small palm grove afforded a sympathetic setting to the monument and there was excellent visibility from both the river Nile and its banks.

The blocks having been delivered to the site by the Egyptian Antiquities Department, the work of rebuilding commenced in mid September 1974. The project took shape as follows. Study of the blocks showed that whatever the full architectural development of the Ptolemaic Temple may have been, the only architectural unit afforded by the surviving remains which was sufficiently coherent to permit rebuilding was a small chamber sanctuary *c.* 7.5×5.5 m in plan with an external height of 4.3 m. And of this structure something like 20 per cent of the original wall blocks were preserved.

After consideration of the various alternatives it was apparent that the only practical way of exhibiting the blocks was to rebuild them into a semblance of the original structure. The facing for the missing portions was formed out of small 'sand-bricks' of such high quality as to approximate to artificial sandstone somewhat similar in texture to the original blocks. These were set dry-jointed and then patinated. In this way the bonding pattern clearly indicated the modern work in which the original blocks were set, whereas the patina and texture of the new material did not clash with the old and resulted in an agreeable over-all aspect.

Additionally, structural necessity demanded the use of some new stone which was obtained from the ancient sandstone quarries of Silsileh, and was left roughly dressed to distinguish it from the original blocks. It was used for the entablature of the door, for the angle blocks of the cornice, and for paving. In this way it bound together and weighted down the structure to re-assert its monumental character.

The work was completed on March 3rd, 1975. On the following day, March 4th, a state ceremony took place as scheduled to inaugurate publicly the German Government's work of preserving the Nubian Temple of Kalabsha—both the Roman and the Ptolemaic remains.

Following on this work there remained stored some 30–40 blocks of various descriptions, insufficient for incorporating into any structure. Since very little ground was made available surrounding the monument, it was not an easy matter to lay out this material without detracting from the monumental appearance of the reconstructed Sanctuary. Accordingly it was recommended that the blocks should be left stored, to be dealt with as part of the over-all programme for the *mise-en-valeur* of Elephantine Island as an Antiquities site. However, for administrative reasons it was found necessary to conclude all Kalabsha operations within the financial year of 1975.

Setting out these remaining blocks effectively was indeed a problem and the best that could be hoped for was not to spoil the effect of the Sanctuary. Half a dozen large blocks remained from a Gateway and these were re-erected down by the Nile's bank to make a piece of 'scenic architecture'. For the remainder it was possible to evolve a platform half-way down the slope to the river, cut deeply enough for the blocks not to obtrude on the view of the Sanctuary façade. In accordance with instructions it was found possible to lay out these blocks in such a way as to convey the lines of their original structure. The final over-all effect was that a recognizable Antiquities-area was developed at the scenic south point of Elephantine. And with this, at the end of

the year 1975, the German Government's undertaking to save the Temple of Kalabsha was discharged.¹ See pl. XXVI, 1-3.

¹ The various operations here described, proceeded on and in turn gave rise to various studies of Kalabsha Temple site and its remains. The following is a synopsis.

H. Stock and K. G. Siegler. *Kalabsha* (Wiesbaden, 1965).

K. G. Siegler. *Zur Baugeschichte des Tempels von Kalabsha* (Berlin, 1970).

G. R. H. Wright. *Kalabsha, The Preserving of the Temple* (Berlin, 1972).

D. Arnold. *Die Tempel von Kalabsha* (Cairo, 1975) (commemorative brochure for the inaugurations).

G. R. H. Wright. *Kalabsha, The Ptolemaic Sanctuary* (in press).

E. Winter. *The Epigraphy and History of the Temple of Kalabsha* (in preparation).

D. Arnold. *The Archaeology of Kalabsha* (in preparation).



1. The last stage of re-erection. An embankment has been made, up which the small mobile crane has been driven so that the cornice block can be hoisted to the required height



2. The rebuilt monument overlooked from the southern ramparts of ancient Elephantine



3. The rebuilt monument viewed from the Nile to the south of the island

PTOLEMAIC
REMAINS
FROM KALABSHA
TEMPLE

common practice, be quoting *verbatim* extracts from the letter of the King of the Noubades to which the present letter is a reply; in such cases the 1st person would refer to the King of the Noubades and the 2nd person to the King of the Blemmyes.

Certain passages in the letter seem to make perfectly good sense, and basing ourselves on these we can attempt to interpret the more cryptic utterances of the King of the Blemmyes, but even so considerable tracts defy interpretation, and for this reason no continuous English translation has been attempted; instead, the notes appended to the text discuss the meaning of the text sentence by sentence.

How is such confusion of thought and language to be accounted for? In the first place we must assume that the meaning of the letter was perfectly clear both to the writer and the recipient, both of whom had the advantage of being in full knowledge of the circumstances and thus able to place the phrases in the letter in their correct context. But this does not explain why the letter is so enigmatic to us. We would suggest that the letter was dictated by the King of the Blemmyes in his own native language to a scribe with a smattering of Greek, who for each native word or phrase wrote down some Greek equivalent without much regard to such matters as person, case, number, mood, etc. When the letter reached its destination it would have been necessary to translate it back into the native language for the benefit of the King of the Noubades, and it seems at least possible that the scribe of the letter himself acted as messenger, in which case he would have had no difficulty in reproducing the original language of the King of the Blemmyes. If this hypothesis is correct, the Greek text would have been in the nature of an *aide-mémoire* rather than a vehicle of direct communication.

The text shows no punctuation of any kind, and although there are sometimes spaces between words or phrases, these are so variable that it is not practicable to reproduce them. Proper names of non-Greek origin frequently, but by no means regularly, have a horizontal line drawn above them. In the text here printed words have been separated and proper names capitalized, but no accents or breathings have been added and no punctuation is shown. Accompanying the text is a commentary, taking the text section by section, suggesting a reconstruction of the Greek (introduced by the words 'Correct to . . .') and adding an English translation of the reconstruction. In the reconstructed text non-Greek names have been left without accents or breathings, since these are unknown quantities.

The text is based upon a provisional transcript made directly from the original by Professor Plumley and Mr. Robert Anderson. I have checked this carefully with various photographs and have introduced certain changes, with the result that I accept responsibility for what is here printed.

In conclusion, I would express my gratitude to Professor Plumley for the privilege of editing for the first time this unique document. The text will be found on the fold-out sheet inserted between pp. 168 and 169.

Commentary

- 1-2. ο επιφ[αν]εστατος Φωνην βασιλευς Βλεμμυων Αβουρνη βασιλευς Νουβαδες και Νακασε και Μουσης των υιων σου. Correct to: ὁ ἐπιφανέστατος Φωνην βασιλεὺς Βλεμμύων Αβουρνη βασιλεῖ

Νουβάδων καὶ Νακασε καὶ Μουση τοῖς υἱοῖς σου. ‘The most illustrious Phonen,⁴ King of the Blemmyes, to Abourni, King of the Noubades and Nakase and Mouses his sons.’ The words *Αβουρνι βασιλευς Νουβαδες* recur in line 29 and in both cases the 3rd declension form *Νουβάδες* is used whereas elsewhere a 2nd declension form *Nobadai* or *Nobatai* is found.⁵ The Silko inscription (see below) contains only the genitive plural *Νουβαδων*, which is indeterminate.

3. πολλ[α προ]σαγορευω . . . του οχλου σου. Correct to: *πολλὰ προσαγορεύω ἐν πρώτοις τὴν βασιλείαν μετὰ πάντων τῶν τῆς χώρας καὶ τὴν σωτηρίαν τοῦ ὄχλου σου.* ‘First of all I send many salutations to your Majesty with all the inhabitants of (your) country and (wishes for) the safety of your people.’ *τῆς σωτηρίας*, even when corrected to *τὴν σωτηρίαν*, is awkward after *προσαγορεύω*, but the alternative of connecting it with the next line is even more difficult.
4. [και γαρ το]υτο . . . ευχομαι. Correct to: *καὶ γὰρ τοῦτο πρῶτόν ἐστι εὐθέως εὐχομαι.* ‘For this is in the forefront of my immediate prayers.’ Since line 3 stops well short of the right-hand edge of the column of writing, it seems likely that line 4 began a new sentence, and *καὶ γὰρ* is restored in view of the writer’s predilection for beginning a sentence with these words. The word read as *ευθεω* might just as well be read *εγθεω*, which would have to be emended to *ἐκ θεοῦ*, but this seems a less likely solution, and it is simpler to understand *εὐθέως* as simply echoing the sense of *τοῦτο πρῶτόν ἐστι*, i.e. the idea of priority.
- 4–5. *νυν γραφω . . .]μεγα . . . πως.* Owing to an unread letter in line 4 and the lacuna at the beginning of line 5, no reconstruction can be offered and no translation except for the opening words ‘I now write to your Valiancy since (your Valiancy) wrote to me that . . .’
As regards the text, the next letter after *με* in line 4 is invisible, being covered over by some loose fragments of papyrus. Following this is apparently *alpha* (cf. the final *alpha* in *προβατα*, line 13), but neither *μετα* nor *μεγα* offers any reasonable sense. In line 5, after the initial lacuna, the letters read as *]με* are followed by what at first sight appears to be another *mu* but on closer inspection looks more like *γα*; on this basis *μεγα* might be read, recalling the possible *μεγα* in the preceding line. Traces of two further letters are followed by *πως*, which by comparison with *ανθρωπως* (*sic*, for *ἄνθρωπος*?) in the preceding line might be corrected to a noun in *πος*. It should be pointed out that *ἔγραψεν*, i.e. the 3rd person singular, is correct, the subject being *ἡ σὴ ἀρετὴ* understood.
5. *και γαρ σοι . . . και αλλ[ους].* Correct to: *καὶ γὰρ σὺ δὲ ἔχεις παῖδα καὶ ἐγὼ ἔχω παῖδα Βρειτεκ καὶ τὸν ἀδελφὸν Ειενει καὶ ἄλλους.* ‘For you have a child and I too have a child, Breeitek, and (my) brother Eienei and others.’ That Breeitek is the King’s son seems certain, since he adds his own postscript to the letter in lines 29–31, where he describes himself as *φύλαρχος*. As regards Eienei, *ἀδελφόν* is ambiguous since it might mean either a brother of the King or a brother of Breeitek. But as the King calls Eienei *ὁ ἀδελφός* in line 27, this seems conclusive.

⁴ Phonen. What appears to be the same name occurs in an inscription in the temple walls at Kalabsha (H. Gauthier, *Le Temple de Kalabchah*, i (1911), 312–13, and pl. 103 A; cf. also Wilcken, *Archiv für Papyrusforschung*, i (1901), 412), recording a benefaction to certain ‘prophets’. The text begins *ἐπὶ Φονοιν φυλάρχου*, and there is a subsequent reference (line 3) to *ὁ βασιλεύς*. Whereas the famous inscription of Silko at Kalabsha is cut in crude uncials, this is in a script much more akin to documentary papyri and as such might well be dated to the fifth century. It is therefore at least possible that the Phonoin of the inscription is the Phonen of the present letter at an earlier stage of his career, when he was still only *φύλαρχος*. This is supported by the fact that in the present letter Phonen’s son Breeitek bears the title of *φύλαρχος* (line 29).

⁵ U. Monneret de Villard, *Storia della Nubia Cristiana* (= *Orientalia Christiana Analecta* 118), 1938, pp. 39–40, 87, suggests that the Nobades or Noubades constituted the ruling class in contradistinction to the Nūba (*Νουβται*) who were the indigenous working population.

6.]ατη αλλα . . . ευγενεστατος. Correct to: ἀλλὰ μὴ νόμιζε ὅτι οὐκ ἔστι εὐγενέστατος. No supplement can be suggested for the initial lacuna. After]ατη, translate '*but do not imagine that he is of anything but the most noble birth*'. The subject might be either Breeitek or Eienei.
- 6-7. και γαρ ταυτα . . . αδ[ελ]φους Eienei. Correct to: καὶ γὰρ ταῦτα ὅλα τὰ γενόμενα οὐδεὶς ὄρᾳ εἰ μὴ ὁ θεὸς καὶ ὁ ἡμῶν [παῖς] Βρεειτεκ καὶ ὁ ἀδελφὸς Eienei. '*For no one sees these things which have happened except God and our child Breeitek and brother Eienei.*' The use of ὁ θεός does not, of course, imply a belief in monotheism, much less Christianity, and indeed it seems clear from references to 'gods' in the plural elsewhere in the letter that Phonen was not a Christian.⁶
7. θελω επιζητει των θανατον Eienei. This is a most puzzling sentence. With only the minor changes of επιζητει to ἐπιζητεῖν and των to τόν we have the literal meaning '*I wish to seek the death (of) Eienei*'. But this is totally at variance with other references to Eienei in the letter, notably the King's statement (lines 27-8) that he had sent Eienei on a mission to recover his territories and negotiate a lasting peace. There is nothing in the context to suggest that the statement is, e.g., a (false) charge made by Abourni against Phonen, and the only possible solution seems to be to emend the 1st person to the 2nd person, and the meaning accordingly to '*You wish to seek the death of Eienei*'. There is indeed a later reference to Abourni having 'jeered' at Eienei (line 17), but no more is said of any more drastic act of hostility.
- 7-8. και μετα ταυτα . . . εκωλυσα αυτους. Correct to: καὶ μετὰ ταῦτα τὸν πρεσβευτήν σου [.]. ω μοι ἐνταῦθα καὶ ἐκάλεσα Βρεειτεκ καὶ τὸν ἀδελφὸν Eienei καὶ ἐκώλυσα αὐτούς. '*And after these things (you sent?) your ambassador to me here, and I summoned Breeitek and my brother Eienei and restrained them.*' If ὁ πρεσβευτής is retained it becomes necessary to restore a verb in the 1st person singular at the beginning of line 8 and correct it to the 3rd person.
- 8-9. ου δυν[α]τ[α]ι . . . εμου. Correct to: οὐ δύναται τίς ποτε πολεμῆσαι εἰ μὴ ἐκέλευσα ἐγώ. '*For nobody can go to war unless I have ordered (it).*' The supplement at the beginning of line 9 is, of course, not certain, but it seems to make good sense and continue the thought of ἐκώλυσα αὐτους in the preceding clause.
9. αλλα . . . ρηματα. Correct to: ἀλλὰ οἱ αὐτοὶ ἄνθρωποι σου οὐκ ἀκούουσίν σου, ἀλλὰ τῶν ἀνθρώπων ἀκούεις τὰ ῥήματα. '*But these same people of yours do not listen to you, but you listen to the words of these people.*' In other words, Phonen is suggesting to Abourni that while he listens to his advisers, these same advisers are pursuing their own policies without regard to him.
- 9-11. καθως . . . φιλησαι. Correct to: καθὼς ἔγραψέν μοι ὅτι "θέλω ὁμόνοιαν ἔχοντες μεταξύ ἀλλήλων κοινωνῶμεν τὰ βοῖδιά μου μετὰ βοιδίων σου βόσκοντες μετὰ ἀλλήλων καὶ τὰ πρόβατα πάνυ φιλοῦντες". '*As (your Valiancy) wrote to me that "I desire that we being of one mind between each other should hold in common my cattle with your cattle, pasturing (them) with each other, and treat (our) sheep with all kindness"*.' The 3rd person singular ἔγραψεν is strictly correct, the subject being ἡ σὴ ἀρετή in line 4. By correcting κοινωνομεν to κοινωνῶμεν we obtain a construction θέλω+subjunctive which is found in classical Greek as well as in the New Testament and the papyri. The words in the corrected Greek text placed within quotation marks are a direct quotation from the letter of the King of the Noubades to which Phonen is replying. If the quotation is anywhere near *verbatim*, the letter of the King of the Noubades will have been written in the same kind of pidgin Greek as Phonen's reply.

⁶ It has commonly been assumed, from his reference to ὁ θεός and his characterization of the sacred images of the Blemmyes as εἰδωλα, that Silko was a Christian, but this is by no means certain, cf. Wilcken, *Archiv für Papyrusforschung* 6 (1920), 379-80 and S. Donadoni, *Studi classici e orientali* 14 (1965), 29.

The prime question is, how far does the quotation from the letter of Abourni extend? It is certainly possible that it extends as far as the words *πρωτον Σιλκω* in line 13, and this injects a further element of uncertainty into the already grave problems of interpretation presented by the next sections of text.

11. *εα[ν] θελησης . . . οικιαν ημων.* Correct to: *ἐὰν θελήσης, ἐγὼ καὶ σὺ παραμενοῦμεν καλῶς εἰς τὴν οἰκίαν ἡμῶν.* 'If you so desire, you and I will remain peaceably within our (respective) homelands.' While it would be theoretically possible to regard this as a continuation of the quotation from Abourni's letter (see preceding note), it does not add anything to the practical proposals already put forward by Abourni, and it thus seems simpler to take the words in their natural sense as an expression of Phonen's willingness to reciprocate Abourni's conciliatory gesture.
- 11-13. *καὶ γὰρ . . . πρωτον Σιλκω* (i.e. the second occurrence of these latter words, in line 13). This is the most difficult passage in the entire letter, and nowhere else is the imprecision of the language more to be deplored, since statements of obvious historical importance are concerned. The following interpretation is based on two hypotheses, viz. (1) that there is an apparent distinction drawn between two situations, a former situation introduced by *πρωτον* and a current situation introduced by *σήμερον δέ*. And it is possible, though by no means certain, that the latter situation is not merely different from, but an actual reversal of, the former; (2) that in lines 11-13 there appears to be a major dislocation of the text. In line 12 the words *πρωτον Σιλκω* seem to be an erroneous repetition of the same words in line 11, while the following *ελαβα* looks like an echo of its occurrence twice earlier in the same line. In lines 12-13 the words *σημερον δε | ενικασης και ελαβα Ταλμewς* are clearly a reduplication of the identical words in the earlier part of line 12. When the repetitious material is excised, we are left with the following text: *καὶ γὰρ πρωτον Σιλκω ενικασα και ελαβα Ταλμewς σημερον δε ενικασης και ελαβα Ταλμewς και εκωλυσα τας χωρας ημων.* If we take the second element, beginning *σημερον δε*, first, a clue to the subject of *ενικασης και ελαβα* is provided by the fact that in line 29 Breetek sends his salutations to Abourni 'together with the Gods of Talmis.' These words would be meaningless unless at the time of writing Abourni was in possession of Talmis. The subject of *ενικασης και ελαβα* is therefore Abourni, and the text can accordingly be corrected to: *ἐνίκησας καὶ ἔλαβας* (the first aorist form is well attested) *Ταλμιν.* But who was Abourni's opponent, whom he defeated and from whom he took Talmis? He might, of course, have been Silko, who is mentioned in the first part of the sentence, but if so there is no reason why his name should not have occurred after *ενικασης*. If he was not Silko, the defeated opponent can only have been Phonen himself, and it is quite understandable that Phonen was unwilling to add *εμε* or *ημας* after *ενικασης*. This hypothesis is the more economical since it enables us to take the first part of the sentence at its face value, without altering the persons of the verbs, to mean 'First I defeated Silko and took Talmis.' The entire sentence can therefore now be corrected to: *καὶ γὰρ πρώτων Σιλκω ἐνίκησα καὶ ἔλαβα Ταλμιν, σήμερον δὲ ἐνίκησας καὶ ἔλαβας Ταλμιν καὶ ἐκώλυσας τὰς χώρας ἡμῶν.* 'For first I defeated Silko and took Talmis, and now you have conquered (me) and taken Talmis and occupied my territories.' The supposition that Silko was defeated by Phonen, who in turn was defeated by Abourni, fits in with the general tone of the letter, since nowhere does Silko appear as a force currently to be reckoned with, while Phonen, by continually harping on the loss of his territories, gives us the impression that he had got the worst of whatever conflicts had occurred between him and Abourni.

The crucial question is to decide what correlation, if any, exists between the historical data in the present letter and those in the triumphal inscription of Silko at Talmis

(Kalabsha), the text of which is, for convenience, printed at the end of this article.⁷ The inscription records three campaigns by Silko against the Blemmyes, in all of which he claims to have been victorious. After the first, the Blemmyes sued for, and apparently obtained, peace. Why war broke out again, and what was the outcome of the second campaign, we are not told, perhaps because it was indecisive. But the third campaign ended in total victory for Silko, who captured the cities of the Blemmyes and overran and ravaged their territories.

This uniformly victorious career of Silko is far from being reflected in the present letter. If the interpretation offered above is correct, Silko had been defeated by the Blemmyes and expelled from Talmis. It would be just possible to bring this situation into connection with the first campaign of Silko described in the stela, for although according to Silko it was the Blemmyes who sued for peace, he adds that he himself subsequently retired southwards, which may suggest that the conflict was less decisive than Silko cared to admit. According to Phonen, Abourni expressed his contempt for Phonen's brother Eienei on account of his dealings with Silko (τὰ γενόμενα Σιλκω, line 17), and the further reference to conversations between Eienei and Silko (τὰ ῥήματα Σιλκω καὶ Εἰενει) may conceivably have been the peace negotiations described in the stela; Abourni's contempt for Eienei may have been prompted by a feeling that Phonen and Eienei had let Silko off too lightly.

According to the inscription, the government of Nubia at this period seems to have been exercised by a number of local rulers, described as 'Kings' (βασιλεῖς) who owed allegiance, nominally at least, to a 'Chief King' (βασιλίσκος), who at the time of the inscription was, of course, Silko himself.⁸ At the time of his first campaign against the Blemmyes Silko appears to have been one of these local 'Kings', and there is therefore nothing inconsistent in the description of Abourni in the present letter as 'King' of the Noubades. By the time Silko became βασιλίσκος, Abourni must either have accepted a subordinate position or have been otherwise disposed of.

It must be emphasized that the foregoing reconstruction is purely tentative. The fact that Silko's inscription remained intact at Talmis suggests that he had the last word in this series of conflicts, and this in itself gives the impression that the present letter relates to an earlier stage in the progress of events. In view of the contrast of situation between the letter and the inscription, Dr. K. Bosse-Griffiths suggests that the possibility should not be excluded that the Silko of the inscription relates to a later king, though of the same royal line—a phenomenon often exemplified in the history of Egypt.

13-14. εἶπον ὅτι . . . ἐκώλυσα ἡμῶν. Since the subject of ἐκχλευασῆς in line 14 must be Abourni, the subject of the preceding ἐδώκα can only be Phonen. The person who made the demand, δως μοι κτλ., with which Phonen complied, is therefore Abourni, and the correction of εἶπον to εἶπες seems essential. We therefore have the corrected text: εἶπες ὅτι "δός μοι πρόβατα καὶ

⁷ See *infra*, p. 170.

⁸ On the meaning of βασιλίσκος as supreme ruler, exercising authority over a number of βασιλεῖς, cf. Dittenberger's commentary on the Silko inscription (printed *infra*, p. 170) and S. Donadoni, *La Parola del Passato* 14 (1959), 461.

βοΐδια καὶ καμήλια . . . ἵνα δοθῶσι αἱ χῶραι ὑμῶν,” καὶ ἔδωκα αὐτὰ ὅλα καὶ ἐχλεύασας καὶ ἐκώλυσα ἐμαυτόν. ‘You said: “Give me sheep and cattle and camels in order that your lands may be given (back) to you,” and I gave them all and you treated (me) with contempt but I restrained myself.’ For the construction ἵνα + infinitive cf. line 19 ἵνα ποιῆσαι and line 26 ἵνα δοθῆναι. Note that κωλύω is apparently used in the sense of ‘restrain’, as in line 8.

- 14-15. καὶ ἐγραψον . . . ὀρκους. Only slight corrections are necessary: καὶ ἔγραψα πρὸς Εἰενεὶ διὰ τὴν εἰρήνην καὶ ἐπέμψα τοὺς πρεσβευτὰς μετὰ ὄρκων. ‘And I wrote to Eienei with a view to peace and sent ambassadors with sworn undertakings.’ For the ὄρκοι cf. line 28, καὶ δέδωκα τοὺς ὄρκους μου τῷ ἀδελφῷ Εἰενεὶ. Apparently these were sworn statements in writing empowering the ambassadors to negotiate and acting as their letters of credence. The ὄρκος taken by the Blemmyes in the Silko stela (καὶ ὤμοσάν μοι τὰ εἶδωλα αὐτῶν καὶ ἐπίστευσα τὸν ὄρκον αὐτῶν) must have been an oath taken at a later stage, promising to keep the conditions of peace.
15. καὶ ἐχλευασας . . . Φωνταου. Correct to: καὶ ἐχλεύασας καὶ ἐφόνευσας φυλάρχους καὶ ὑποτυράν-
νοους καὶ ἔλαβας τοὺς προφήτας ἐν τῷ τόπῳ Φωνταου. ‘And you expressed contempt and killed the phylarchs and hypotyrannei and seized the prophets in the place Phontauou.’ The titles of φύλαρχος and ὑποτύραννος are known from a document issued by the Blemmyan βασιλίσκος Charachen.⁹ Whether accusatives singular or accusatives plural should be substituted for the nominatives φύλαρχος and ὑποτύραννος must remain uncertain. As regards ἐχλεύασας καὶ ἐφόνευσας it seems strange that Phonen should have troubled to complain of Abourni’s ‘contempt’ if he had subsequently gone so far as to murder the ambassadors; and although ἐφόνευσας stands quite unequivocally both here and in line 16, it is possible that the ambassadors may have escaped with nothing more than a beating-up. Why the ‘prophets’ were involved in these hostile measures we have no means of knowing, unless this action was connected with the seizure of Phonen’s ‘gods’, for the return of which he repeatedly asks.
16. ἀλλὰ ἐκξεστιν . . . μετὰ ὀρκους. Correct to: ἀλλὰ ἔξεστι πολέμους γενέσθαι, ἀλλὰ οὐκ ἐξὸν χλευάσαι τοὺς ἀνθρώπους καὶ φονεῦσαι τοὺς ἀνθρώπους μετὰ ὄρκων. ‘It is possible that wars should come, but it is not allowable to treat men with contempt and to kill men (who come) with letters of credence.’ Here again the two actions of χλευάσαι and φονεῦσαι seem to be placed on a level, which prompts the suspicion voiced in the preceding note that the ambassadors may have suffered nothing more than physical violence.
- 16-17. καὶ γὰρ . . . πολεμησαι. Correct to: καὶ γὰρ διὰ τὰ γενόμενα Σιλκῶ ὦν ἐχλεύασας Εἰενεὶ, διὰ τοῦτο ἐλυπήθην καὶ κατήλθα καὶ ἐπολέμησα. ‘As to what happened to Silko, for which you treated Eienei with contempt, on this account I was grieved and I came down and waged war.’ The question arises whether τὰ γενόμενα Σιλκῶ ὦν ἐχλεύασας Εἰενεὶ are identical with, or connected with, τὰ ῥήματα Σιλκῶ καὶ Εἰενεὶ (lines 17-18) and τὴν τύχην Εἰενεὶ καὶ Σιλκῶ (line 18), but in our ignorance of the circumstances there seems no possibility of deciding this. Cf. following note.
- 17-18. καὶ γὰρ . . . Σιλκῶ. No corrections are needed except the alteration of the doubly augmented ἐπαρηλθα to παρηλθα. Translation is, however, difficult since there appear to be two objects of παρηλθα, viz. τὰ ῥήματα and τὴν τύχην. A possible clue is provided by the modificatory τάχα, suggesting that in the course of dictation the King first said τὰ ῥήματα (or its Nubian equivalent) and then wished to substitute a more exact term, τὴν τύχην. If this suggestion is correct, we might translate: ‘For I have passed over the conversations of Silko and Eienei—or perhaps I should rather say the fate of Eienei and Silko.’ As mentioned in the preceding note, we have no means of knowing what the ῥήματα and the τύχη were.

⁹ The letter of Charachen is Wilcken, *Chrestomathie*, no. 7 = Preisigke, *Sammelbuch*, no. 6257.

- 18–19. *δυναμεν . . . αλληλους*. Correct to: *δυναμεθα γάρ ἄρτι ἐγὼ καὶ σὺ μετ' ἀλλήλων ὡς ἀδελφὸς καὶ ὡς μειζότερος ποιῆσαι καλὸν χρόνον μετὰ ἀλλήλων*. It seems that *δυναμεν* must be the beginning of a new sentence, despite the resultant late position of *γάρ*. After *ἐγὼ καὶ σὺ, μετ' ἀλλήλων* is tautologous, and *μετὰ ἀλλήλων* at the end of the sentence still more so. The words *ὡς ἀδελφὸς* and *ὡς μειζότερος* are difficult to interpret. *μειζότεροι* and *μειζονες* are common terms in the Byzantine period for official superiors, but this can scarcely be the significance here. Phonen and Abourni might regard each other as 'brothers', and indeed Breitek addresses Abourni as 'brother' in line 29, but neither is likely either to have conceded to the other the position of *μειζότερος* or to have demanded it for himself. Indeed the whole tone of the letter suggests that the correspondents regarded themselves as of equal status. Possibly therefore *μειζότερος* simply means that each was supreme within his own kingdom—in other words, a sovereign. If so, it might be desirable to correct *ἀδελφὸς* and *μειζότερος* to plurals, when we could translate the whole: 'For now I and you can create with each other a time of peace as brothers and sovereigns in collaboration.' For *καλὸν χρόνον* cf. lines 19–20 and *καλὴν εἰρήνην* in line 22.
- 19–20. *αναχωρησα . . . μετε σου*. Correct to: *ἀναχώρησον ἀπὸ τῆς χώρας ἡμῶν καὶ πέμψον τοὺς θεοὺς εἰς τὸ ἱερόν ἵνα ἐγὼ καὶ σὺ ποιήσωμεν καλὸν χρόνον μετὰ σοῦ* (or *μετ' ἐσοῦ*). 'Evacuate my territory and return the (images of the) gods to the temple in order that I and you may establish a time of peace.' The 'Gods' were clearly the sacred images of the Blemmyes (described as the *εἰδωλα* in the Silko stela) which Abourni had forcibly removed, perhaps from Phontauou where he had seized the prophets. After *ἐγὼ καὶ σὺ, μετὰ σοῦ* is otiose in the same way as *μετὰ ἀλλήλων* at the end of the preceding section.
20. *καὶ ἐδηλωσεν . . . ευρηθημεν*. Correct to: *καὶ ἐδήλωσάς μοι περὶ ἀσήμεια καὶ πρόβατα καὶ καμήλια. ταῦτα εὔρομεν*. 'And you indicated to me (your demands) concerning silver and sheep and camels. These we procured.' *ευρηθημεν* perhaps arose from confusion of *εὔρομεν* and *εὔρέθη*. Abourni here demands silver, sheep, and camels, whereas in line 13 he had demanded sheep, cattle, and camels. Despite this discrepancy it seems likely that the same demand is here referred to. In line 14 Phonen claimed to have met the demand in full (*ἔδωκα αὐτὰ ὅλα*) so perhaps thought it unnecessary to repeat the statement here. *ταυτα ευρηθημεν* might be linked with the next two words, *απεστιλα σοι* to mean 'These we procured and sent', but the absence of any copula is a difficulty and it seems easier to end the sentence here.
- 20–1. *απεστιλα . . . θεους*. Correct to: *ἀπέστειλά σοι*. 'ἀναχώρησον ἀπὸ τῆς χώρας μου καὶ δὸς ἡμῖν τὰ ἴδια ἡμῶν καὶ τοὺς θεοὺς.' 'I sent (a message) to you: "Evacuate my territory and give us back what is our own and the (images of) the gods.'" This is simply an abbreviated repetition of the demand in lines 19–20.
- 21–2. *καὶ απεστιλα . . . ειρηνην*. The emendation of *χίρας* to *χειρός* seems inevitable, in which case it may be used in the sense of 'handwriting' or 'autograph document'. We could thus correct to: *καὶ ἀπέστειλά σοι τὰ τῆς χειρός μου* (sc. *γράμματα*?) *ἐὰν θελήσης δὸς μοι τὰς χώρας ἡμῶν καὶ τοὺς θεοὺς* (ἵνα) *ἔχω μετὰ σοῦ καλὴν εἰρήνην*. 'And I sent you (a letter) under my own hand (saying) if you please, give me (back) our territories and the (images of the) gods (so that) I may establish with you an honourable peace.'
- 22–3. *μαθηται . . . αποθανη ολα*. Correct to: *μάθετε ὅτι ἐὰν κωλύσης ἡμᾶς τὰς χώρας ἡμῶν καὶ τοὺς θεοὺς οὐ δύναμεθα παραμεῖναι ἐὰν ἀποθανεῖν ὅλα*. 'Let me inform you that if you withhold from us our territories and the (images of the) gods, we cannot endure to leave everything to go to ruin.' *κωλύειν* is here used with a double accusative, rather like, e.g. *ἀποστρεφῖν*. Instead of *ἐὰν* it might be possible to read *ἐάν*, taking the sense to be 'even if everything were to go to ruin.'

23. και γαρ . . . ημων πολεμησαι. The interpretation is uncertain. Some sense could be obtained by fairly drastic emendation, e.g. to οὐ δεῖπολεμηῆσαι διὰ τὰς χώρας σου οὐδὲ διὰ τὰς χώρας ἡμῶν πολεμηῆσαι, but if the basic meaning is 'it is no good going to war for territorial advantage', the sentiment is doubtful and it is not clear why a simpler expression could not have been employed. The apparent opposition between τὰς χώρας σου and τὰς χώρας ἡμῶν might suggest something like an exchange of territories, but it is noticeable that throughout the letter Phonen, while always harping on the subject of the return of his own territories, nowhere mentions having occupied any of Abourni's territories (cf. note on lines 25-6); this interpretation therefore seems improbable.
- 23-4. γραφῶ . . . χωρας υμων. Interpretation is difficult. Παχενωσ is presumably a personal name, in which case ηλθα must be altered to ἦλθεν, a correction confirmed by the following ἐρήμωσεν. The sense so far is thus 'I write to you again that Pachenius has come and laid waste Damant.' As regards the remainder, αναχωρησα could be corrected to ἀνεχώρησα, in which case the subject is Phonen, and if we retain the final υμων unaltered, the meaning is 'I retired from your territories.' On the other hand, τας χωρας υμων at the end of line 25 must certainly be emended to τὰς χώρας ἡμῶν and it may be that the same correction should be made here, in which case the meaning becomes 'I retired from my territories' (i.e. under pressure from the incursion of Pachenius).
24. και γαρ Κωει . . . βωμους. Correct to: και γὰρ Κωει ἦλθεν εἰς τὸ πέρα Τάβαλες και ἐποίησε τοὺς βώμους. 'For Koei has entered the (country) beyond Tabales and erected altars.'
- 25-6. και Καβαντια . . . εστιν καλα. The interpretation of this section is based on the supposition that the subject of ἐνίκησας in both occurrences of the word is Abourni. 'You have conquered Kabantia. We do not remain in (any of) your territories. You have conquered all the kings, so do not seek to hold sway over our territories since it is not honourable.' Kabantia might be either a personal or a place name—more likely the former, since elsewhere νικᾶν is employed with personal objects. The meaning of παραμνομεν is uncertain, since in the other two occurrences of the verb it is used intransitively. ἐθελῆς is presumably subjunctive used in a jussive sense. On the foregoing basis the corrected version would read: και Καβαντια ἐνίκησας και οὐ παραμνομεν τὰς χώρας ὑμῶν. ὅλους τοὺς βασιλέας ἐνίκησας, και οὐκ ἐθελῆς κρατῆσαι τὰς χώρας ἡμῶν ἐπειδὴ οὐκ ἔστιν καλόν.
- 26-7. οταν . . . χωρας μου. Correct to: οταν ἀπήγησέ μοι ὁ πρεσβευτής σου κατέστησα Σκαροου υἱὸν Αεινημ εἰς τάχος ἵνα δοθῶσιν αὐτῷ αἱ χῶραι μου. 'When your ambassador met me I speedily appointed Skaroo son of Aeinem in order that my territories might be handed over to him.' Apparently this means that Skaroo was appointed prospective Governor of the territories which Phonen expected to recover. The following section deals with the delegation sent by Phonen to Abourni to negotiate terms of settlement.
- 27-8. οταν ηλθα . . . χωρας μου. Correct to: οταν ἦλθεν ὁ πρεσβευτής ἐπίστευσά σοι και ἀπέστειλα τὸν ἀδελφόν Ειενει. ἰδοὺ ὤμοσα ὅτι ἀπόδος μοι τὰς χώρας ἡμῶν (και) εἰρηνεύσομεν ἕως τῶν αἰώνων. 'When (your) ambassador came I trusted you and I sent my brother Eienei (to you). Lo, I have sworn that (if you) give me back my territories we shall be at peace for all time.' This section, like the following, shows that Eienei was Phonen's only envoy and that Skaroo (see note on preceding section) was in no way concerned in the negotiations.
28. και δε . . . χωρας μου. Correct to: και δὲ δέδωκα τοὺς ὄρκους μου τῷ ἀδελφῷ Ειενει ἵνα παράσχη αὐτῷ τὰς χώρας μου. 'And I have given my sworn statements to my brother Eienei in order that you may hand over to him my territories.'

- 28-31. *καγω . . . καλως*. Correct to: *καγὼ Βρειτεκ φύλαρχος πολλά προσαγορεύω τὸν κύριόν μου ἀδελφὸν Ἀβουρني βασιλέα Νουβάδων μετὰ τῶν θεῶν τῆς Τάλμεις, ὅτι ἐὰν ἀποδῶς τὰς χώρας ἡμῶν οὐκέτι πολεμήσομεν μετὰ ἀλλήλων ἕως τῶν αἰώνων, εἰ μὴ τὴν εἰρήνην φυλάξομεν καλῶς.* 'And I, Breetek, phylarch, send many salutations to my lord brother Abourni, King of the Noubades, together with the gods of Talmis (saying) that if you give back our territories we shall no longer go to war with each other for all time, but shall keep the peace honourably.' This is a postscript by Phonen's son Breetek, in which he joins in his father's wishes for a settlement. The King's brother Eienei does not add his own postscript since he will be meeting Abourni personally and may indeed have carried the present letter with him. For the significance of the reference to the gods of Talmis as indicating that Talmis was in the hands of Abourni see note on lines 11-13. For *εἰ μὴ* = 'but' cf. the Silko inscr. (*infra* p. 170), line 20.
- 32-5. *καγω . . . αὐτου*. This final section of the letter, which runs over on to the verso of the papyrus, is only partially intelligible owing to the lacuna in line 33 and uncertainties of decipherment elsewhere. So far as possible, correct to: *καγὼ Φωνην βασιλεὺς ἀπέστειλά σοι κάμηλον μίαν. προσαγόρευσις ἐστιν. γράφω σοι ὅτι ἐγὼ καὶ Βρειτεκ . . . θεῶν . . . ἀναχώρησον ἀπὸ τῶν χωρῶν ἡμῶν . . . καὶ περὶ Ἰασατεκ μὴ ἄφες αὐτὸν κοιμηθῆναι ἀλλὰ τὸν φεύγε. μὴ ἄκουε τὰ ῥήματα αὐτοῦ.* 'And I, Phonen, King, have sent you one (female) camel. It is (for) a salutation. I write to you that I and Breetek . . . gods . . . retire (from) our territories . . . and concerning Iasatek do not allow him to rest (?) but pursue (?) him (?). Do not listen to what he says.' No doubt the gift camel accompanied the delegation headed by Eienei which may also have carried the present letter. Emendation of *προσαγορεύω* to *προσαγόρευσις* is rather a desperate measure but it is difficult to see an alternative since *ἐστιν* is clearly written.
- The foregoing interpretation is unsatisfactory in that *φεύγειν* used transitively means 'avoid', and this certainly cannot be the meaning here; possibly the writer confused *φεύγειν* with, e.g. *διώκειν*.
- As regards Iasatek, he had obviously been the subject of previous correspondence, but we know nothing about him; the language suggests that he may have been a Blemmyan notable who had defected to the Noubades.

Appendix

Professor E. G. Turner has kindly contributed a number of notes on the foregoing article, and since in some cases they involve interpretations differing from my own it seems desirable to record them here with any comments of my own appended in square brackets.

4. Since *εγθεω* is readable as easily as *ευθεω* the temptation is great to interpret as *ἐν θεῷ εὔχομαι* ('false' assimilation, but it occurs as early as 251 B.C., Mayser *Grammatik d. gr. Pap.* I 1² p. 210 Anm. 4). This need not imply either a Christian greeting or an imitation of one, and strengthens the doubts expressed by Mr. Skeat about the validity of inferences from *ὁ θεός* (note to 6-7, and footnote 6).
- 4-5. The final *πως* in line 5 must be the indefinite adverb, in which case the whole sentence is likely to be some commonplace such as frequently opens a letter and will thus be unconnected with the historical situation—e.g. *μετὰ ἀνθρώπους ἐστιν [πράγματα?] μεγάλα πως*, 'There are really great troubles among men.'
5. I should keep *τοὺς ἀδελφούς* to mean 'the brothers of Eienei'.

1 ο επιφ[αν]εστατος Φωνην βασιλευς Βλεμμων
2 Αβουρνη βασιλευς Νουβαδες και Νακασε και Μουσης των υἱων σου
3 πολλ[α] πρ]οσαγορευω εμ πρωτοις την βασιλειαν μετα παντων των της χωρας και της σωτηρια[ς] του οχλου σου
4 [και γαρ το]υτο πρωτων εστι ευθεω ευχομαι νυν γραφω σοι τη ση αρετη σου επιδη εγραψεν μοι οτι με .α ανθρωπως εστι
5 [.]μεγα . . πως και γαρ σοι δε εχω παιδαν και καγω εχωμεν παιδαν Βρειτεκ και τους αδελφους Ειενει και αλλ[ους]
6 [.]ατη αλλα μη νομιζε [ο]τι ουκ εχι ευγενεστατος και γαρ ταυτα ολα τα γενομεθα ουδισ ορα ει μη ο θεος και των ημων
7 [παιδα]ν Βρειτεκ και τους αδ[ελ]φους Ειενει θελω επιζητει των θανατον Ειενει και μετα ταυτ[α] ο πρεσβευτης σου
8 [.]ω μοι ενταυθα και εκαλε[σα]ς Βρειτεκ και τους αδελφους Ειενει και εκωλυσα αυτους ου δυν[α]τ[α]ι τις ποται πολεμ
9 [ει μη εκ]ελευσεγ εμου αλλα το[υ]ς α[υ]τους ανθρωπους σου ουτ ακουειν σοι αλλα τους ανθρωπους ακουις τα ρηματα καθως
10 εγρ[α]ψεν μοι οτι θελω ομονοιας εχωντες μεταξυ αλληλους κοινοουμεν τα βοῖδια μου μετα βοῖδια σου βωσκων μετα αλληλο
11 και τα προβατα πανν φιλησαι ξα[ν] θελησης εγω και σοι παραμινομεν καλως εις την οικιαν ημων και 'γαρ' πρωτον Σιλκω ει
12 και ελαβα Ταλμεως σημερον δε [ε]ρικασης και ελαβα Ταλμεως πρωτον Σιλκω ελαβα και εκωλυσα τας χωρας ημων σημερον
13 ενικαση[ς] και ελαβα Ταλμεως πρωτον Σιλκω ειπον οτι δωσ μοι προβατα και βοῖδια και καμηλια ει . . . ινα δοθηναι τας χωρας
14 ημων και εδωκα αυτους ολα και εκχλευασης και εκωλυσα ημιν και εγραψον προς Ειενει δια την ειρηνην και επεμψα τους πρ
15 μετα ορκους και εκχλευασης και φωνεσα φυλαρχος και υποτυραννος και ελαβα τους προφητους εν τω τοπου Φωνταου
16 αλλα εκζεστιν πολεμωσ γενεσθαι αλλα ουκ εξων χλευασης τους ανθρωπους και φωνεσα τους ανθρωπους μετα ορκους και γαρ
17 δια τα γενομενα Σιλκω ων εκχλευασης Ειενει δια τουτο ελυπησης και κατηλθα και πολεμησαι και γαρ τα ρηματα Σιλκω
18 και Ειενει επαρηλθα ταχα την τυχην Ειενει και Σιλκω δυνομεν μετα αλληλους αρτε γαρ εγω και σοι ως αδελφος και ως μησ
19 καλον χρονον μετα αλληλους αναχωρησα απο της χωρας ημων και πεμψα τους θεους εις τω ἱερον εινα εγω και σοι ποιησαι κ
20 χρονον μετε σου και εδηλωσεν μοι περι ασημια και προβατα και καμηλια ταυτα ευρηθημεν απεστιλα σοι αναχωρησα απο τη
21 χωρας μου και δοθηναι ημιν τα ἴδια ημων και τους θεους και απεστιλα σοι τα της χιρας μου εαν θελησαι δωσ μοι τας χωρας
22 και τους θεους εχω μετε σου καλην ειρηνην μαθηται οτι εαν κωλυσης ημασ τας χωρας ημων και τους θεους ου δυναμεθα παρ
23 εαν αποθανην ολα και γαρ ου πολεμησαι δια τας χωρας σου δια τας χωρας ημων πολεμησαι γραφω σοι παλιν οτι Παχενιωσ
24 και ερημωσεν Δαμαντ και αναχωρησα απο της χωρας ὑμων και γαρ Κωει ηλθα εις τω περα Ταβαλεσ και εποιησα τους βωμ
25 και Καβαντια ενικησες και ο'υ' παραμινομεν τας χωρας ὑμων ολα οι βασιλευς ενικησες και ουκ εβελησ κρ[ατ]ησαι τας χωρας
26 επιδη ουκ εστιν καλα οταν απαντησα μοι ο πρεσβευτασ σου εκατεστησα Σκαρωου υἱος Αεινημ εις τ[α]χος εινα δοθηναι αυτω
27 τας χωρας μου οταν ηλθα ο πρεσβευτασ επιστευσα σοι και απεστιλα ο αδελφος Ειενει ηδου ωμασα οτι αποδωσ μοι τας χωρα
28 ειρηνεουσιν εωσ των αιωνιων και δε δεδωκα τους ορκους μου τω αδελφω Ειενει εινα παρασχου αυτου τας χωρας μου καγω
29 Βρειτεκ φυλαρχος πολλα προσαγορευω των κυριων μου αδελφω Αβουρνη βασιλευς Νουβαδες [μετ]α των θεων της Ταλμεωσ
30 οτι εαν απ[ο]δωσ τας χω]ρας ημων ουκετι πολεμησαι μετα αλληλους εωσ
31 των εωνιων ει μη την ειρηνην φυλαξω καλως
32 καγω Φωνην βασιλευς απεστιλα σοι καμηλον μιαν προσαγορευω εστιν γραφω σε οτι
33 εγω και Βρ[ε]ιτεκ τον θεων εν αναχωραησα τας χωρας ημων οιωσ ηλθου εις των οδον το'υ'το

Verso

34 και περι Ιασατεκ μη αφησες αυτω κυμηθ .ον . αλλα τους φ[ε]υγουσιν μη ακουη .
35 τα ρη[μα]τα αυτου

6. For [ατη another possibility seems to be]λλη. [Plumley and Anderson read]ατη]. I would place a stop after *ὁ θεός*. Phrases meaning ‘no one but God’ occur in various contexts, cf. *P. Abinn.* 34, 7 and references there given. At the end of the line I cannot see *ημων*, rather *τιαν*, but this suggests nothing. [Plumley and Anderson read *ημν* here.]
7. I think *ἐπιζητεῖν* must mean ‘inquire into’ or ‘investigate’. This interpretation is critical, since on this view *Eienei* must be dead, and I would bring this into connection with *φωνευσα* in lines 15, 16 to mean that *Eienei* had been murdered by Abourni while on a diplomatic mission from Phonon. I take the sense to be ‘*I desire Breeitek and the brothers of Eienei to inquire into the death of Eienei.*’ Alternatively, *τους αδελφους ειενει* might mean ‘*my brothers, of whom Eienei was one.*’ [This may be so, and [και γ]αρ could then be supplied at the beginning of the line, but if *Eienei* had been murdered, and in such circumstances, would Phonon have concluded his letter to Abourni (i.e. the letter proper, without the postscripts) with the words *δεδωκα τους ορκους μου τω αδελφω Eienei ειναι παρασχου αντου τας χωρας μου*, line 28? E. G. T. counters: Does Phonon’s recapitulation, lines 23–8, keep events in chronological order?]
8. At the beginning of the line perhaps [εκοι]γωνοι for *ἐκοινώνει*, retaining *ὁ πρεσβευτής σου* in line 7 as the subject. [It is almost impossible in the photograph to decide between *μοι* and *νοι* here, but the first letter seems to be ligatured on to the *omicron*, which would favour *μοι*, as read also by Plumley and Anderson.] *εκαλε[σα]ς* and *τους αδελφους* might both be left uncorrected, the meaning then being ‘*You summoned Breeitek and the brothers of Eienei, but I prevented them (from obeying the summons).*’
9. Instead of *]ελευσεν εμου* perhaps *]ελευσεται μου* or *]ελευσετε μου*. In the lacuna *εὶ καὶ* is an alternative to *εὶ μή*. For *το[υ]ς α]υτους* I would prefer *το[υ]ς κ]αλους*, the tip of the *kappa* being visible in the photograph; this would mean ‘*the honourable men*’, i.e. Abourni’s counsellors. *ακουειν σοι* = *ἀκούεις σύ*.
13. *εκωλυσα ημν* = *ἐκώλυσα(ς) ἡμᾶς*. Is *ἡμᾶς* the Royal ‘We’ or could it mean ‘my people’?
15. *φονεύω* here and in line 16 can certainly have the sense of ‘beating up’, cf. e.g. *P. Lond.* 113. 12 (d) (vol. i, p. 227), where a sixth-century petitioner writes *ἀπέθανον ἐν τῇ φρουρᾷ ταύτῃ . . . ὁ χρεώστης ἐφόνευσέν με*. On the weakened sense of *ἀποκτείνειν* and *ἀποθνήσκειν* in late Greek cf. S. Kapsomenakis, *Voruntersuchungen zu einer Grammatik der Papyri der nachchr. Zeit* (Munich, 1938), 102–3. But the noun *θάνατος* (line 7) can hardly be brought under this head, and I take the view (see above) that *Eienei* had been literally murdered with other members of the diplomatic mission. The singular *φύλαρχον* and *ὑποτύραννον* seem preferable since elsewhere in the letter distinction between singular and plural seems to be generally maintained.
17. *ελυπησης*. Whenever the 2nd person singular aorist occurs elsewhere the voice is active, and I should therefore prefer to retain the active here, = *ἐλύπησάς* sc. *με*, rather than correct to *ἐλυπήθην*.
19. I take *αναχωρησα* and *πεμψα* to stand for *ἀναχωρήσαι* and *πέμψαι*, which would be imperatival infinitives (cf. B. G. Mandilaras, *The Verb in the Greek Non-Literary Papyri*, 316–20).
20. *εδηλωσεν*. Sc. *ἡ σὴ ἀρετή*, as before.
21. *τα της χιρας*. Perhaps a conflation of articles for *τὰς χείρας*.
23. Since *εαν* elsewhere always = if, I should prefer to take it so here, i.e. *εἰαν ἀποθανῆ ὅλα*, ‘*If there should be death for all.*’ Perhaps *οὐ (θέλω) πολεμηῆσαι*.
25. The photograph suggests that the first occurrence of *υμων* is a correction from *ημων*. I have several doubts about this line. *εθελης* as jussive should be preceded by *μή*, not *οὐκ*. I cannot see

the κρ of κρ[ατ]ησαι in the photograph [but it is so read by Plumley and Anderson]. And who are ὄλους τοὺς βασιλέας? Could we read ὄλα <σ>οι (= σὺ), βασιλεῦ, ἐνίκησας καὶ οὐκ ἐθέλησας ἀφήσαι, 'All things, O King, you have conquered and you are unwilling to relinquish them.' [I take the 'Kings' to be the subordinate Kings (see above) as in the Silko inscription.]

Triumphal Inscription of Silko at Talmis (Kalabsha)

Taken from H. Gauthier, *Le Temple de Kalabchah*, i (1911), 204-5 and pl. lxxii A. See also Dittenberger, *O.G.I.S.* i, no. 201.

ἐγὼ Σιλκῶ βασιλικὸς Νουβαδῶν καὶ ὀλων τῶν
 Αἰθιοπῶν ἦλθον εἰς Ταλμῖν καὶ Ταφῖν ἀπαξ δυο ἐπο-
 λεμησα μετὰ τῶν Βλεμμῶν καὶ ὁ θεὸς ἐδωκεν μοι τὸ
 νικημᾶ μετὰ τῶν τριῶν ἀπαξ ἐνίκησα παλιν καὶ ἐκρα-
 τησα τὰς πόλεις αὐτῶν ἐκαθεσθῆν μετὰ τῶν
 οὐχλῶν μου τὸ μὲν πρῶτον ἀπαξ ἐνίκησα αὐτῶν
 καὶ αὐτοὶ ἠξίωσαν με ἐποίησα εἰρηγῆν μετ' αὐτῶν
 καὶ ὤμοσαν μοι τὰ εἰδῶλα αὐτῶν καὶ ἐπιστευσαν τὸν
 ὄρκον αὐτῶν ὡς καλοὶ εἰσὶν ἀνθρώποι ἀναχωρηθῆν
 εἰς τὰ ἀνω μέρη μου ὅτε ἐγεγονεμένη βασιλικῶ
 οὐκ ἀπηλθον ὀλωσ ὀπισθῶ τῶν ἀλλῶν βασιλειῶν
 ἀλλὰ ἀκμῆν ἐμπροσθεν αὐτῶν
 οἱ γὰρ φιλονικουσιν μετ' ἐμοῦ οὐκ ἀφῶ αὐτοὺς καθέζομε-
 νοὶ εἰς χώραν αὐτῶν εἰ μὴ κατηξίωσαν με [κ]α[ι π]αρακαλοῦσιν
 ἐγὼ γὰρ εἰς κατῶ μέρη λεῶν εἰμι καὶ εἰς ἀνω μέρη ἀρξ̄ εἰμι
 ἐπολεμησα [μ]ετὰ τῶν Βλεμμῶν ἀπὸ Πριμ̄ εἰς Τεληλεῶσ
 ἐν ἀπαξ κα[ι οἱ ἀ]λλοὶ Νουβαδῶν ἀνωτέρω ἐπορθησα τὰς
 χώρας αὐτῶν ἐπειδὴ ἐφιλονικησοῦσιν μετ' ἐμοῦ
 οἱ δεσποτ(αι) τῶν ἀλλῶν ἐθνῶν οἱ φιλονικουσιν μετ' ἐμοῦ
 οὐκ ἀφῶ αὐτοὺς καθέσθην εἰς τὴν σκιαν εἰ μὴ ὑπὸ ἡλίου
 ἐξῶ καὶ οὐκ ἐπῶκαν νηρον̄ ἐσῶ εἰς τὴν οἰκίαν αὐτῶν οἱ γὰρ
 ἀ[ν]τι(δ)ικοὶ μου ἀρπαζῶ τῶν γυναικῶν καὶ τὰ παιδία αὐτῶν

For those unfamiliar with the inscription it may be desirable to point out that the word ἀπαξ which occurs repeatedly means 'time' or 'occasion'. It has been suggested that this originated in Coptic, and that the drafter of the inscription was therefore Coptic-speaking; but in fact the usage occurs in Greek early enough to preclude a Coptic origin, cf. Wilcken, *Archiv für Papyrusforschung*, vi (1920), 379 and *P. Abinn.* 32, 12. In line 15 ἀρξ̄ = ἄρκος = 'bear', while in line 21 νηρον̄ means 'water', cf. modern Greek νερό.

Handwritten text in a cursive script, likely a letter or document. The text is written in a dark ink on aged, yellowed paper. The script is dense and fills most of the page. There are some faint markings and bleed-through from the reverse side of the paper. The text is arranged in several lines, with some words appearing to be in a different script or dialect than others, possibly indicating a mix of languages or a specific regional dialect. The overall appearance is that of an ancient or historical document.

A LETTER FROM THE KING OF THE BLEMMYES TO THE KING OF THE NOUBADES

MUSEUM ACQUISITIONS, 1975

Egyptian antiquities acquired in 1975 by museums in the United Kingdom

Edited by JANINE BOURRIAU

THE format follows that of the first list of acquisitions in *JEA* 62 (1976), 145–8. Several museums received objects from the excavations of the Egypt Exploration Society at Saqqâra. None of these objects is illustrated and the entries for some of them are very brief, since full accounts will be given in the relevant volumes of the excavation report.

Neolithic

1–2. Flint arrowhead and knife. Ashmolean 1975.276–7. Lengths 4.1, 9.5 cm. Fayûm Neolithic A.

Early Dynastic Period

3–5. Diorite bowl and two alabaster vases. British Museum 68302–3, 68305. Heights respectively 6.9, 10.5, 25.8 cm. Saqqâra, EES excavations.

6. Alabaster model vase. Petrie Collection U.C. 30826. Only slight hollowing out of interior. Height 10.95 cm. Saqqâra, EES excavations (Sak. 71/2–103).

7–9. Three ivory rings. British Museum 68316–18. Between 4.6 and 5 cm in diameter. Saqqâra, EES excavations. Early Dynastic–Old Kingdom.

Old Kingdom

10. Fragment of limestone offering table with beginning of text invoking Anubis. Fitzwilliam E. 47.1975. Length 15.4 cm. Saqqâra, EES excavations (H5–2811).

11–12. Two bowls, alabaster and limestone. British Museum 68304, Fitzwilliam E. 48.1975. Heights 9.1, 10.1 cm. Saqqâra, EES excavations.

13. Red burnished ware pot. British Museum 68310. Saqqâra, EES excavations.

14. Roughly cut wooden foot from a piece of furniture. Fitzwilliam E. 49.1975. Height 15.3 cm. Saqqâra, EES excavations (Sak. 71/2 253).

Middle Kingdom

15. Glazed steatite scarab, scroll design. Ashmolean 1975.307. Length 1.6 cm.

16. Pottery saucer containing traces of myrrh and juniper resin (?). Ashmolean 1975.253. Diameter 4.6 cm. From refuse of embalmer's workshop at Deir el-Bahari, Middle Kingdom (?).

Second Intermediate Period

17. Steatite scarab, glaze lost, with scroll design. Manchester 1975.11 (pl. XXIX, 3). Length 1.7 cm.

18–20. Three alabaster kohl pots and two lids. Ashmolean 1975.244–6 (pl. XXVIII, 1). Heights respectively 5.1, 7.6, 3.6 cm. Probably all from Abydos, Garstang 1900, 1908–9 excavations, from respectively tomb E. 230 (see *El Arâbah* (1901), 45), and tombs 118, 1081.

New Kingdom

21-4. Three glazed steatite and one faience scarab inscribed for the following, the Chief Prophet of Amūn, Senres, the *ḥṣty-ꜥ*, Dja, the Lady of the House, Ii-ib, and the *ḥṣty-ꜥ* Resy-a. Fitzwilliam E. 27-30.1975 (pl. XXVIII, 2). Lengths respectively 1.45, 1.35, 1.75, 1.55 cm. Early Eighteenth Dynasty. See *Sotheby's Sale Catalogue*, April 21st, 1975, 35 (148-9) with fig.

25. Wooden shabti of Esy. Ashmolean 1975.127. Height 8.9 cm. Thebes, said to be from Dynasty XX tomb.

26. Faience shabti. Ashmolean 1975.243. Height 8.2 cm. Probably Abydos, Garstang 1900 Excavations, New Kingdom (?).

27-31. A red jasper figurine of a trussed calf and four faience plaques depicting two flying birds, an ox's head, haunch and the cartouche of Ramesses II, from foundation deposits. Manchester 1975.13-14 A-D. Respective heights, 1.4, 2.5, 2.0, 1.2, 2.4 cm. According to collector's notes the plaques come from the Ramesseum, cf. Quibell, *The Ramesseum*, p. 6, pl. xv.

32. Two glaze disc-tiles, each with daisy pattern of eight white petals and yellow centre on grey background. Manchester 1975.12 A, B. Diameter 3.3 cm. Collector's notes give provenance as Palace of Ramesses III, Tell el-Yehudiyeh.

33. Cornelian, garnet and glass beads. Ashmolean 1975.417. El Amarna.

Third Intermediate Period

34-5. Two bronze shabtis of Psusennes I and the overseer of the army, Wendjebaudjed. British Museum 68526-7. Height 7.6 and 8.4 cm. Tanis. Twenty-first Dynasty. See Charles Ede, *Small Sculpture from Ancient Egypt* (London, 1975), no. 28.

36-8. Three faience shabtis of Djemut, Esamūn, and Djekhons. Ashmolean 1975.238-40 (pl. XXVIII, 3). Abydos, Garstang 1900 excavations. Twenty-first-Twenty-fourth Dynasty. See below, Jaromír Málek, 'New ushabtis of the Third Intermediate Period in the Ashmolean Museum', p. 180.

39-40. Two shabtis, painted mud and faience, of Pauseramūn and Amenemōpe. Ashmolean 1975.241, 328 (pl. XXVIII, 3). Twenty-first-Twenty-fourth Dynasty. See below, Jaromír Málek, op. cit. pp. 180 f.

41. Pottery shabti. Ashmolean 1975.242 (pl. XXVIII, 3). Height 7.8 cm. Probably from Abydos, Garstang 1900 excavations, Twenty-first-Twenty-fourth Dynasty.

42. Faience shabti. Ashmolean 1975.160 (pl. XXVIII, 3). Height 10.7 cm. Twenty-first-Twenty-fourth Dynasty.

43-6. Scarabs, three steatite and one green jasper, inscribed for the following, the God's Wife, Divine Adoratrice, Shepenwepet, the Divine Adoratrice, God's Wife, Amenirdis, Taharka and Djed-ka-rēꜥ (Shebitku). Manchester 1975.7-10 (pl. XXIX, 3). Lengths respectively 1.6, 1.6, 2.4, 1.7 cm. Twenty-fifth Dynasty. See *Sotheby's Sale Catalogue*, April 21st, 1975. 21 (77) with fig.

Late Period

47. Rising handle from large pottery brazier. Ashmolean 1975.418 (pl. XXIX, 2). Ptolemaic.

48. Pottery flask, two handled. Ashmolean 1975.420. Height 14.4 cm. Abu Qir. Roman.

49. Deep-blue glazed faience vase. Ashmolean 1975.419 (pl. XXVIII, 4). Height 6.8 cm.

50. Faience beads and pendants. Ashmolean 1975.161.

51. Wooden door-bolt (?). Ashmolean 1975.254. Length 15.8 cm. Fayûm, probably Grenfell & Hunt excavations, Second century A.D.

52. Limestone grave stela of a woman, with traces of paint. Fitzwilliam E. 83.1975 (pl. XXIX, 1). Probably from Kôm Abu Billu. First to second centuries A.D. To be published shortly by Janine Bourriau.

53. Piece of Coptic (?) twill-woven silk, in two colours (fawn and light brown), showing opposed figures of hunters and beasts within roundels. Roy. Scot. Mus. 1975.299. Height 17.7 × 19.2 cm. (pl. XXIX, 4). Sixth century A.D.

54. Menas-ampulla, cream earthenware, decorated in relief with the figure of St. Menas flanked by camels. Roy. Scot. Mus. 1975.519. Height 9.8 cm, diam. 6.7 cm. Fifth to sixth century A.D.

The rest of the objects in this list come from the EES excavations at Saqqâra. Not listed individually are a selection of faience amulets, bronze figurines of divinities, and pottery, which were received by the following: British Museum, Gulbenkian, Fitzwilliam, and Manchester museums, and the Petrie Collection in University College, London.¹

55-67. Twelve bronze situlae, four decorated or inscribed. Gulbenkian, Fitzwilliam, Manchester museums, and Petrie Collection. Average height 8.3 cm. Excavation numbers G4-78, G4-66, G6-11, H5-2764, G4-74, G4-1, H5-302.

68. Bronze figure of a kneeling king. British Museum 68294. Height 7 cm.

69. Fragments of lead, comprising part of the head of a 'ba' bird. British Museum 68299.

70. Limestone head of a foreigner. Petrie Collection U.C. 30820. Features incised; details of wig in black paint. Height 2.6 cm. Excavation number H5-2833.

71. Limestone figure of a baboon. British Museum 68306. Height 10.5 cm.

72-3. Two terracotta statuettes of Bes, and of a devotee of Isis, incomplete. British Museum 68308, Fitzwilliam E. 57-1975. Heights respectively 15.5 and 7.0 cm.

74. Limestone relief plaque of a naked woman, head and feet broken away. Fitzwilliam E. 50.1975. Height 5.6 cm. Excavation number H5-2851. *c.* Fifth to fourth centuries B.C.

75. Plaster figure of Hermes(?), flesh painted pink and details in black, head broken away, Fitzwilliam E. 56.1975. Height 15.5 cm. Excavation number Sak. 71/2 75, *c.* Second century B.C. See *JEA* 59 (1973), 12, pl. 10, 2.

76-82. Group of phallic objects of limestone, plaster, and terracotta in the British Museum, Fitzwilliam, Manchester museums and the Petrie Collection. Excavation numbers Sak 71/2, 58, 76, 255, 258, H5-2853, 2855. Fifth to second century B.C.

83-4. Fragments of two shabtis, faience and limestone, inscriptions lost. Gulbenkian 1975/48, Manchester 1975.38. Heights 5.5, 7.8 cm. Excavation numbers 15-1, Sak. 71/2 216.

85. Central part of a limestone offering table, inscribed with offering formula mentioning Horus of Buto, Osiris Apis, and Khonsu. Fitzwilliam E. 53.1975. Height 11.4 cm. Excavation number H4-2825.

86-7. Two fragments of a reused limestone slab marked out for the game of Senet and a limestone gaming die. Fitzwilliam E. 52a-b.1975 and British Museum 68307. Height 13.2, 11.1, 1.2 cm.

88. Greywacke scarab, incomplete. Petrie Collection U.C. 30825. Details incised. Length 2.25 cm. Excavation number Sak. 71/2 43.

¹ Objects found at Saqqâra but clearly made outside Egypt and imported to the site, such as the Samian bronze Griffon's head from a cauldron, Fitzwilliam GR. 5.1975, have been omitted.

89. Papyrus roll, uninscribed. British Museum 68321. Width 3 cm, diameter of roll 2.0–2.5 cm.
90–3. Four mud seals, two fragmentary, from papyrus rolls. British Museum 68312–15. Average length 1.6 cm.
94. Rectangular papyrus tag, uninscribed. Fitzwilliam E. 78.1975. 8.2 × 7.3 cm. Excavation number Sak. 71/2 383.
95. Two sandal straps of reed, inscribed in Demotic. Fitzwilliam E. 79a–b.1975. Lengths 32.6, 28.2 cm. Excavation numbers Sak. 71/2 218–19. Ptolemaic.
- 96–104. Two caches of bronze coins. Manchester (not yet registered but excavation numbers Sak. 71/2 318 a–g), Fitzwilliam, Department of Coins and Medals 251–258.1975. Ptolemaic. For the latter see Deposit 3, *JEA* 59 (1973), 14, pl. xvii.
- 105–7. Blue faience vase, dish and rim fragment of a four-handled jar. Petrie Collection U.C. 30827, and Fitzwilliam E. 74–5.1975. Heights respectively 8.85, 2.5, 5.9 cm. Excavation numbers Sak. 71/2 47, J4–2, Sak. 71/215.
108. Lower part of turquoise glazed pottery lamp. Fitzwilliam E. 82.1975. Height 4.1 cm. Excavation number H5–2788. Coptic or early Islamic.
- 109–10. Hawk mummy with remains of painted plaster mask on head and skull of a baboon. Fitzwilliam E. 80.1975, British Museum 68322. Heights 28.5, 12.5 cm.
- 111–12. Two bronze rectangular cases for a mummified falcon and ichneumon, surmounted by figures of the animals. British Museum 68291–2. Height 13.8 × 16, 4.2 × 14.5 cm.
113. Wooden box for mummified animal with scarab in relief on reverse side. Petrie Collection U.C. 30823. Length 8.3 cm. Excavation number H5–2697.
- 114–15. Rectangular wood and cord box, and oval rush work basket with two small handles. Petrie Collection U.C. 30829–30. Heights 12.0, 14.0 cm. Excavation numbers Sak. 71/2 108, 249.
116. Wooden comb, broken. Fitzwilliam E. 81.1975. Excavation number Sak. 71/2 27.
- 117–19. Two socketed arrowheads and a hook, bronze. British Museum, 68296–8. Length 2.6, 4.2, 1.4 cm.
- 120–1. Two pieces of plain woven linen. British Museum 68319–20. Lengths 96.5 × 68.5 cm, 190.0 × 43.0 cm.

Date uncertain

- 122–33. Flint tools and flakes. Ashmolean 1975.278–81, 282–4, 285–9, from respectively, Serabit el-Khadim, Wadi Maghara, and Sinai.

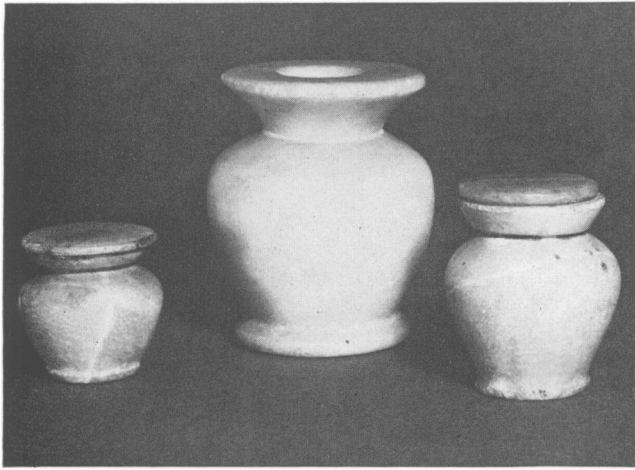
BRIEF COMMUNICATIONS

The structure of the Meidum Pyramid

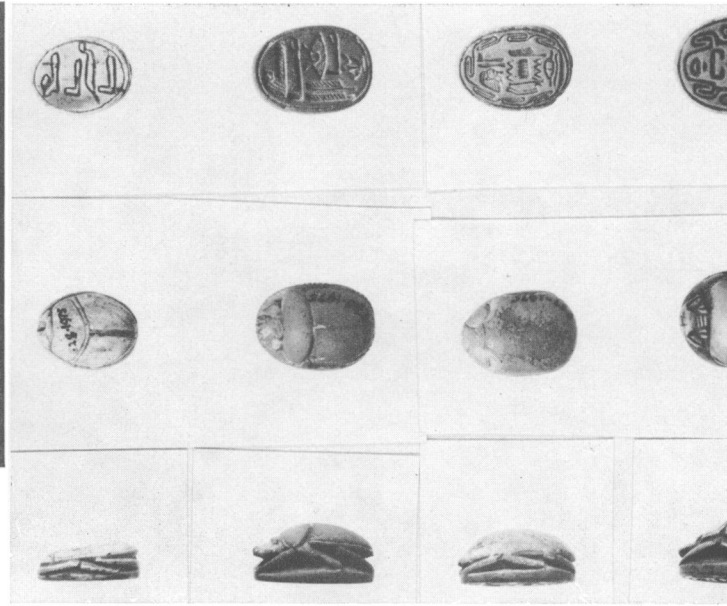
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C. J. DAVEY



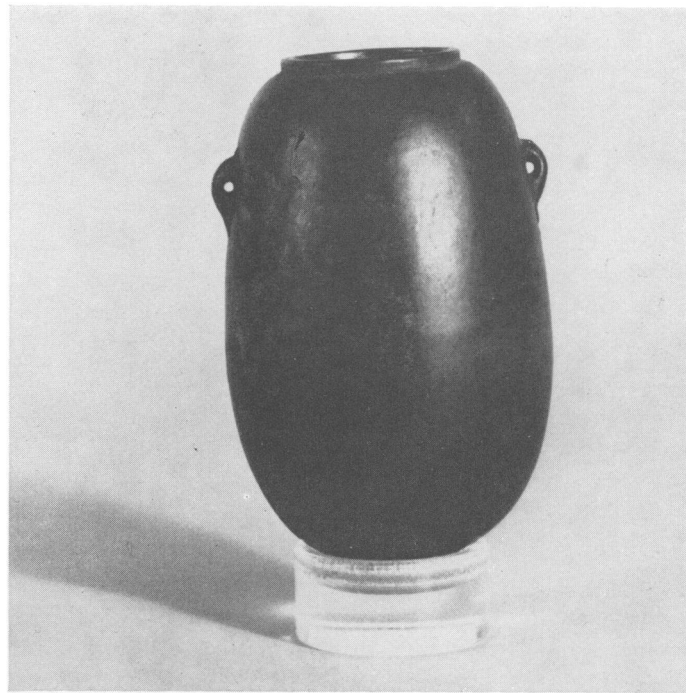
1. Alabaster kohl pots, Ashmolean Museum, 20, 19, 18



2. Glazed steatite and faience scarabs, Fitzwilliam Museum, 22, 21, 20, 19



3. Faience, painted mud and pottery shabtis, Ashmolean Museum, 40, 39, 41, 36, 42, 37-8



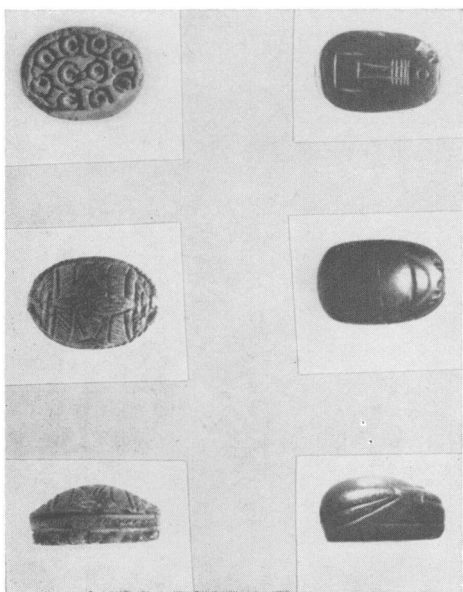
4. Faience vase, Ashmolean Museum, 49



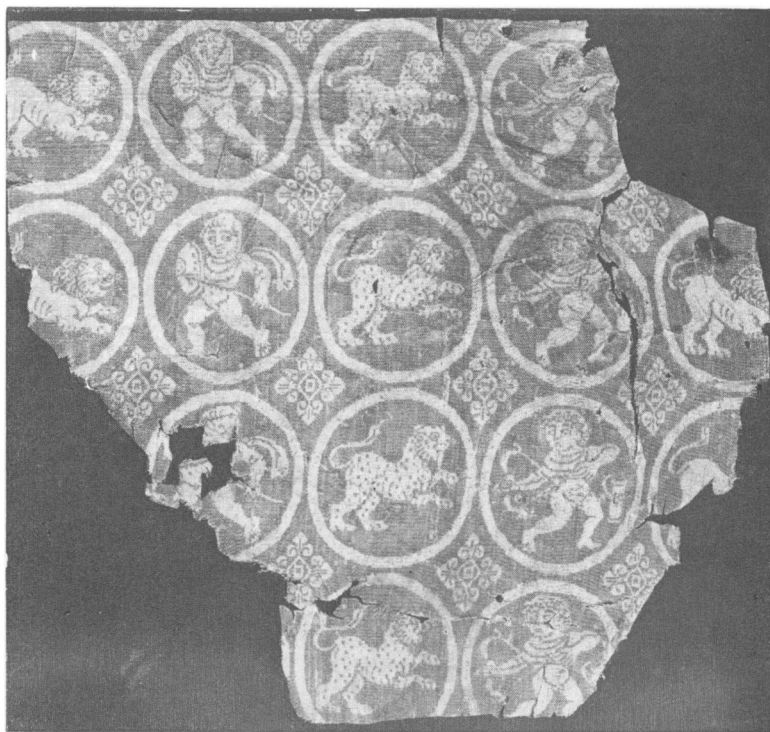
1. Limestone stela, Fitzwilliam Museum, 52



2. Handle from brazier, Ashmolean Museum, 47



3. Scarabs, Manchester, 17, 46



4. Fragment of Coptic silk, Royal Scottish Museum, 53

89. Papyrus roll, uninscribed. British Museum 68321. Width 3 cm, diameter of roll 2.0–2.5 cm.
90–3. Four mud seals, two fragmentary, from papyrus rolls. British Museum 68312–15. Average length 1.6 cm.
94. Rectangular papyrus tag, uninscribed. Fitzwilliam E. 78.1975. 8.2 × 7.3 cm. Excavation number Sak. 71/2 383.
95. Two sandal straps of reed, inscribed in Demotic. Fitzwilliam E. 79a–b.1975. Lengths 32.6, 28.2 cm. Excavation numbers Sak. 71/2 218–19. Ptolemaic.
- 96–104. Two caches of bronze coins. Manchester (not yet registered but excavation numbers Sak. 71/2 318 a–g), Fitzwilliam, Department of Coins and Medals 251–258.1975. Ptolemaic. For the latter see Deposit 3, *JEA* 59 (1973), 14, pl. xvii.
- 105–7. Blue faience vase, dish and rim fragment of a four-handled jar. Petrie Collection U.C. 30827, and Fitzwilliam E. 74–5.1975. Heights respectively 8.85, 2.5, 5.9 cm. Excavation numbers Sak. 71/2 47, J4–2, Sak. 71/215.
108. Lower part of turquoise glazed pottery lamp. Fitzwilliam E. 82.1975. Height 4.1 cm. Excavation number H5–2788. Coptic or early Islamic.
- 109–10. Hawk mummy with remains of painted plaster mask on head and skull of a baboon. Fitzwilliam E. 80.1975, British Museum 68322. Heights 28.5, 12.5 cm.
- 111–12. Two bronze rectangular cases for a mummified falcon and ichneumon, surmounted by figures of the animals. British Museum 68291–2. Height 13.8 × 16, 4.2 × 14.5 cm.
113. Wooden box for mummified animal with scarab in relief on reverse side. Petrie Collection U.C. 30823. Length 8.3 cm. Excavation number H5–2697.
- 114–15. Rectangular wood and cord box, and oval rush work basket with two small handles. Petrie Collection U.C. 30829–30. Heights 12.0, 14.0 cm. Excavation numbers Sak. 71/2 108, 249.
116. Wooden comb, broken. Fitzwilliam E. 81.1975. Excavation number Sak. 71/2 27.
- 117–19. Two socketed arrowheads and a hook, bronze. British Museum, 68296–8. Length 2.6, 4.2, 1.4 cm.
- 120–1. Two pieces of plain woven linen. British Museum 68319–20. Lengths 96.5 × 68.5 cm, 190.0 × 43.0 cm.

Date uncertain

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C. J. DAVEY

An additional dog's name from a Giza mastaba

THE list of names of dogs provided by the late J. M. A. Janssen has been extended and commented upon by H. G. Fischer.¹ Since it seems unlikely that the subject will be pursued in detail for some time, it may be appropriate to note a single additional example from the Giza area. This is the name *Inhb* on a block photographed by Reisner in G 2042a, a chapel situated just east of the great mastaba G 2000 and built just north of the entrance to the southern chapel of that mastaba (fig. 1).² The dog with curled tail, high ears, and a collar with a tie is placed on a low platform or podium, a feature which with human figures is generally assumed to indicate that it supports a statue rather than a living figure. In this case it presumably represents a cushion or a sort of dog bed. The block is apparently the only element preserved from the chapel. Although the legs of the chair on which the tomb owner sits have bull's feet, a feature more characteristic of the Fifth Dynasty than the lion's feet of many Sixth-Dynasty chapels, the area in which the mastaba was erected suggests a late Sixth-Dynasty date. *Inhb* does not seem to be attested as a personal name, geographical designation, or lexical term. Although most dog names are clearly Egyptian, one may venture to include *Inhb* among the names usually regarded as foreign, perhaps in this case as a Libyan name.

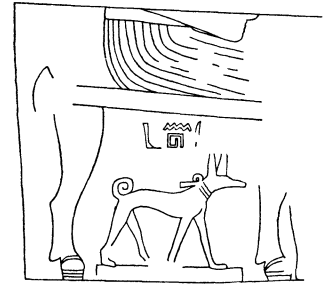


FIG. 1

WILLIAM KELLY SIMPSON

The provenance of a fragment attributed to *Hnw* at Saqqâra

B. J. DEMARÉE has called my attention to the fact that I have overlooked two references in Edel's *Altägyptische Grammatik*, § 485 [Nachträge] and § 1080, to the Old-Kingdom fragment published in *JEA* 61, 33–5. Unfortunate as it is, this oversight would not be worth mentioning were it not for the fact that, in both cases, Edel attributes the fragment to the 'Grab des *Hnw*'. This reference would seem to indicate the well-known tomb of *Hnw* on the Unis Causeway at Saqqâra, to which he refers in his § 160 (p. 71 n. 1), and which is discussed by Altenmüller, *SAK* 1 (1974), 6–8. In response to my inquiry, however, Professor Edel has informed me that he did not find the inscription in the chapel of *Hnw* but in a storeroom of the Egyptian Department of Antiquities, from which it was evidently stolen. One and a half columns of inscription were sawn off the slab after its removal, presumably from the right side, and the name *Hnw* occurs on the missing portion.

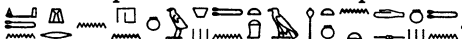
While I have no further information that might identify this *Hnw* more clearly, it seems unlikely that he is the same as the one for whom the aforementioned chapel was constructed. The hieroglyphs of the new fragment are less deeply cut than those of the other *Hnw*; the cartouche of Unis is horizontal rather than vertical, as in the columnar inscriptions of the other, and $\overline{\text{nw}}$ is more angular (as in Piankoff, *The Pyramid of Unas*, pl. 70 [245]). This question of provenance is of some interest because, as Altenmüller points out, the Causeway chapel of *Hnw* can hardly be earlier than the very end of the Sixth Dynasty, while the new fragment evidently refers to a contemporary of Unis, the last ruler of Dynasty V.

HENRY G. FISCHER

¹ J. M. A. Janssen, 'Über Hundenamen im pharaonischen Ägypten', *MDAIK* 16 (1958), 176–82; H. G. Fischer, 'A supplement to Janssen's list of dogs' names', *JEA* 47 (1961), 152–3.

² Kindly drawn for me from a photograph by Miss Suzanne E. Chapman of the Department of Egyptian and Ancient Near Eastern Art of the Museum of Fine Arts, Boston.

***Hrw* 'bottom' and *tꜥht* 'dregs' (Brooklyn 57. 140)**

IN his admirable *Corpus of Hieroglyphic Inscriptions in The Brooklyn Museum*, vol. I, p. 59, T. G. H. James translates part of an address to passers-by, exhorting them to leave offerings in the following terms: . Although he translates 'you should give the contents of your vessels and the liquid (?) of your jugs',¹ James rightly points out that the word translated 'liquid' is *tꜥht*, with a mistaken substitution of ꜥ for ꜥ, and he notes that the translation 'dregs' has been suggested for this word, which occurs in *Admonitions* and in medical texts. That is certainly its meaning here, for the word translated 'contents' is not *hrt* but *hrw* 'bottom', 'underside' (*Wb.* III, 392). Thus the translation is more precisely: 'you should give the bottom of your bowls and the dregs of your jars'. Gardiner's translation of the aforementioned occurrence of *tꜥht* in *Admonitions* is strikingly confirmed, for the context is very similar: 'He who begged for himself his dregs is (now) the possessor of bowls full to overflowing'.² But the chief interest of the Brooklyn passage lies in this hitherto unattested application of *hrw*. HENRY G. FISCHER

The sheyba in ancient Egypt

IN the tomb of Huy, Prince of Kush, No. 40 at Qurnet Mur'rai, there appear paintings of negro prisoners with their hands confined by manacles, and wearing around their necks a peculiar sort of white collar which has a long straight appendage falling down the front of the body and terminating in a slight flare below the level of the knees.³ Gardiner⁴ describes such objects as white ties passing round the necks of the captives by which they could be hauled along. Vandier⁵ describes them as 'une sorte de cravate, se prolongeant par un grand pan qui tombe en avant, et qui servait, sans doute, à les retenir aisément quand ils cherchaient à s'échapper'. Both scholars seem to take the view that these halters are made of a pliable textile that may be knotted upon itself.

There is another representation of the same tie in use in the tomb of the Steward Meryrꜥat Amarna (Tomb No. 1), where in the scene of the presentation of gifts to the king, a number of negro captives are shown being hauled into the royal presence by such halters.⁶ Davies⁷ identifies the contingent as 'about a dozen male negroes . . . being dragged forward by ropes tied around their necks and fettering their wrists also'. A similar representation is shown in the adjacent tomb of the Steward Huy,⁸ where a different version of the tribute scene appears, but this is less detailed and more damaged.

Yet another illustration of the same means of restraint is painted on the north wall of the inner chamber of the tomb of Neferhotep, No. 49 in el-'Asasif.⁹ Here, according to Davies,¹⁰ is an 'unblushing depiction of the very rough usage accorded to the serfs or slaves of the estate (of Amūn) at the orders of the overseer whose servants armed with clubs and a noose, lasso the unfortunate herdsmen as if they were so many cattle and drag them up for inspection'.

Such descriptions of these restraints as ties, cravats, ropes, nooses, or lassoes cannot be correct. In the first place they differ markedly in thickness from the ropes used to confine the Asiatic captives in the same scenes. Moreover they do not fall into the catenary curve that such ropes assume,

¹ So also B. V. Bothmer in *Brooklyn Museum Bulletin*, 20/4 (Fall 1959), 16. This has been cited anew by David Silverman in *JEA* 61 (1975), 249 n. 5, again quoting the alleged example of *hr* 'contents'.

² *Admonitions*, p. 58, translating lines 7, 11.

³ Davies and Gardiner, *T. of Huy*, pls. 30, 31.

⁵ *Manuel*, IV, 607-8.

⁷ *Ibid.*, p. 39.

⁹ Davies, *Tomb of Nefer-hotep*, pl. 43.

⁴ *Ibid.*, p. 24.

⁶ Davies, *Rock Tombs of El-Amarna*, II, pl. 37.

⁸ Davies, *op. cit.* III, pl. 14.

¹⁰ *Ibid.*, p. 33.

as may be readily seen by comparing the almost contemporary relief from the Saqqâra tomb of Horemheb where a reluctant Asiatic prisoner is dragged by an unmistakable rope before the royal pair.¹ It will also be noted that such ropes are connected to the handcuffs of the Asiatic captives and are not fixed around their necks. In the case of the negroes, however, their guards lead them by thick, rigid, and straight ligatures which have more the appearance of poles than ropes and are directly connected to the collar.

In the significant representation in the tomb of Neferhotep, the negro, *pace* Davies, is not being lassoed and dragged forward by a flexible rope, but is being *jerked back* by the thrust of an unyielding pole, as will be seen by the posture of the prisoner and the drawing of the hand of his guard which is shown in a thrusting motion rather than a grasping and pulling action. In the writer's opinion this leaves very little doubt that these ties, which are peculiar to the African captives, are not ropes but slave-yokes or 'taming-sticks'. Such devices were still in use in East Africa when traders and missionaries began to open up the region to European penetration about the middle of the last century. Livingstone, for instance, describes their use in a letter to his daughter, and adds a sketch of a typical example which takes the form of a Y-shaped log of wood cut from the trunk of a young tree with two shortened divergent arms at its thinner end.² Elsewhere in his journal for April 11th, 1859 he describes such a device as, 'an implement for taming any slave who being recently sold is troublesome. It is a piece of wood four or five inches thick, six or seven feet long, forked at one end. The neck is inserted in the fork and another slave carries the free end. At night when tied by the other end to a tree the slave is helpless.'³

Most large ethnographic collections have examples of such implements which, as Livingstone explains, reveal that the head of the wearer was confined in the fork of the yoke by a stick, or an iron pin,⁴ passing through holes near the ends of the divergent limbs, or by a withy tied around knuckles carved as terminals. An example from Nyasaland, formerly in the Royal Scottish Museum, measuring about two metres in length and nine centimetres in diameter, had had its bark removed and presented a smooth appearance which originally must have been white and glistening, like the startling white colour given to the yokes represented in the tomb of Huy.⁵

Different local names exist for this yoke among the peoples who were conversant with its use. The writer prefers the term 'sheyba' used by G. Schweinfurth⁶ in a Nilotic context when describing the implement in use among the slaves from the Baḥr el-Ghazāl. Such yokes are very rarely represented in Ancient Egypt, the only examples known to the writer being the four instances cited above. The somewhat ambiguous pictures given in the tomb of Huy also suggest that the artist was unfamiliar with their exact use. The usual Egyptian forms of restraint from earliest times are the thongs pinioning the captive at the elbows, and the leading-string around the neck. The slave-yoke appears only in an African context for a very brief period at the end of Dynasty XVIII, and this suggests that it was a device that the Egyptians adopted rather than introduced in a region where slave-raiding has been endemic for many centuries.

CYRIL ALDRED

¹ e.g. Lange and Hirmer, *Egypt*⁴, pl. 206.

² Cf. the drawing given on p. 137 of D. and C. Livingstone, *Narrative of an Expedition to the Zambesi* (New York, 1866). I am indebted to my colleague Dale Idiens for this reference and that given in the next note.

³ J. P. R. Wallis (ed.), *The Zambesi Expedition of David Livingstone, 1858-1863* (London, 1956), Vol. 1, 98. Cf. J. Roscoe, *Twenty-Five Years in East Africa* (Cambridge, 1921) 13.

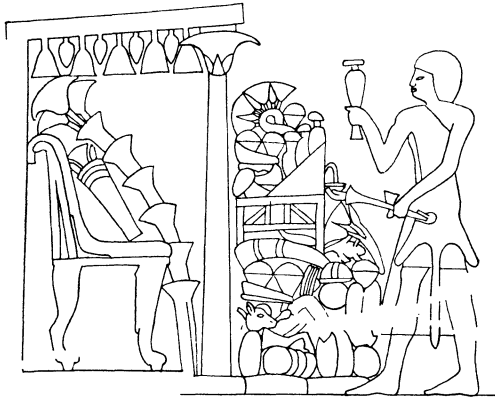
⁴ A. Werner, *Natives of British Central Africa* (London, 1906), 267.

⁵ This specimen is now in the collection of the Scottish National Memorial to David Livingstone, Blantyre, Lanarkshire. The light colour of such yokes would presumably make it easy for the slave to be located at night.

⁶ *The Heart of Africa* (London, 1873), Vol. II, 414.

An allegory of death

ON the north wall of the passage of the Theban tomb of Kha^cemḥat (P.-M. I¹, 1960, p. 118, 21-2) appears a sub-scene showing the Abydos pilgrimage and a *setem*-priest censuring and libating before



a chair. One would expect a seated figure of the deceased; instead the chair is empty and piled with funerary bouquets.¹ The peculiar representation appears in one other Theban tomb, that of Amenhotep-si-se, and again in connection with the journey to and from Abydos.² The two scenes appear to be a discreet allegory of death, representing the deceased as 'departed'.

A similar representation is seen in the painted burial chamber of 'Ankmaḥor Sesi at Saqqâra where, in place of the expected figure of the deceased at an offering table with his titles above his head, we find an empty chair.³ In this last instance, of course, it is always possible to explain

away the allegory as another instance of the suppression of the human form in texts in close proximity to the body.⁴

The empty chair did not always signify death, however, even in the New Kingdom. On the northern wall of the entrance hall to Ḥatshepsut's Deir el-Baḥari shrine to Hathor is depicted the arrival of the great annual river procession of Amūn on the west side of the river.⁵ At least three royal barges are shown with their thrones empty as though the royal occupants had left to join the procession. The funeral bouquets here are replaced by royal *flabella*, which Naville takes as a substitute for the royal ka.⁶ One might rather speculate that it represents the royal *šwyt* ḥ^c, the 'shade', as part of a person's personality (*Wb.* IV, 432-3, 5; see also 432, 11, 12).

EDWARD BROVARSKI

Zum Wechsel *k/q* in ägyptischen Transkriptionen

DIE ägyptischen Wiedergaben des Namens der Stadt Karkemisch (*ḡerabluš* am mittleren Euphrat) zeigen bekanntlich einen originellen Wechsel der Verschlußlaute, der schon M. Burchardt⁷ Schwierigkeiten bereitet haben muß, wenn er gesteht, daß er über das gegenseitige Verhältnis der beiden Formen *qrqmš* und *krkmš* 'nichts anzugeben' vermöge. Die seit Burchardt neu beigebrachten Belege haben das Bild einer unsystematischen Variabilität nicht wesentlich verändert, ja eher noch verwirrender gestaltet, wie es die jüngste Übersicht von W. Helck⁸ erkennen läßt.

¹ I would like to thank Mr. Nicholas Thayer of the staff of the Egyptian Department of the Museum of Fine Arts, Boston, for the drawing reproduced here from Wreszinski, *Atlas*, I, 207.

² Davies, *The Tombs of Two Officials of Tutmosis IV* (1923), 17, pl. 17. For the day of the funeral as *hrw šḥr cbwt* 'the day of setting up floral bouquets', cf. Faulkner, *JEA* 37 (1951), 47.

³ Firth and Gunn, *Teti Pyramid Cemeteries* (1926), pl. 6.

⁴ Lacau, *ZÄS* 51 (1914), 33 ff. Human figures are shown, however, in the scenes of daily life in the burial chamber of *Ki-m-ḥnḥ* at Giza, Junker, *Giza IV* (1940), 43 ff., so that the prohibition does not seem at all universal.

⁵ Naville, *Deir el-Bahari*, IV (1901), pls. 88-91.

⁶ *Ibid.*, p. 2.

⁷ *Die althanaanäischen Fremdworte und Eigennamen im Ägyptischen*, II (Leipzig, 1910), 52 (Nr. 1019).

⁸ *Die Beziehungen Ägyptens zu Vorderasien im 3. und 2. Jahrtausend v. Chr.* (Äg. Abh. 5, Wiesbaden⁸, 1971), 290.

Die zeitliche Verteilung der Schreibungen kann auch mit folgender Aufstellung verdeutlicht werden:

- Tuthmosis III. *k* (*Urk.* IV 792, 3 = Simons, *Liste* I 270)
q (*Urk.* IV 891, 3)
- Amenophis III. *q* (Simons, *Liste* IX f. 3; Edel, *A_N* re. 8)
- Ramses II. *k* (*KRI* II 4, 7. 8. 9. 10; 18, 1. 3; 51, 1. 2. 3. 4. 5; III, 13. 14; 145, 11)
q (*KRI* II 4, 11; 17, 15; 18, 5?; 51, 6)
- Ramses III. *k* (*KRI* V 94, 29 = Simons, *Liste* XXVII 29)
 und Nachf. *q* (*KRI* V 39, 16; Ostrakon Kairo 25807)
g (*AEO* 132*)

Der Befund unter Ramses II. gestattet eine Differenzierung nach hieroglyphischen (*k*) und hieratischen (*q*) Texten, die allesamt in Beziehung zur Qadešschlacht stehen.¹ Eine Tendenz zur Systematisation der Umschrift wird hier jedoch bestenfalls nur im Ansatz greifbar. Die keilschriftlichen Wiedergaben bab. *k/gargamiš/s*, ug. *krgrmš* mit dem hebr. Äquivalent *krkmjš* (vgl. *KBL*³ 474) legen die Vermutung nahe, daß die ägyptischen Varianten einer wechselseitigen Assimilation der Verschlußlaute unterliegen.^{1a}

Ein Wechsel *k/q* ist scheinbar auch in einem weiteren Fall mit nahezu vergleichbarem Belegspektrum gegeben. Von den Schreibungen eines Namens, der in dem modernen *el-qalamun* (südwestlich v. Tripolis) bewahrt ist, kann zunächst die Gruppe *qrmm* der Position in den Listen wegen (*KRI* I 33.24 = Simons, *Liste* XV 24; gewiß auch in *KRI* I 32.61^A = Simons, *Liste* XIII 61, *KRI* II 177.36 = Simons, *Liste* XXI 9, *KRI* II 178.17 = Simons *Liste* XX 17; ob auch in *KRI* I 29.66^A = Simons, *Liste* XIV 63, *KRI* I 34.24 oder noch in *KRI* I 35.28?) für sich genommen werden. Von dieser unter Sethos I. und Ramses II. belegten Form wird jedoch die in anderem Kontext enthaltene Bildung *qrmm* (*KRI* II 161.20 = Simons, *Liste* XXIII 20 / / *KRI* V 95.84 = Simons, *Liste* XXVII 84) nicht getrennt werden dürfen. Auf der anderen Seite stehen mehrere mit den genannten teilweise identifizierte Schreibungen mit anlautendem *k*, wie zunächst die Form *krmjn* (*KRI* II 156,16; 182,6), beigeschrieben zu Kriegsszenen in Karnak bzw. Luxor.² Dazu kommen 1. *krmjn* (*KRI* V 95.74 = Simons, *Liste* XXVII 74)³ und vielleicht 2. *krmrn* (pAnast. I 22,3) als wahrscheinlich verderbte Schreibung,⁴ Namen offenbar aus dem Umfeld von Qadeš. Ob mit Kitchen die Torso-schreibung *kr* . . . (*KRI* II 161.42 = Simons, *Liste* XXIII 43) beigezogen werden darf,⁵ erscheint zweifelhaft. Stattdessen wäre eher mit W. M. Müller⁶ an eine Ergänzung der wahrscheinlichen Lesung *krm*. . . (*KRI* II 161.48 = Simons, *Liste* XXIII 49) zu denken. Mit größerer Sicherheit können wir dagegen ebenfalls mit W. M. Müller⁷ die Form *krjmn* (Simons, *Liste* I 49) heranziehen:

¹ Vgl. Helck, op. cit. 290.

^{1a} Zusatz: Beleg unter Haremheb (*q*): Redford, *BASOR* 211 (1973), 42.

² Vgl. dazu K. A. Kitchen, *JEA* 50 (1964), 57 f. Kitchens Kritik (op. cit. 57, Anm. 7) an W. Wreszinskis Lesung des Karnakbelegs übersieht, daß im Text zu *Atlas zur altägyptischen Kulturgeschichte*, II (Leipzig, 1935), Taf. 54a immerhin *krmjn* gelesen wird, nach M. Noth, *ZDPV* 64 (1941), 67, Anm. 113 in einer 'hieroglyphischen Phantasieschreibung' (!). Die von Kitchen gebotene Form findet sich zuerst im gleichen Jahr bei W. M. Müller, *Egyptological Researches*, II (Washington, 1910), 105 und (im Anschluß an Sethe) bei Burchardt, op. cit. 51 (nr. 1007). Kitchen und Helck, der auch in der 2. Aufl. der *Beziehungen* (op. cit. 211) irrtümlich ein anlautendes *q* unterstellt, sprechen sich für eine Identifikation mit *el-qalamun* (s. o.) aus; anders Noth, op. cit. 67, der wiederum fälschlich *qrmjn* liest.

³ Nach W. M. Müller, op. cit. 105, Anm. 2 'improbable'. Beachtenswert ist die Nachbarschaft zu *Šabtuna* (73).

⁵ Kitchen, op. cit. 57.

⁴ Anders Helck, op. cit. 317.

⁶ Müller, op. cit. I (1906), pl. 63.

⁷ Müller, op. cit. II (1910), 105. Wahrscheinlich liegt eine graphische Metathese von *j* und *m* vor (vgl. auch W. Borée, *Die alten Ortsnamen Palästinas* (Hildesheim², 1968), 55, Anm. 4 gegenüber Müller, op. cit. 105, Anm. 2).

da unter Tuthmosis III. belegt, zugleich der früheste Nachweis. Unter Ramses III. (Simons, *Liste* xxvii), womöglich aber schon unter Ramses II. (Simons, *Liste* xxiii), begegnen sich demzufolge Schreibformen mit anlautendem *q* und anlautendem *k*, ein Zusammentreffen mit gleichem Kontext, das eine Identifikation beider Namen vorerst nicht eindeutig rechtfertigt.

Die genannten Beispiele können eine grundsätzliche Austauschbarkeit der Verschluslaute in den ägyptischen Transkriptionen nicht erweisen. Während an der Identität des Namens Karke-misch kein Zweifel am Platz ist, wird man bei den zuletzt zitierten Toponymen mit anlautendem *k* (und infigiertem *j*) mit Varianten des Namens einer Ortschaft rechnen müssen, die nicht im engeren Bereich von Tripolis liegt, sondern im Umkreis von Qadeš.¹ M. GÖRG

New ushebtis of the Third Intermediate Period in the Ashmolean Museum²

Three ushebtis from Abydos. Pl. XXVIII, 3 and fig. 1.

No. 1975.238. *Dd-mwt*. H. 10.6 cm; w. 4.3 cm; t. 2.3 cm. Arms right over left. Back flat but not straight.

No. 1975.239. *Ns-ïmn*, God's father of Osiris, Scribe of the Temple of Khons. H. 10.6 cm; w. and t. 3.6 cm. Arms right over left. Back flat and almost straight.

No. 1975.240. *Dd-hns*, God's father, Beloved of the God. H. 10.8 cm; w. 4.7 cm; t. 2.7 cm. Arms left over right. Back flat and straight.

These were excavated by J. Garstang at Abydos (*El Arâbah*, p. 43) and have been presented by Professor O. R. Gurney. All of them are made of pale green faience, are mummiform, and have lappet wigs. Texts and details such as hoes, eyes and eyebrows, head-band and bag are indicated in dark paint. The ushebtis now join other figures of the same people in the Ashmolean Museum (No. 1975.238 is paralleled by E. 3510, No. 1975.239 by 1968.1278, and No. 1975.240 by E. 3613 and 1971.1417). Furthermore, companion pieces of all three are in the Fitzwilliam Museum in Cambridge (E. SU. 81, 33 and 79).

Ushebti No. 1975.238 displays several interesting features such as the indentation separating the feet, also known from late Ramesside shabtis (e.g. Louvre E. 3078 = *Rev. d'Ég.* 23, pl. 12 on p. 179), and a plastically modelled bag.

Ushebti No. 1975.239 provides further interesting evidence for the existence of a probably local temple establishment of Khons. This can be added to the information we already have from Abydos (a statue of Ramesses III dedicated by the Chief Steward of Khons and First Prophet of Osiris called Hori = Mariette, *Cat. d'Abydos*, No. 354; a stela of perhaps the same man in Louvre E. 17227 = *Rev. d'Ég.* 13, pls. 7, 8, pp. 65-9; a probably Ramesside stela mentioning Turi, Royal Scribe and Steward of Khons, Cairo Mus. Temp. No. 19.3.25.4 = Mariette, op. cit. Nos. 1153, 1219). The ushebti published by J. Garstang (op. cit. pl. xiv[296]) is one whose present location is unknown.

The full name of the owner of No. 1975.240, as shown by Fitzw. E. SU. 79 and Ashm. E. 3613, was Djekhensefankh.

Pauseramün. Pl. XXVIII, 3 and fig. 1.

No. 1975.241. *P3-wsr-ïmn*. H. 11.2 cm; w. 4.5 cm; t. 3.7 cm.

This ushebti was acquired in Egypt by J. Garstang and has been presented by Professor O. R.

¹ Von den hier behandelten nördlichen Toponymen sind wohl die Formen mit anlautendem *ku*, wie *kurmn* (Simons, *Liste* 196) und *kumrm* (Edel, BN li. 7) abzuheben. Letztere Schreibung versteht sich wahrscheinlich mit Metathese der Liquiden (siehe dazu Burchardt, op. cit. 1 (1909), 54 (§ 166)) und ist vielleicht mit der ersteren gleichzusetzen. Der Kontext spricht in beiden Fällen für eine Ortschaft im Ostjordanland.

² For information and help I am grateful to Mrs. J. Crowfoot Payne, Miss J. Bourriau, and Miss K. Lorimer. In the description h. stands for height, w. for width at the elbows, and t. for maximum thickness.

Gurney. It is the second ushebti of Pauseramūn in the Ashmolean Museum (the other is No. 1971.1418). It is made of clay painted grey-green. Although the slightly rounded back profile showing a gentle curve and the absence of a head-band would suggest an earlier date, the position of the arms (the left one over the right one), and particularly the attempt to imitate green glazed ushebti, point to the Third Intermediate Period. The surface of the ushebti has been affected by the flaking off of the material at several places and the figure has been broken in two.

The provenance is fairly certain because one ushebti (or more) of Pauseramūn was found by J. E. Quibell in the Ramesseum area (see *The Ramesseum*, pls. ii, v, p. 12). A figure of the kilted type made of green painted clay and with the title 'God's father of Amūn' is at University College London (Petrie, *Shabtis*, pl. xvii and p. 15 [404], but shown on pl. xxxix as No. 406) and a faience ushebti is in Berlin (No. 13395 = *Äg. Inschr.* ii. 580).

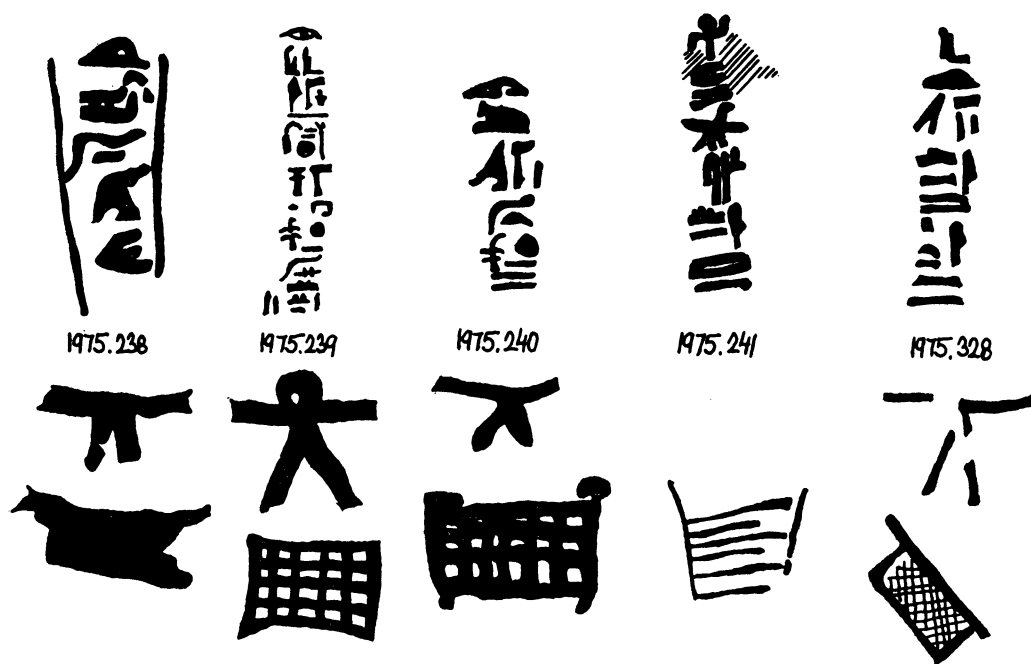


Fig. 1. Texts, head-bands and seed-bags (reduced to about two-thirds)

Amenemōpe. Pl. XXVIII, 3 and fig. 1.

No. 1975.328. *Imn-m-īpt*, God's father, Beloved of the God. H. 11.5 cm; w. 4.5 cm; t. 2.0 cm. Back flat and straight.

The ushebti, acquired by purchase, is made of bright blue faience. Its arms are not crossed and the bag is held over the left shoulder in a slanting position. Provenance of the figure is not known.

Postscript

An ushebti of the 'Overseer' type belonging to the same man as Ash. 1975. 240 was published in *Me-ošaroth Mišrayim ha-catiqah be-Yisra'el* (Kibus Hazorea, Beth Wilfrid Yisra'el, 1969). No. 96 with fig. Eight ushebti of Pauseramūn have recently been identified by Mrs. B. Adams at University College London (No. 29980), and another was sold at Christie's (see *Christie Sale Cat.* March 16, 1977, No. 18).

JAROMÍR MÁLEK

REVIEWS

Contribution to the Verbal System in Old Egyptian. A New Approach to the Reconstruction of the Hamito-Semitic Verbal System. By GERARD JANSSENS. *Orientalia Gandensia* vi. Pp. 55. Leuven, 1972. £1.88.

The book claims to be a new description of the verbal system of Old Egyptian, as well as to constitute a new approach to the reconstruction of the Hamito-Semitic verbal system. It is an attempt to reorganize and describe Old Egyptian on the basis of Semitic. The discussion is based on Edel's transliterations and on his treatment of the verbal forms in his *Altägyptische Grammatik*. Although authoritative in many respects, Edel's description of the verbal system is not the only possible one. This book is at best a discussion of Edel's description (which is sometimes misunderstood), but it cannot be regarded as an original study of Old Egyptian.

Great emphasis is laid on the presence or absence of an *y* augment in Edel's transliteration of weak and biliteral verbs, with no discrimination as to whether this *y* is actually written or not. Three Egyptian *sdm·f* forms are reconstructed on the basis of the presence or absence of an initial or final *y*. They are then compared with three Semitic tenses, and their usages are defined and explained according to them. Thus, according to Janssens, the 'ordinary' *sdm·f* in Old Egyptian included three tenses: preterite, jussive, and imperfect. Since the imperfect was expressed by the 'ordinary' *sdm·f*, the *mrr·f* form (referred to by Gardiner as the 'imperfective *sdm·f*') is now defined as an infinitive (§ 32). The existence of an 'ordinary' *sdm·f* is in dispute. According to another view such a *sdm·f* form never existed, but rather the 'preterite' and 'jussive' had separate distinct forms, while the *mrr·f* form was emphatic (a view shared also by Edel), and not imperfective. The author has misunderstood the nominal character and usages of the *mrr·f* form, and has even gone so far as to attribute to Polotsky the idea that it was an infinitive (p. 25 top).

The book is imbued with inaccuracies and misunderstandings (such as the mixture of Gardiner's and Polotsky's ideas in § 31), and the present reviewer does not intend to discuss all its misconceptions here. All through the book the Egyptian forms are compared with, and explained by, Semitic. The general idea is that Egyptian finite forms represent a conversion of object/subject, that is, what in Semitic 'used to indicate the object, in O.Eg. . . . has become the subject' (§ 21). All the verbal formations, active as well as passive, are described in this way. The author explains every *t* (i.e. passive *tw*, *sdmt·f*) as originally a Hamito-Semitic accusative mark—including the *t* of the prospective *int* and *iw* which he believes is a *sdmt·f* form (§§ 23–9).

This book is indeed 'a new approach to the reconstruction of the Hamito-Semitic verbal system'. The present reviewer, however, does not accept its basic ideas and method of investigation, nor its way of argumentation and conclusions.

MORDECHAI GILULA

The Book of the Dead or Going forth by Day. By T. G. ALLEN. Oriental Institute of the University of Chicago. Studies in Ancient Oriental Civilizations, No. 37. Pp. x + 306. University of Chicago Press, 1974. £10.00.

This, the last book published by the late Professor Allen, differs from his earlier study of the *Book of the Dead*, which appeared in 1960, in that it is based on sources from the New Kingdom rather than on documents of late date, and by virtue of that fact it may at times better represent the archetypes of the various spells.

A general Introduction of four pages is followed by the translations of the spells, numbered and ordered in the manner generally accepted by Egyptologists. For each spell the main source on which the author has

depended for his translation is stated in a footnote; on the left-hand margins of the printed translations of each spell we find the code-letters S, indicating the original body of the spell; P to denote later 'preliminary' additions which have been inserted before the original beginning of the text, and T to mark similar 'terminal' additions. This serves as an indication of ancient editing of the texts.

The actual translations do not call for comment; a detailed discussion of each spell is entirely beyond the scope of a review. A brief comparison of Allen's text with the present reviewer's own privately printed version shows many differences in detail, but they fall mostly within the acceptable range of inevitable discrepancies, see Gardiner's remarks in *JEA* 9, 6. It is to be regretted, however, that the author in his translations has adhered to the old convention of pseudo-Biblical English instead of using the modern idiom; such forms as 'thou', 'thy', 'ye', 'shalt' are gratuitous obstacles to the younger student who has not been familiar from childhood with the Authorized Version of the Bible, and he may find them irritating, thus detracting from his appreciation and understanding of his text.

Following the translations there are two appendices. The first gives cross-references from the *Book of the Dead* to the *Coffin Texts* and to the *Pyramid Texts*, and the other gives a long list of the sources Professor Allen has used, with the approximate date of the document and where it is published; this will be a valuable guide to later scholars. These appendices are followed by an index of names, epithets, and subjects and by another of Egyptian words; these last two items were compiled by Elizabeth Hauser, who completed the preparation of the manuscript of this book for press, since Professor Allen's failing health prevented him from doing so.

The absence of commentaries on the spells is unavoidable, in view of the lack of a modern publication of parallel texts of the spells after the manner of de Buck's *Egyptian Coffin Texts*, but his Appendix I makes it clear that the author has made use of all possible sources in the preparation of his translation, and it is likely that his *Book of the Dead* will remain the standard work of its kind for many years to come, as indeed it well deserves.

R. O. FAULKNER

The Juridical Terminology of International Relations in Egyptian Texts through Dyn. XVIII. By DAVID LORTON. The Johns Hopkins Near Eastern Studies, 4. Pp. x + 198. The Johns Hopkins University Press, Baltimore and London, 1974. £6.60.

Dr. Lorton's book deals with the neglected subject of Egypt's own view of her relations with foreigners. The author has construed his task as a series of word-studies, a procedure which is quite correct to my mind. The work is enhanced by the author's familiarity with law and Akkadian, and will doubtless prove useful as a point of departure for future studies in the same area. Of particular interest to the reviewer is his extended treatment of *hkr* (pp. 21 ff.), and occasionally he has been perspicacious in eliciting a plausible derivation of a term (e.g. his understanding of *hnty-r* [p. 63], and *nt-r* [p. 114], though in the case of the latter I still feel 'customary procedure' is the best rendering of the term in Tuthmosis III's annals).

While the word 'juridical' is ubiquitous, no clear definition of the term is given. As none of the expressions discussed arose in the context of a court of law, pronouncement of a judge, judicial body, or any institution concerned with jurisprudence, one might question the aptness of the word. I see very little evidence that any of the words or phrases are used in a technical sense. If, then, the category 'juridical' does not in the parameters which moderns understand correspond to an Egyptian one, there is some danger of introducing distinctions which do not exist. In fact some fine lines are drawn. Thus *iri bw nfr n* is not juridical, while *iri htp* is (pp. 76 f.); *ity* has juridical connotations, but expressions involving 'sun' do not 'in themselves' (pp. 8 ff.); sometimes a 'connotation of forceful conquest' is attached to *iti* and *wf*, at other times a 'juridical one' (pp. 79 ff., 83 ff.). Again *šfyt* has juridical connotation, but *ššft* has not (p. 136); *hr ibwty* 'takes on juridical connotation' at the end of the Hyksos period (p. 130—although the same sort of examples occur earlier as are found in Dyn. XVIII!) Some of the finest distinctions are made between the expressions *iri/rdi htpw*, *pri m htpw* and *X m htpw* (cf. pp. 76 ff., 151 f. nn. 6–8).

All this hair-splitting might have been avoided by asking the simple question: what categories did the Egyptians themselves employ and what terms did they use? I find it an introduction of Western concepts to distinguish between 'political designation' and those indicative of 'divine rule' (s.v. *nswtbity*, and between 'religious' and 'juridical' (p. 75).

It would seem wiser to my mind to have eschewed such a term as 'juridical' in favour of 'words and phrases which describe Egypt's foreign relations, and how they were brought about, maintained or restored'. This would have enabled the author to draw on a wider selection of texts (including religious and private) more germane to his subject than many he does include, for example divine and official epithets, divine and royal statements of intent, justification or apology. Instead, what the author gives is a heterogeneous collection of terms, organized into only two parts with a simple alphabetic arrangement. It does not hang together by definition, nor is it complete. Why, for example, is *hfty* present, but not *hm*, *sbi* or *bin*? Where is *rnḥ* ('oath') or *nḥtw* ('hostages')? Where are such pertinent phrases as 'opening the door of foreign lands', or 'placing the fear of Horus in foreign lands'? Why is *swsh tš* dismissed so summarily (p. 75, and 150 n. 14), a dismissal excused on the basis of the supposition that *tš* relates 'to religious rather than to legal concepts' (p. 75)?

Unless sound judgement is used in word studies, one runs the risk of imputing to a term a meaning derived from an accidental attribute, shared by each of the examples adduced, but not the basis of the meaning of the term in antiquity. Many to whom *hkḳ* was applied may very well have been free and independent; but the word itself means simply 'one who tends, looks after, rules', and says nothing about any quality of independence (pp. 22 ff.). Most magnates designated *hry-tp* were undoubtedly '(royal) representatives' (p. 36), but the title means nothing more than 'he who is over, chief, boss'. Probably all those foreigners who were 'on the water of' the king enjoyed an exchange of goods with Egypt; but that does not mean that the phrase may be translated 'to have economic relations with' (p. 87). Obviously a person who is paid something is going to be 'satisfied', but is that reason enough to render *šhtp* 'to satisfy (by means of payment)' (p. 93)? Clearly lands which had not known Egypt would not have had any political contacts with her; but that is no reason to translate *hm* by 'not to have relations with' (pp. 121 ff.). This constant desire to force the term or phrase to say more than it actually does, to interpret rather than translate, can only lead to distortion.

The author's argumentation is generally good and he often puts his case persuasively. One wishes, however, that in certain areas he had prepared a sounder foundation. For example: the Execration Texts are not used as a source for *hkḳ* because of an alleged doubt cast on their significance by one scholar's suggestion (pp. 26 f.); the obvious meaning of 'chiefs' for the nisbe *hryw-tp* is rejected because the Middle Egyptian grammars give only 'on behalf of' for the preposition (p. 50 n. 65); and since occurrences of *bsk* 'are too numerous to allow a full discussion', one of Bakir's conclusions is accepted without testing (p. 91). Difficulties are occasionally dismissed a little too cavalierly. The term [*hkḳw*] *hšwt* in the Turin Canon 'reflects a Ramesside misunderstanding' (p. 52 n. 87). Because the Gebelein blocks 'were published without indication of archaeological context . . . there is thus no reason to presume that they are from monuments built there: (p. 53 n. 90; one may well ask where the burden of proof lies in such cases). The accepted renderings of *nswt nswyww* and *hkḳ hkḳw* are rejected on very weak grounds, and are replaced by 'king of those who are subject' and 'ruler of those who are ruled' (pp. 18 ff. and 33 ff.), two cumbersome tautologies which are impossible logically and syntactically. This is a well-known type of bound construction which relies for its rhetorical effect upon cognates being in front and rear position, as *nb nbw*, 'lord of lords', and *bity bityw*, 'monarch of monarchs' clearly show.

One last point: why must we moderns cut ourselves off from much of the relevant evidence by recognizing the artificial 'Manethonian' boundary of the end of the Eighteenth Dynasty? Textual evidence of a fairly representative nature is available through the Twentieth Dynasty, and Dr. Lorton would have enhanced his study by making use of it.

DONALD B. REDFORD

Die Felsgräbernekropole der Qubbet el Hawa bei Assuan. II. Abteilung. Die althieratischen Topfaufschriften aus den Grabungsjahren 1972 und 1973. By ELMAR EDEL, assisted by Angelika Edel, Birgit Kohl, Edgar Pusch. Abhandlungen der Rheinisch-Westfälischen Akademie der Wissenschaften, Band 55. 297 × 210 mm. Pp. xi, pls. frontispiece, 1-115. Westdeutscher Verlag, Opladen, 1975. DM 38.

This volume offers a further instalment of epigraphs on inscribed pottery from Professor Edel's excavations on the West bank at Aswân; for reviews of previous instalments, see *JEA* 55 (1969), 58 (1972), 60

(1974). This volume is essentially an album of plates, to which only a brief introduction is prefaced with essential details on number and range of specimens (260 'new' texts). It is intended to issue a further text-volume to complement both this and the previous issue of plates. Pending the publication of such an account, long commentary here is needless. The main bulk of material here comes from Shafts II and III of a new tomb, No. 88, plus a fair range from Shaft I and from Tomb 89. The fruit and products are the same as in earlier material; the persons, largely so. Likewise the basic formulas—most commonly, just the product (plus or minus source), or personal name (sometimes with filiation); sometimes, product of/belonging to PN. Occasionally, a fuller text occurs, e.g. product of/for PN-filiation; deriving from place of PN, as in pl. 52, No. 130. In reproducing the hieratic, the technique of indicating faint or damaged writing by stippling is usefully developed. Basic pot-types are given in outline, and specimen-photos of representative vessels. Issued under a new imprint, the new volume well maintains its predecessors' quality, and with them forms a useful addition to the total documentation of this most interesting excavation.

K. A. KITCHEN

Untersuchungen zur hieroglyphischen Wiedergabe Palästinischer Ortsnamen. By M. GÖRG. Bonner Orientalistische Studien, Neue Serie, herausgegeben von Otto Spies, Band 29. 208 × 147 mm. Pp. 226, pls. 3. Bonn, 1974. DM 14.

This book consists essentially of nineteen short studies of twenty place-names and a formative element (*beth-*, 'house of') found in the Old Testament and in Egyptian topographical lists and other texts. Görg's principal interest lies in the detailed variations of spelling present in these names in group-writing or 'syllabic orthography', the investigation of which affords him the opportunity of reassessing some of the supposed vocalic values of specific sign-groups as exhibited in the systems (e.g.) of Albright and Helck. This work is intended as a partial contribution, discussing in depth just a small group of names more fully than in previous works. Görg aims also to elucidate the 'contextual' role of names in lists and to review geographical locations.

In each case, Görg notes the main O.T. occurrences, lists and discusses all forms of the name from Egyptian sources, and ends with a note on the localization. The terms studied are as follows (I give the English form for convenience): Adoraim, Edrei, Ono, Achshaph, Apheq, Ascalon, Berothai/Beeroth, (Beth)-Sh(e)an, 'Beth-', Gezer, Ha(m)math, Hazor, Tob, Jarmuth, Megiddo, (Ma'aleh)-'Aqrabbim, Rehob, Shime'on/-Shimron, and Sharon. Three excursuses deal with details in the great 'Palestine list' (I) of Tuthmosis III and with the sequence of names in the broken List II (extracts from these lists appear in photographs, Taf. I-III). An index of sign-groups discussed, abbreviations, and bibliography complete the book.

Continued critical discussion of the vexed problem of the 'syllabic orthography' is certainly welcome. However, the positive new factual gains offered over all by this book are slender and elusive. No one, for example, disputes the locations of well-attested places like Ascalon, Gezer, Beth-Shan or Megiddo; the location of Rehob and Sharon adds nothing to what others have already adequately said. Likewise, study of toponyms in 'context' within lists requires treatment on a scale much more comprehensive than that envisaged by Görg. And his discussions of the details of the 'Syllabic orthography' are conducted for the most part upon an uncomfortably narrow basis; much wider data have to be adduced than simply the variants for this or that particular name with occasional references elsewhere. Perhaps too little weight is given to the fact that apparent variations in vocalic 'value' of a sign-group may arise from any one of several causes, and may not, in fact, prove 'Vieldeutigkeit'; in that connection, Görg might have profited from perusal of *BiOr* 26 (1969), 198-202 (which he nowhere cites). One final point. In this book, the forms of hieroglyphs drawn vary from poor through monstrous to the well-nigh incomprehensible. For the sake of any future works, one must beg Dr. Görg to take a little more effort to develop clean, legible forms—good forms and pens are readily available, and there can be no excuse for such slovenly work in this day and age. In sum, this little book is of use principally as a critical corrective to some aspects of earlier publications on group-writing.

K. A. KITCHEN

Ägyptische Ärzte und ägyptische Medizin am hethitischen Königshof. Neue Funde von Keilschriftbriefen Ramses' II aus Boğazköy. By E. EDEL. Rheinisch-Westfälische Akademie der Wissenschaften, Geisteswissenschaften, Vorträge, G.205. 240×165 mm. Pp. 140, pls. 4. Westdeutscher Verlag, Opladen, 1976. ISBN 3-531-07205-6. DM 38.

Less far-famed than the battles, treaty, and royal marriages between Egypt and Hatti, the visits of Egyptian physicians to the Hittite court and attendant correspondence probably involved closer intercultural contacts. The correspondence about these visits is the subject of Prof. Edel's new monograph.

The book has five sections (A-E) and an equally long 'Anhang', plus good indexes. The heart of this work is the presentation (pp. 31-44, 67-75) of a hitherto unpublished letter from Ramesses II to Hattusil III concerning the latter's request for medicaments for his sister Matanazi to help her to have children. Being practical (but decidedly ungentlemanly), Ramesses exclaims of Matanazi that he knows her age — 'fifty?— No, she's certainly sixty years old!', at which age no medicines could help her. But the gods might so will, so he sends two skilled men (medical; magical) to prepare suitable medicaments in that hope. Edel notes an amusing parallel to this *insharallah* viewpoint on the same problem in an Arabic medical treatise.

This fascinating novelty is preceded by a highly convenient summary of extant cuneiform correspondence with Egypt, especially under Ramesses II. Other than perhaps two letters from earlier years, most of the latter's Hittite correspondence falls into three groups: time of the treaty, year 21, time of the first royal marriage, year 34, and those attributable to about years 42-56 through containing the cuneiform equivalent of the special epithets *ntṛ ḫḫ; Ṭwnw* of that period.

After the Matanazi document, Edel reviews six other Egypto-Hittite letters that mention medical matters, plus one item each for Hittite-Babylonian and Egypto-Ugaritic exchanges on this topic. Of special interest are the equivalences established between Egyptian and Akkadian terminology for physicians, etc., and the possible role of the Matanazi incident as part-background for the Bentresh Stela.

The 'Anhang' tabulates the Akkadian letters from Boğazköy with clear address-lines, likewise the medical personnel involved, and gives running translations and commentary for the seven Egypto-Hittite 'medical letters' and relevant portions of *KBo* I, 10 and *KUB* III, 71. The treatment of topics is at times scattered, but well covered by cross-referencing and the indexes. To p. 21 n. 35 add *KRI* II, 3-147 (more complete than Kuentz); to n. 36, add *KRI* II, 225-32 and *ANET* renderings; to p. 27 and n. 58, add 'with Abydos parallel, cf. Gaballa and Kitchen, *ZAS* 96 (1969), 14 ff.'; to p. 60 n. 133 add *KRI*, II 284-7. This compact and highly competent volume should be of the greatest interest alike to Egyptologists, cuneiformists, and historians of the ancient world and deserves a warm welcome. One must hope that, in due course, all the Boğazköy correspondence will be fully published in both cuneiform (*KUB/KBo* series) and in transliteration/translation in similarly exemplary fashion.

K. A. KITCHEN

The Late New Kingdom in Egypt (c. 1300-664 B.C.). A Genealogical and Chronological Investigation.

By M. L. BIERBRIER, with a foreword by K. A. Kitchen. Liverpool Monographs in Archaeology and Oriental Studies. Pp. xvi + 160. Warminster, 1975. £7.50.

Der Schwerpunkt dieses Buches liegt in der gründlichen, detailreichen Untersuchung einer Vielzahl von Priester- und Beamtenfamilien der Ramessidenzeit und der 3. Zwischenzeit. In 26 Tabellen werden die genealogischen Ergebnisse zusammengefasst, und man darf sagen, dass in der Ägyptologie seit langer Zeit nicht mehr so reiche genealogische Informationen geboten worden sind, wie in diesem Buch von Dr. Bierbrier. Es ist für den Benutzer allerdings schwierig, die Einzeldaten nachzuprüfen, die in den Tabellen verarbeitet sind; die Darbietung wäre klarer geworden, wenn der Autor jeder genealogischen Verbindung eine Ziffer zugeordnet und unter dieser Ziffer die Belege aufgeführt oder die Problematik der Verbindung besprochen hätte.

Die Untersuchung der Generationenfolge dient dazu, die bisher aufgestellten Chronologien für die Zeit von Ramses II. bis zu Psammetich I. zu überprüfen. Hier kann ich den Optimismus nicht teilen, den K. A. Kitchen in seinem Geleitwort zu diesem Buch vertritt: 'the genealogical network established here effectively precludes the "high" date 1304' (p. ix). Dr. Bierbrier argumentiert p. 113 weitaus vorsichtiger ('the generation analysis . . . tends to weaken the argument in favour of 1304 B.C.'), und die Zahlen

sind alles andere als eindeutig. Zwischen dem Regierungsbeginn von Ramses II. und dem Jahr 664 liegen 24 bis 25 Generationen. Ein Durchschnitt von 25 Jahren pro Generation führt auf 1264 bis 1289, aber bereits ein Durchschnitt von 26 Jahren auf 1288 bis 1314, lässt also das umstrittene Datum 1304 durchaus zu. Dass ein solcher Durchschnitt möglich ist, zeigt eine analoge Berechnung für Monthemhat, der nach Tabelle 25 einen Abstand von 9 oder 10 Generationen von Scheschonk I. hat. Man muss also vom vermuteten Geburtsjahr Scheschonks I. (990/980) ausgehen und kommt dann bei 25 Jahren Durchschnitt auf 765/730, bei 26 Jahren auf 756/720 für das Geburtsjahr Monthemhats. Nach Rowton, *JNES* 17 (1958), 100 f. liesse sich sogar eine noch höhere Generationendauer vertreten (bis über 30 Jahre bei 7 Generationen), wobei sich Rowton auf Königsfamilien stützt, die nach Dr. Bierbrier (p. 100) eine geringere Generationendauer aufweisen als Beamtenfamilien.

Es zeigt sich daher, wie schon oft, dass Genealogien nur für sehr grobe chronologische Schätzungen geeignet sind; für präzisere Bestimmungen ist dieses „network“ nicht fein genug. Wir sollten mehr genealogische Untersuchungen für die Zeit nach 664 haben, um die Generationendauer in Aegypten genauer berechnen zu können und zugleich auch ihre Abweichungen zu bestimmen. Der genealogische Teil dieses Buches erbringt nur einige Indizien, die z. B. für eine kurze, etwa 10 jährige Regierung von Merenptah sprechen. Aus der Liste p. 1 sind jedoch die 4 Jahre für Amenmesse wieder zu streichen (siehe R. Krauss in *SAK* 4, 1976). Auch für die 21. Dynastie ergeben sich einige Änderungen durch jüngste Forschungen (E. F. Wente in: *Drevnij Wostok*, Festschrift für M. A. Korostovtsev, Moskau 1975, pp. 36–38: Pianchi nicht Sohn Herihors; nach plausibler Annahme von A. Nawiński ist Tentamun nicht Gemahlin des Smendes, sondern von Ramses XI.).

Ist somit das chronologische Ergebnis dieser Arbeit keineswegs eindeutig, so spricht es doch dafür, dass die neuere Minimal-Chronologie im wesentlichen richtig ist, und dazu bildet die reiche Dokumentation von Dr. Bierbrier eine Fundgrube für weitere chronologische und genealogische Forschung. Aus den rein chronologischen Argumenten, die p. 109 ff. im Anschluss an Brinkman vorgetragen werden, ergibt sich 1279 als neue, sehr wahrscheinliche Alternative für 1290 als Regierungsbeginn von Ramses II. Die weitere Verkürzung der ramessidischen Chronologie durch R. Krauss weist in die gleiche Richtung, und man muss 1304 wohl definitiv als Alternative aufgeben. Das bedeutet auch für Thutmosis III. einen späteren Regierungsbeginn (1479), dazu eine Herabsetzung aller anderen Daten der 18. Dynastie. Es ist das Verdienst von Dr. Bierbrier, den Anstoss zu dieser neuen chronologischen Revision gegeben zu haben.

ERIK HORNING

A Community of Workmen at Thebes in the Ramesside Period. By JAROSLAV ČERNÝ. Institut Français d'Archéologie Orientale du Caire. Bibliothèque d'Étude. Tome L. Pp. v+383. Cairo, 1973. £10·75.

The late Professor Černý devoted a major part of his career to the study of the ostraca, graffiti, stelae, and other monuments of the workmen of Deir el-Medina. It was his intention to publish a comprehensive history of this community which he knew so well, but unfortunately he was able to write only a portion of his study before his untimely death. This work which has now appeared will be indispensable in any future studies of the workmen's community. The first nine chapters of the book comprise a detailed examination of the meaning of the words *hr* and *st mwt* which Černý concludes designate the royal tomb and not the necropolis as a whole. In the remaining chapters he studies the various offices which existed in the community and compiles chronological lists of the attested officeholders. Since the publication of this work, there have appeared several studies which complement Černý's own study—S. Allam's *Hieratische Ostraka und Papyri aus der Ramessidenzeit* and *Das Verfahrensrecht in der altägyptischen Arbeitersiedlung von Deir el-Medineh* (Tübingen, 1973) on legal matters; M. L. Bierbrier's *The Late New Kingdom in Egypt* (Warminster, 1975), Chapter II, on genealogy and chronology; and J. Janssen's *Commodity Prices from the Ramesside Period* (Leiden, 1975) on economic matters.

Černý's discussion of the exact meaning of certain words relevant to the Deir el-Medina community is extremely valuable, but the bulk of the study is concerned with the internal history of the community. In Chapter X Černý outlines the history of the gang of workmen and its division into two sides, left and right, and then devotes separate discussions to the principal offices—chief workman (Chapter XI and Appendix A),

deputy (Chapter XII), scribe of the tomb (Chapter XVII and Appendices B–D), and captains of the tomb (Chapter XVIII). It is clear that there were two chief workmen and two deputies, but the number of scribes is more problematic. This question is complicated by the appearance of many other scribes whose exact functions are not always clear. One would expect that there should be two scribes of the tomb, one for each side (as Černý, p. 191), and this twofold division was certainly in force at the end of Dynasty XX when scribes Pwer'o and Dḥutmose were in office (Papyrus Turin 2018 cited by Černý, pp. 203 and 360). In certain cases superfluous scribes can be viewed as relatives acting temporarily for an absent incumbent, but the problem is not always as simple as that. The scribe of the tomb Amennakhte appointed in year 16 of Ramesses III (Černý, p. 340) was a colleague of the scribe Ḥori attested from year 29 of Ramesses III (Černý, p. 216); yet on Berlin ostrakon 12654 of year 2 of Ramesses IV or later the two scribes of the tomb are named as Ḥori and Amenemope, while Amennakhte and his son are only termed scribes without any qualification. Were there then three scribes of the tomb in office or had Amennakhte been temporarily superseded by Amenemope? Moreover, documents from Dynasty XIX and early Dynasty XX make it clear that the captains of the tomb consisted of two foremen and one scribe although records definitely attest to two or more scribes in office such as Ra'mose, Ḥuy, and possibly Amenemope (Černý, pp. 194–5, 215–16, 236, and 317–27). Pending further study, it is perhaps best to consider that there were undoubtedly a number of scribes in the village but only two scribes of the tomb at any one time, of whom only one counted as a captain. However, in the absence of the official scribe, others may have had to act as scribes of the tomb and are so recorded in their temporary capacity.

It is inevitable that minor modifications should appear in the chronology of the chief workmen with the publication of new material and the reinterpretation of old. The tenure of office of the chief workman Neferḥotep the younger can in fact be lengthened by at least twenty-five years (Černý, pp. 288–9). In a forthcoming article M. Green points out that the death of the workman Ḥarmose, fixed to year 40 of Ramesses II, occurred while Neferḥotep was chief workman. Černý noted this death (p. 119) but failed to realize that Neferḥotep must then have been foreman. Indeed, Neferḥotep must have succeeded to this office even earlier since on Cairo ostrakon 25573 a foreman Neferḥotep is attested as a contemporary of the scribe Ra'mose who left office between years 38–40 of Ramesses II. Černý (p. 322) had identified this foreman with Neferḥotep the younger without reasons, while Bierbrier (*op. cit.*, p. 122 n. 15) had suggested that he was Neferḥotep the elder due to the presence of Ra'mose. Now that it is known that Neferḥotep the younger was in office at least two years after Ra'mose's last appearance, he can easily be identified with the foreman of the ostrakon. His appointment cannot be earlier than *c.* years 25–30 since his father was a contemporary of the vizier Khaṯy who came to office between years 21–30 (Černý, p. 287). Thus Neferḥotep the younger would have been born at the latest *c.* years 5–10 of Ramesses II and his minimum age at death should be increased to *c.* 70 (Bierbrier, *op. cit.*, p. 22). The fact that his tomb was constructed during the reign of Ramesses II confirms that he must have been chief workman for some time in that reign.

The exact position of the foreman Pashed is not certain. Černý (p. 293) suggests that he was the successor of Baki, but equally he could have been the predecessor of Baki who would have been succeeded directly by his son-in-law Ḳaḥa. The workman Pashed who appears with Baki could easily have been Pashed son of Ḥaḥnekh who is also attested at this time. The family trees of both foremen are well done, but some confusion has arisen with regard to Sibe son of Baki who has been wrongly identified with Sibe the elder husband of Neferiiti. This mistake has been compounded on the chart by a line in the wrong place, making it appear that Neferiiti was Baki's daughter (p. 315) although the text correctly names Sibe as the son (p. 291). The grandson of Sibe and Neferiiti was the workman Wadjmose who flourished in the first half of the reign of Ramesses II as a contemporary of his supposed great-uncle Ḥaremwia son of Baki (Bierbrier, *op. cit.*, pp. 21–2). The grandfather Sibe the elder must have been born under Ḥoremḥeb and cannot be identical with Sibe son of Baki. The workman Sibe in year 40 of Ramesses II can be either the son of Baki or the brother of Wadjmose, Sibe the younger.

The genealogical charts of the later foremen are more brief. There are several errors in that of the family of Ḳaḥa (p. 300 and chart p. 314). The first and third generations are confused and the generation of Anherkhe't the elder is omitted. The lady Tatumeḥ was not the wife of the foreman Ḥay but was the spouse of his great-uncle Ḥay, brother of Ḳaḥa (Bierbrier, *op. cit.*, p. 136 and T. G. H. James, *Hieroglyphic Texts from Egyptian Stelae*, Part 9, pp. 46–7). Černý's doubts on the position of Tatumeḥ on B.M. stela 144 can now

be allayed since she was receiving offerings from her sister-in-law and not her grandmother-in-law. She and her husband appear together in Theban tomb 10 dated to Ramesses II. The name of the wife of the foreman Ḥay remains unknown. Contrary to arguments on p. 137, the deputy Anherkheḥ should be identified with the chief workman Anherkheḥ since their careers do not overlap (Bierbrier, *op. cit.*, p. 128 n. 165). The foreman Nekhemmut the elder first appears in year 11 not year 12 and is last attested in year 15 not year 16, all of Ramesses III (Bierbrier, *op. cit.*, pp. 32 and 125 n. 100). His son Khons was already in office in year 16 of Ramesses III and not for the first time in year 18. Certain dates which Černý attributes to Meneptah and Amenemope should rather be ascribed to Amenmesse and Smendes (e.g. pp. 290 and 383).

It is regrettable that so important a work as this lacks an index, and thus it is extremely difficult to check references. Perhaps this gap will one day be filled. It is also hoped that as a memorial to Professor Černý the publication of Deir el-Medina material which his studies have inspired should continue. Such publications will undoubtedly bring more revisions to this work but will also prove its lasting worth.

M. L. BIERBRIER

Ancient Egyptian Musical Instruments. By LISE MANNICHE. Münchner Ägyptologische Studien, 34. Pp. xi + 111, pl. 20. Munich and Berlin, 1975. DM 30.

Since the death of Hans Hickmann in 1968, the field of ancient Egyptian music has been little worked, and the most important tasks remaining are the cataloguing of surviving instruments (a British Museum volume has recently appeared and a Louvre publication is in progress) together with a detailed study of Egyptian musical terms. It is only on the basis of a knowledge wider than Hickmann's that new theories can be seriously put forward. And Miss Manniche has been properly modest about her aims. She has taken over Hickmann's terminology, including (p. 66) the rather odd genealogy that makes the 'arched harp' a sub-section of the arched harp; and there are no detailed descriptions of instruments. The book sets out to be a complete listing of known instruments and their representations, with clearly stated if sometimes illogical exceptions. All idiophones (clappers, bells, cymbals, sistra, and the like) are omitted, as are horns and rhytons for the most part, on the grounds that they occur only at the end of pharaonic civilization, and much Graeco-Roman material. Miss Manniche's main achievement has been to include neglected evidence from the Theban tombs and new material from the Akhenaten talatât. It is clear both from the text and illustrations that Miss Manniche has examined these scenes with care, and her discoveries will be a stimulus to other workers. But where she has been unable to investigate personally, traditional errors have been preserved and there are also some slips that should have been avoided.

In the case of the British Museum collection, for instance, the 'flute' (6385) found at Dahshûr appears to have come from a late burial area and should probably no longer be considered XIIth Dynasty (nos. 6386 and 6387, both reed pipes from the same site, are unaccountably omitted); from the high-spirited scene on a late steatite bowl (no. 47992) mention of the frame-drum (tambourine) in the procession has been left out; concerning the splendid model harp no. 25464 one can probably agree it had originally five strings, even if only three (not four) pegs remain and the suspension rod has actually six holes; the wooden statuette of a girl with angular harp (no. 48658) should probably be dated to the New Kingdom rather than the traditional XXVth Dynasty; it seems perverse to banish the vase shaped to represent a woman playing the lute (no. 5114) to the final 'Note on the music of ancient Egypt'; and obviously any reference to the mastaba of Werirentah (preferably via *Hieroglyphic Texts* Part 1 of 1961 rather than Part 6 of 1922) should make clear that the musical scene is in London rather than at Saqqâra.

These points suggest that Miss Manniche needs watching in matters of detail, an impression reinforced by a number of wrong references (*Paheri* pl. xi does not exist, for example, and should be changed to pl. vii; Davies, *The Tombs of Two Officials of Tuthmosis the Fourth*, pl. xxxiii should be pl. xxiii *passim*), and that her observation cannot always be trusted (on this same pl. xxiii there are in fact two female lutenists rather than one, and in the references to *JEA* 16, pl. 15 there is no mention of the head of an arched harp still clearly visible). None the less, as a compilation of much scattered evidence, as a starting-point for further research, the book has obvious virtues and must be warmly welcomed for the additional material it has brought into the field.

R. D. ANDERSON

A Visit to Ancient Egypt. Life at Memphis and Saqqâra (c. 500–30 B.C.). By H. S. SMITH. Pp. 92, 12 figs., 8 plates. Warminster, 1974. Price £1.95.

It is doubtful whether there has been anywhere in Egypt during this century a more important series of excavations than those conducted since 1964 in the sacred animal necropolis at North Saqqâra under the auspices of the Egypt Exploration Society. Both in terms of the quantity and quality of the antiquities unearthed and the wealth of information acquired on Late-Period Egypt the significance of the work, directed first by the late Professor W. B. Emery and subsequently by Professor H. S. Smith and Dr. G. T. Martin, can hardly be overestimated. Inevitably the organization of this material for publication has proved an arduous and time-consuming business and scholars have had largely to content themselves with annual reports of the work published in this journal. Professor Smith's book is, therefore, all the more welcome as a handy conspectus of the site and the riches which it has yielded.

A Visit to Ancient Egypt is quite explicitly aimed at the general reader and at visitors to Saqqâra and is composed essentially of the text of three lectures. Chapter I sets the scene with a brief summary of Egyptian history in the fifth and fourth centuries B.C. and a description of life in Memphis and its environs at that time. Chapter II is concerned with the sacred animal necropolis itself and describes its discovery and the material, both archaeological and written, which has come to light there. Chapter III is a fictional piece based closely on documents from the site and purporting to retail the experiences of two Athenians bent on attending the funeral of the mother of an Apis Bull sometime in the fourth century B.C.

The work is written in a lively and readable style admirably suited to the audience for which it is intended. In addition, all three chapters contain translations and summaries of documents which have yet to be published *in extenso* and, therefore, do much to whet the appetite for the forthcoming excavation memoirs. The book does still more, however. By bringing together so much into so small a compass it brings home with great force the fact that the excavation of such sites opens up the very real possibility of major advances in our knowledge of Ancient Egyptian history and civilization which more superficially glamorous enterprises very rarely contribute. It is very much to be hoped that archaeological research will be resumed on some scale in this part of North Saqqâra, particularly along the general line South Ibis Gallery-Serapeum where there is every reason to suspect that further startling discoveries still await the spade of the Egyptologist.

ALAN B. LLOYD

Other books received

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