

EVIDENCE FOR THE BICHROME WHEEL-MADE WARE IN EGYPT

By R. S. MERRILLEES

Of all fields of Near Eastern ancient history, none paradoxically has suffered more from neglect than the Pharaonic civilisation of Egypt. Despite more than a century's scientific exploration, excavation and research, a major facet of ancient Egyptian life, the material or everyday culture, remains as little known or understood amongst Egyptologists as by experts in other fields of Levantine archaeology. Though it is generally accepted that the relative and absolute chronologies of the Bronze Age civilisations in the eastern Mediterranean basin depend to a major extent on direct and indirect correlations with Egypt, which can be demonstrated by the movement of peoples, goods and influences between these different areas, no systematic study of the cultural chronology of the Pharaonic period has ever been attempted. Indeed it would be no exaggeration to say that interest in establishing dating criteria and identifying cultural characteristics and trends amongst the minor arts or small finds from Egypt has come not so much from Egyptologists, who have been more preoccupied with the civilisation's outstanding developments in the spheres of architecture, art and literature than with socio-cultural history, as from specialists outside the field, who have been compelled for other reasons to use the archaeological data from the Nile Valley. Even then the latter, profiting from the lack of study and expertise developed by their Egyptological colleagues, have had an unfortunate tendency to manipulate the information from Egypt so as to conform to chronological and cultural frameworks devised independently by a circumstantial interpretation of internal evidence from their own particular regions.

Quite apart from the unresolved inconsistencies in the comparative chronology of the Bronze Age Levant, the results of this situation have been detrimental both methodologically and historically, as imperfect understanding of the dynamics of cultural evolution in Egypt has led to the popular acceptance and current usage of unverified argumentative devices such as, for example, that scarabs can never provide anything more than a *terminus post quem* for dating deposits, and to a widespread scepticism in general about the chronological validity of archaeological contexts in the Nile Valley. This in turn has inhibited full and rational exploitation of the available data from Egypt for elucidating cultural, social,

economic and even political history, not only in the Nile Valley but also throughout the Levant.

The study of the material culture in Egypt has only recently begun to occupy the critical attention of scholars, and a number of works on the minor arts attest to a growing awareness of the importance of small finds for building up a complete picture of Pharaonic civilisation, as well as for shedding light on its inter-relationships with the contemporary cultures around it. Research into categories of objects has already shown encouraging signs of divesting itself of the restrictions of an exclusively, even predominantly artistic or stylistic approach, and though there is still much room for improvement in the selection of typological criteria for studying the cultural remains of the period, works such as those by Tait (Tait, 1963), Ucko (Ucko, 1968), myself (Merrillees, 1968), Nolte (Nolte, 1968) and Miss Lilyquist (unpublished doctoral dissertation on ancient Egyptian mirrors, 1970) demonstrate the potential of small finds for contributing to our knowledge of the Bronze Age in the Levant. On a broader front Bietak (Bietak, 1968) and O'Connor (O'Connor, 1969) have independently carried forward a revolution into the study of Pharaonic Egypt by applying to the archaeological remains of the historical period the methodological techniques perfected by Kaiser for reappraising the sequence of predynastic cultures. By attempting a comprehensive and systematic analysis of all relevant facts in order better to define specific cultural phenomena and establish their chronological and historical setting, they have succeeded in elaborating a series of principles of particular, if not unique applicability to the settlements and cemeteries of Egypt. Of prime importance to the historian is their convincing demonstration that objects may be legitimately dated not solely on the internal evidence of individual deposits but equally well on the overall chronology of the functional contexts of which they form part.

The chronological importance of the material from Egypt and the defective state of our present knowledge are well illustrated by recent studies on evidence for the Bichrome Wheel-made Ware in Egypt. While Aström is able to maintain that "the repeated occurrences of Hyksos scarabs, and no later objects, in these tombs (containing vases in the Bichrome style) strongly suggest that the tombs really belong to the Second Intermediate period" (Aström, 1957, p. 273), Hennessy using the same data argues that "The supposed occurrence of Bichrome Wheel-made ware in pre-XVIIIth Dynasty contexts in Egypt . . . does not bear close examination" (Hennessy, 1963, p. 54). He does, however, concede

that "The evidence from these three sites (Sidmant, Qaw el-Qebir, Abusir el-Malaq) is possibly sufficient to suggest that there may be a late second intermediate beginning to the fabric; but they can never stand in their own right as unassailable evidence" (Hennessy, 1963, p. 54). Kantor assigns all the vases "painted with designs characteristic of the Tell el Ajjul ware in Asia . . . but not executed in bichrome paint (Fig. 7, *B - E*) (*sic*) . . . to the latest part of the Second Intermediate period" (Kantor, 1965, pp. 22 f.), without examining their archaeological contexts. Epstein not only avoids a detailed chronological study of the Egyptian deposits concerned, but does not even make any comment on their dating, except to state that "Most of these tombs have been dated as late Hyksos or early Eighteenth Dynasty" (Epstein, 1966, p. 138) and that "The fact that they (the Bichrome vessels) appear to belong to a somewhat late phase of the ware is reflection of the growing contact with the north which resulted from Egyptian expansion under the Eighteenth Dynasty" (Epstein, 1966, p. 141). Finally Oren excels himself by attributing his own preconceived dating to the excavators who published the tombs in which two of the vases in the Bichrome style occurred (Oren, 1969, p. 140). Even then he misquotes his authorities, for though Brunton places Sidmant Maiyana Tomb 1289 in the XVIth Dynasty (Petrie and Brunton, 1924, I, Pl. XLVI), Oren, whose reference to the pot from this grave is in any case wrong—it should be *Sedment I*, Pl. XLV. 69, not Pl. LV. 69—asserts that it and Dishasha Tomb 44 "are dated in the early XVIIIth Dynasty".

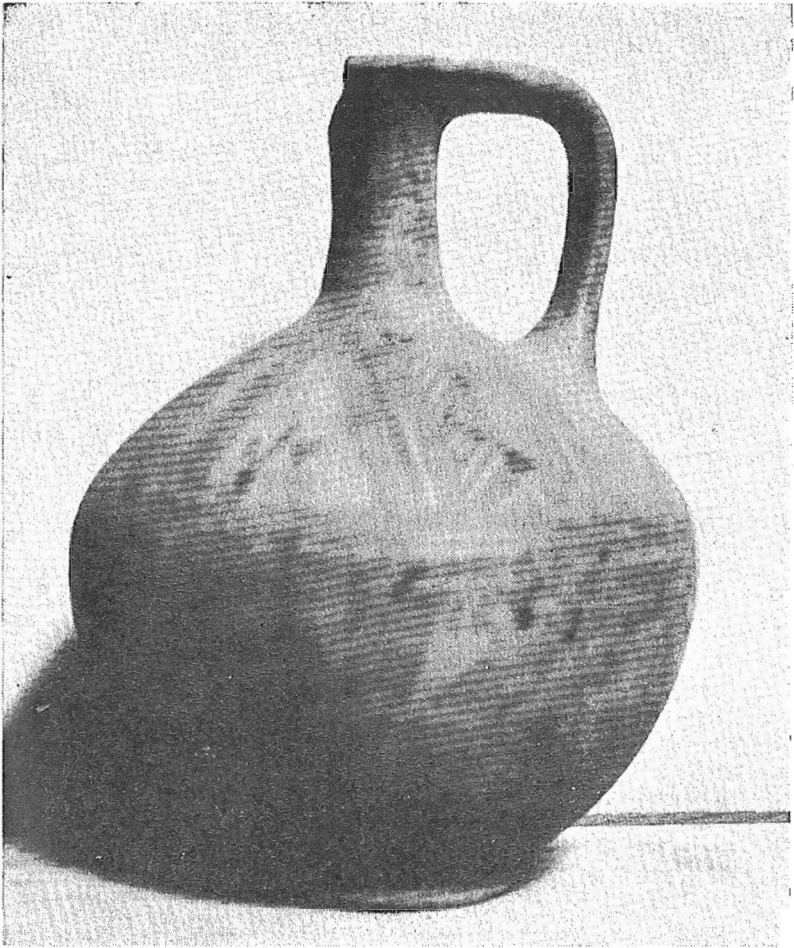
Despite the extensive treatment which Epstein has given the Bichrome Wheel-made Ware in her thesis (Epstein, 1966), it has become clear that not only is her catalogue far from complete, but the analytical approach adopted leaves much to be desired (Birmingham, 1968, pp. 105 ff.). The basic methodological fault of her work lies in the fact that all 16th century pottery from the Levant with bichrome red and black painted decoration has been indiscriminately ascribed to the Bichrome Wheel-made Ware, irrespective of such other diagnostic features as shape, fabric or ornamental style. It is noteworthy that Epstein devotes no section of her study to a discussion of the shapes represented amongst the bichrome pots which she has listed, nor does she have anything to say about the visible, let alone chemical characteristics of the clays used in their manufacture. Though she remarks with evident endorsement that "there was a characteristic manner in which both bichrome geometrical as well as figure decoration was executed" (Epstein, 1966, p. 21), she makes no attempt to identify regional variations of this distinctive style and assumes for the whole corpus

a consecutive, internal artistic development with valid chronological implications. Nevertheless her tacit acceptance of the thesis, first elaborated by Heurtley (Heurtley, 1938, pp. 21 ff.) and most recently supported by Aström (Aström, *The Swedish Cyprus Expedition* Vol. IV: 1C - forthcoming), that there existed a bichrome style capable of geographical and chronological localisation, is confirmed by the title of her volume, *Palestinian Bichrome Ware*, which further highlights the inconsistency with which her argument has been developed.

As a result of this approach, the pottery from Egypt which shows decorative affinities with the Bichrome Wheel-made Ware has been included in Epstein's corpus without any attempt at isolating those features which differentiate it from the body of examples belonging to the distinctive Asian style described by Heurtley. As has already been recognised by Hennessy (Hennessy, 1963, p. 54) and Kantor (Kantor, 1965, p. 22), the so-called Bichrome Wheel-made Ware vases with authenticated find-spots in Egypt are evidently of Egyptian, not Palestinian, Syrian or Cypriote manufacture. There are in fact only two pots alleged to have come from the Nile Valley, which belong to the Palestinian variety of the Ware and could be regarded as imports. Their provenances cannot, however, be verified.

The incomplete Bichrome Wheel-made Ware jug in the Petrie Collection, University College, London (U.C. 18961) (Epstein, 1965, Pl. XIII. 48, p. 51; Epstein, 1966, Pls. III. 2, XIII. 6, p. 138), which is a genuine representative of the Palestinian style, was first identified by the late Professor J. R. Stewart during a visit to the collection in 1959. Dr. Arkell informed him at the time that there were no identifiable marks on the sherds which make up the vessel (Epstein, 1966, p. 138) and that it had no known provenance. Its tentative attribution to the site of Sidmant was based on nothing more than the fact that several pots in the Bichrome style had been found there in scientific excavations (see below, pp. 10 ff.). As the collection in University College also contains material from Petrie's excavations in Palestine, as well as purchases, there is no reason to assume that the jug must have been found in Egypt.

A second Bichrome Wheel-made Ware jug is in the Cairo Museum (No. C 2784 in von Bising's unpublished second volume of *Tongefässe* in the series *Catalogue général des antiquités égyptiennes du Musée du Caire*; Epstein, 1966, Pl. I. 5, p. 6; Aström, *The Swedish Cyprus Expedition*, Vol. IV: 1C, Type IVB1a - forthcoming; Pl. = Medelhavsmuseet, Stockholm, Neg. No. C 9434). The vase, whose provenance is likewise unknown, has



Bichrome Wheel-made Ware jug (Cairo Museum No. C 2784).
Courtesy of the Medelhavsmuseet, Stockholm.

a swollen piriform body with a broad, thick base-ring, a narrow, slightly concave neck with everted, circular rim, and a thick handle of oval section from the rim to the shoulder. The exterior surface is covered with a burnished creamy-buff slip, and bears matt black and purple-red painted decoration. It is 29.4 cm. high and the body is 22.7 cm. wide. As the Cairo Museum collections also include objects which were acquired by gift and purchase, it is



Egyptian pot in Bichrome Style from el-Lisht (Metropolitan Museum of Art, No. 15. 3. 1655). Courtesy of the Oriental Institute, University of Chicago.

(other view opposite page.)



not impossible that this jug was discovered elsewhere and brought to Egypt in modern times. In any case it cannot in our present state of knowledge be said definitely to have come from the Nile Valley.

The remaining vessels, which are related to the Palestinian Bichrome Wheel-made Ware and have verified Egyptian find-spots, betray their seemingly derivative nature through shape, fabric and finish. From the town south of the pyramid of Amenemhat I at el-Lisht has come a pot decorated in the Bichrome style

(M.M.A. No. 15.3.1655; de-accessioned to the Oriental Institute, Chicago, on 13 October, 1953; M.M.A. Egyptian Expedition Neg. Nos. L. 13-14. 274, L. 13-14. 422; Pl. = Oriental Institute, Chicago, Neg. Nos. 55246, 55247). It has a slightly carinated, piri-form body with everted ring base and a short, broad, concave, expanding neck with everted rim, and no handle. Two-thirds of the rim are missing. According to Miss J. A. Franke, to whom I am indebted for this information, the pot is wheel-made and of "non-compact friable red ware with rock or grit temper and some straw. It is painted white over the entire outer surface, including the base, and some paint runs inside the neck. It has matt brown painted decoration on the shoulder: 1) a fish; 2) a bird with a bunch of grapes; 3) a rectangular object. There are three horizontal painted lines on the neck and three horizontal painted lines on the body". It is 20.0 cm. high and the body is 17.0 cm. wide. While the motifs and their arrangement round the shoulder are typical of the Bichrome style (e.g. Epstein, 1966, Pl. XI. 6-7), the rendition of the elements is unparalleled in the Palestinian variety, and in any case the fabric is unmistakably Egyptian. It should also, of course, be noted that the painted decoration is monochrome, not bichrome.

Nothing is known of the *in situ* location of the spot, other than that the Metropolitan Museum's Egyptian expedition brought it to light in the *radim* filling the mud brick village which had been built on the southern side of the pyramid of Amenemhat I. According to the excavator, "the late (i.e. post-Amenemhat I) occupation of the site began towards the end of the Intermediate Period, and lasted up to about the Twenty-second Dynasty" (Mace, 1914, p. 210). It can therefore be given no more specific date than a probable *terminus post quem* of the late Hyksos period.

A number of vases painted in the Bichrome style were found in graves in Cemetery K in the district of Maiyana south of Sidmant (Petrie and Brunton, 1924, II, Pl. XC). Tomb 1254 (Petrie and Brunton, 1924, I, Pl. XLVI, p. 16) produced the upper portion of a jug decorated with Bichrome Wheel-made Ware motifs (Petrie and Brunton, 1924, I, Pl. XLV. 68). Though it is described as having a black painted pattern on a pink ground, it may have had a bichrome black and red design, as the details of the exterior surface treatment of the jug from Tomb 1262, which is said to have had black decoration, is inaccurate (see below). This broken pot appears to have been the only offering found with the interment in Tomb 1254. In Tomb 1262 (Petrie and Brunton, 1924, I, Pl. XLVI, p. 16) occurred another jug of similar shape and ornamentation rendered in bichrome black and dark red paint

(Ashmolean Museum, Oxford, No. 1921. 1318) (Petrie and Brunton, 1924, I, Pl. XLV. 67; Frankfort, 1927, Pl. XIII. 2; Epstein, 1966, Pl. XV. 2). It was located in a basket which also contained an alabaster vase (Petrie and Brunton, 1924, I, Pl. XLI. 33) and a collection of scarabs, amulets and beads of blue glass and blue and black faience, as well as shells (Petrie and Brunton, 1924, I, Pl. XLIII. 64-93), and shell rings and a piece of pumice stone (Petrie and Brunton, 1924, I, Pl. XLVI, p. 16).

A third jug with bichrome painted decoration (Ashmolean Museum, Oxford, No. 1921. 1376) (Petrie and Brunton, 1924, I, Pl. XLV. 71; Frankfort, 1927, Pl. XIII. 6; Kantor, 1965, p. 31 Fig. 7. C, p. 37, where the references to C and D have been transposed; Epstein, 1966, Pl. IX. 4) came to light in the filling of Tomb 1270 (Petrie and Brunton, 1924, I, Pl. XLVI, p. 17). This deposit also yielded a grey limestone kohl pot (Petrie and Brunton, 1924, I, Pl. XLI. 31), a blue faience juglet (Petrie and Brunton, 1924, I, Pl. XLI. 32), two scarabs (Petrie and Brunton, 1924, I, Pl. XLIII. 15, 16), a flint, carnelian ball beads, green glaze cylinder beads, white shell ring beads (Petrie and Brunton, 1924, I, Pl. XLVI, p. 17) and three pots (Petrie and Brunton, 1924, I, Pls. XLIV. 13, painted decoration in the Cypriote White Painted Cross Line Style XLV. 58, 59). Another juglet with bichrome black and plum (Ashmolean Museum, Oxford, No. 1921. 1391) (Petrie and Brunton, 1924, I, Pl. XLV. 70; Frankfort, 1927, Pl. XIII. 1; Kantor, 1965, p. 31 Fig. 7. B; Epstein, 1965, Pl. XV. 11; Epstein, 1966, Pl. XV. 6; Merrillees, 1968, p. 72) was discovered in Tomb 1289 (Petrie and Brunton, 1924, I, Pl. XLVI) together with a juglet of Egyptian manufacture decorated in the Cypriote White Painted VI style (Petrie and Brunton, 1924, I, Pl. XLV. 69; Merrillees, 1968, p. 72).

As to the origin of these pieces, it should first be noted that the jugs from Tombs 1254 and 1262 belong to a type attested in this Ware only in Egypt (Epstein, 1966, pp. 12 f.), which itself hints at provincial production. While the decorative patterns and their colour scheme are clearly related to the Palestinian Bichrome Wheel-made Ware, the careless application of the design shows a hand unfamiliar with the more rigorous conventions which typify the style defined by Heurtley. The colour of the painted decoration and the style of its rendition strongly suggest a non-Palestinian source for the jug from Tomb 1270, and the shape of the juglet from Tomb 1289, which has an exceptionally narrow neck (Epstein, 1966, p. 12) and is based on the Black Lustrous Wheel-made Ware (Black Polished) jug type, also points to a local place of manufacture. Though no spectrographic analyses have yet been made of the clays of these vases, their fabrics resemble those of the other

contemporaneous painted wares which were clearly made in Egypt. While this evidence is not wholly conclusive, there exist sufficient grounds for doubting that the Sidmant pots were imports from Palestine or further afield and for postulating an Egyptian origin for them.

Tombs 1254, 1262, 1270 and 1289 all lay in the western sector of Cemetery K, itself situated in the desert half a mile from the cultivation on the west bank of the valley (Petrie and Brunton, 1924, I, p. 16). This fact is significant on its own, as the extensive excavations conducted in the cemeteries of the Sidmant/Maiyana region failed to reveal any other vases in the Bichrome style, thus giving the specimens from Cemetery K a special chronological and cultural association with the dead buried in the western division. According to Brunton, "There was no sign of re-use, and it is most probable that all the objects found are closely dated to the same period" (Petrie and Brunton, 1924, I, p. 16). He also made a careful chronological analysis of the material from the graves (Petrie and Brunton, 1924, I, pp. 19 f.) and reached the conclusion that "the date of the cemetery is not far from that of the XIIth, but closer to the XVIIth dynasty" (Petrie and Brunton, 1924, I, p. 20). The pottery and scarabs from the cemetery have also been recently subjected to detailed analysis by O'Connor (O'Connor, 1969), who confirms their attribution to the Hyksos period.

While it cannot be disputed that the people buried during the second half of the Second Intermediate period in the cemetery were of very modest means (Petrie and Brunton, 1924, I, p. 20), the homogeneous character of the graves and their furniture and certain unusual features of the burials enable further precision to be reached in determining not only the date of the deposits but also the racial identity of the deceased. Clues to the ethnic origins of these people had in fact already been recognised by the excavator, who noted that "the shell beads, the leather pillows, the use of yellow wool, have a non-Egyptian flavour, and their affinities are with the south" (Petrie and Brunton, 1924, I, p. 20). There are, however, other aspects which strengthen the resemblance between Cemetery K and the "south", in particular Pan-grave culture, and a comparison with the Pan-grave cemetery at el-Balabish (Wainwright, 1920, pp. 1 ff.) demonstrates the unmistakable relationship between the two.

The oblong pits in which the bodies were extended with head to the north and the constant use of mats in Cemetery K (Petrie and Brunton, 1924, I, Pl. XLVI, p. 19) can be exactly paralleled in the late Pan-grave burials at el-Balabish (Wainwright, 1920, pp. 3 ff.). At both sites the bodies had been wrapped in woven material, and

in two cases at Maiyana (Tombs 1282, 1292) the bones were found stained red (Petrie and Brunton, 1924, I, pp. 17, 18, Pl. XLVI; Brunton, 1937, p. 123), a trait characteristic of the whole el-Balabish cemetery (Wainwright, 1920, p. 4). Though there is some conflict of expert opinion as to whether this phenomenon was intentional or an accident of preservation (Petrie and Brunton, 1924, I, p. 17; Wainwright, 1920, p. 4), its singularity and co-incident occurrence in two cemeteries linked by other cultural features in common and belonging to the same period suggests something more than chance in its appearance. Pillows of rolled lamb's wool were used in both cemeteries (Petrie and Brunton, 1924, I, p. 19; Wainwright, 1920, p. 29), and the prevailing ornaments in the graves at Maiyana of white shell ring beads (Petrie and Brunton, 1924, I, p. 19) made up the commonest and most distinctive classes of Pan-grave beads at el-Balabish (Wainwright, 1920, p. 20). The inclusion of shells amongst the grave-goods in Cemetery K (Petrie and Brunton, 1924, I, Pl. XLVI) was another of the typical features of the interments at el-Balabish (Wainwright, 1920, pp. 17 ff.). The shells found in Maiyana Tomb 1262 (Petrie and Brunton, 1924, I, Pl. XLIII. 91, 92, p. 16) are obviously of the same kind as specimens from the el-Balabish cemetery (Wainwright, 1920, Pl. VIII. 2. 6, 9A-C) which belong to the genus *Conus* (Wainwright, 1920, p. 17) and come from the Red Sea/Indian Ocean region (Wainwright, 1920, p. 18).

On the other hand the presence of glass articles at Maiyana (Tombs 1262, 1265) (Petrie and Brunton, 1924, I, p. 16, Pl. XLIII. Group 1262, Pl. XLVI) contrasts with the situation at el-Balabish, where glass is nowhere encountered (Wainwright, 1920, p. 6). Nevertheless Brunton has noted parallels for the blue faience bead amulet, shaped like a door with pivots (Petrie and Brunton, 1924, I, Pl. XLIII. 82) and the blue faience floral bead (Petrie and Brunton 1924, I, Pl. XLIII. 77 from Maiyana Tomb 1262 in the Pan-grave burials at Mostagedda (Brunton, 1937, Pl. LXXVI. 10, 50— from Tombs 3211 and 3134 respectively). A more significant difference, however, lies in the pottery from each site. While the ceramic repertory at el-Balabish is conventionally Pan-grave with a certain admixture of Egyptian types (Wainwright, 1920, Pl. XIV, pp. 35 ff.), the Maiyana corpus is wholly Egyptian with none of the characteristic Pan-grave wares present (Petrie and Brunton, 1924, I, Pls. XLIV, XLV, pp. 19 f.), and looks forward to the typology and fabrics of the XVIIIth Dynasty.

Before evaluating the import of these associations and divergences, one further item of evidence should be taken into account. At Badari, Brunton uncovered traces of small Pan-grave settle-

ments, which comprised huts with circular foundations (Brunton, 1930, p. 3). According to the excavator, "The association of Pan-grave objects with these (circular) hut-bases leaves no doubt as to their date. We can now see that the shallow underground circles at Maiyana (*Sedment I*, p. 21) are also bases of huts, though we cannot fix their date with certainty as the pottery found in them is different from the Pan-grave and other 'Nubian' pottery. It is interesting to note the variation in shape of the huts, some being round and others rectangular. Apparently these people, after settling in the district, became rapidly Egyptianised, and abandoned their native form of hut for that of the Egyptian house. In the cemeteries a similar change is seen in the shape of the graves" (Brunton, 1930, p. 4).

Since it is *a priori* unlikely that native Egyptians would have adopted the burial customs of foreigners, and since there is unequivocal evidence that settlers from outside the Nile Valley, in particular the Hyksos and the Nubians, underwent progressive Egyptianisation during the Second Intermediate Period (see below, pp. 22 f.), it may be reasonably argued that the people buried in Maiyana cemetery K were largely assimilated Pan-grave Nubians, who had moved into lower Egypt before the end of the Hyksos occupation and settled in the Sidmant region. Furthermore, the presence of Egyptian pottery to the exclusion of Pan-grave wares at Maiyana and the rectangular shape of the graves, amongst other factors, indicate that Cemetery K belongs to a late phase in the Hyksos period, probably close to its end, when the manufactures of this people had become almost indistinguishable from Egyptian artefacts but their beliefs and practices had not yet been wholly integrated (Brunton, 1937, pp. 122, 124 f.).

An Egyptian vase decorated in the Bichrome Cross Line Style (Ashmolean Museum, Oxford, No. 1923. 578) (Brunton, 1930, Pl. XVI. 55P; Kantor, 1965, p. 31 Fig. 7. E) was discovered in Qaw el-Qebir Tomb 902, which was located on the southern edge of the western part of the south cemetery (Brunton, 1927, Pl. III). Its shape is typically Egyptian (e.g. Brunton, 1930, Pls. XVI. 55R, XXVIII. 138-141) and its dark purplish-brown painted decoration is monochrome (information from Mrs. J. Crowfoot Payne). The relationship of the ornamental pattern to the Bichrome style may be deduced from the arrangement of the motifs and from the motifs themselves (Heurtley, 1938, pp. 21 ff.).

Qaw el-Qebir Tomb 902 was a re-used IXth Dynasty grave (Brunton, 1930, Pl. V), in which had been laid to rest two bodies. They were accompanied by an alabaster kohl pot (No. i) (Brunton, 1930, Pl. XX. 2); scarabs of steatite (No. ii) (Brunton, 1930, Pl.

XIX. 67) and carnelian (No. iii) (Brunton, 1930, Pl. XIX. 77); an ivory kohl stick (No. iv) (Brunton, 1930, Pl. XX. 16); cylinder beads of blue glazed steatite (No. v) (Brunton, 1930, Pl. XXXII. 23); small carnelian, black paste and blue glazed ball beads (No. vi) (Brunton, 1930, Pl. XXXII. 48, 49, 50); blue glass tyre-shaped beads (No. vii) (Brunton, 1930, Pl. XXXII. 63, 64); and disc-shaped beads of carnelian (No. viii) (Brunton, 1930, Pl. XXXII. 67), shell (No. ix) (Brunton, 1930, Pl. XXXII. 69), blue glaze (No. x) (Brunton, 1930, Pl. XXXII. 73) and black glaze (No. xi) (Brunton, 1930, Pl. XXXII. 76); and local pottery, comprising a carinated bowl with corrugated rim and smooth red slip (No. xii) (Brunton, 1930, Pl. XII. 9F); a bowl with red burnished slip (No. xiii) (Brunton, 1930, Pl. XXVI. 38); a "pinkish drab" jar with lid (No. xiv) (Brunton, 1930, Pl. XVII. 78M); a tall, red burnished ring stand (No. xv) (Brunton, 1930, Pl. XXIX. 215) and a tall, orange buff pot (No. xvi) (Brunton and Engelbach, 1927, Pl. XXXVIII. 53C). The deposit had apparently been disturbed (Brunton, 1930, Pl. V).

The lateral notches in the scarab back (No. ii) are typical of the Hyksos period (Brunton, 1930, p. 12; O'Connor, 1969), and the scarab with the human headed back (No. iii) belongs to a type which occurs at the end of the Hyksos period (Hayes, 1959, p. 6 Fig. 2) and the beginning of the XVIIIth Dynasty (Brunton and Engelbach, 1927, Pl. XXI. 7; Brunton, 1930, p. 12). The small shell and blue glaze disc-shaped beads (Nos. ix, x) are a distinctive feature of the Hyksos period, particularly of the Pan-grave culture (Wainwright, 1920, p. 20). Of the pottery, one bowl (No. xii) can scarcely be later than the Second Intermediate Period, the other (No. xiii), much earlier than Dyn. XVIII A. The ring stand (No. xv) is of a type and fabric which occurs in the Second Intermediate Period (Brunton, 1930, Pl. XVII. 86D) and is unlikely to be much later than this phase, of which it is typical. The grave-gods, which appear to be homogeneous and have been dated by the excavator to the Second Intermediate Period (Brunton, 1930, Pl. V), may be assigned to the very end of the Hyksos period.

From Aniba have come two vases which show evidence for the impact of the Bichrome style on the local ceramic industry. The first was found in Tomb S11 (No. 25) (Steindorff, 1937, Pl. 82. 38 (b) 1, p. 160; Epstein, 1966, p. 16) and is similar in shape and even decorative layout to the pot under the same influence from el-Lisht (see above, p. 9). It had red and red-brown painted ornamentation (Steindorff, 1937, p. 133), and was associated in the tomb with objects covering the Hyksos period and Dyn. XVIII A (Merrillees, 1968, p. 135). The second, a jug from Tomb S87 (No.

18) (Steindorff, 1937, Pl. 83. 39 (b) 2, p. 197; Epstein, 1965, Pl. XIII. 47, p. 51; Epstein, 1966, Pls. III. 4, XIII. 2, pp. 140 f.), shows an unmistakably Egyptian origin through its shape, particularly the thickened, cut-away rim, and the application of its red-brown and black-brown painted decoration (Steindorff, 1937, p. 134). In the same deposit were found two Black Lustrous Wheel-made Ware (Black Polished) juglets (No. 16) (Steindorff, 1937, Pl. 81. 36b type), two Kerma Ware bowls (Nos. 19, 20) (Steindorff, 1937, Pl. 84. 42 (a) 5 type, Pl. 84. 42 (b) 4 respectively) and a Tell el-Yahudiya Ware juglet (No. 21) (Steindorff, 1937, Pl. 86. 45 (a) 1). The contents of the grave have been dated to the period covering the Hyksos phase and Dyn. XVIII A (Steindorff, 1937, p. 197).

Though Tomb S87 had been disturbed, the presence of three additional kinds of vase with foreign associations cannot have been without its significance, especially since only a single mummy mask (No. 1) (Steindorff, 1937, p. 197) was recovered from the deposit and the grave-goods do not suggest an extended period of use. The Kerma Ware is the identifying mark of the Kerma-group culture (Bietak, 1968, pp. 123 ff.), and the Tell el-Yahudiya Ware is the characteristic product of the Hyksos (see below, pp. 23 f.). Neither fabric can be shown to occur after the end of the Hyksos period in Egypt proper (O'Connor, 1969; Merrillees, 1968, pp. 96 f.), and while there is no evidence for the production of Tell el-Yahudiya Ware in the Nile Valley after the end of the Second Intermediate Period, Kerma Ware may still have been made in Nubia during the first half of the XVIIIth Dynasty (Bietak, 1968, pp. 125 f.). On the other hand the Black Lustrous Wheel-made (Black Polished) Ware is typical of Dyn. XVIII A, and has close associations with the Bichrome Wheel-made Ware outside the Nile Valley (Epstein, 1966, pp. 141 f.; Oren, 1969, pp. 127 ff.). The occurrence of all these wares in the same deposit could therefore have had some association outside the funerary context.

The genesis of the Bichrome Wheel-made Ware appears to have lain in north Syria, where the right combination of political, cultural and commercial circumstances are thought to have existed for giving birth to this new ceramic fashion (Epstein, 1966, pp. 186 f.). From these beginnings it must have spread southward and been developed by the cities in Palestine, where it became the most distinctive product of their Late Bronze I ceramic industry. At Tell el-Ajjul the Ware is first attested in Palace I (Epstein, 1966, pp. 175 ff.), whose destruction is usually attributed to Egyptian invaders in the early years of the XVIIIth Dynasty (Epstein, 1966, p. 174). It may even have been that the attack on Tell el-

Ajjul was led by Ahmose I, first king of the XVIIIth Dynasty, who, after chasing the Hyksos from the Nile Valley, but before his twenty-second regnal year, conducted a three year siege of Sharuh-en and led a campaign into Djahi (central Syria) (Redford, 1967, pp. 48 f.).

Bichrome Wheel-made Ware was therefore being manufactured in Palestine by the same Asiatic race of people to whom the Hyksos, then occupying Egypt, also belonged (Hayes, 1962, pp. 15 f.; James, 1965, p. 8). This connection makes the transmission of the Bichrome style to the Nile Valley, whether it took place by the migration of settlers or even potters, or by the export of the Palestinian article, a readily comprehensible event. In fact this very association, when seen against the background of Egyptian campaigns against the Asiatics at the beginning of the XVIIIth Dynasty, makes it *a priori* improbable that any direct commercial links with the home of the Ware should have been maintained by the Egyptians after the Hyksos, or at least their leaders, had been expelled from their land and forced to retreat into Palestine (Merrillees, 1965, p. 95). This supposition is fully confirmed by the chronological data from Egypt for evidence of the Bichrome style in the pottery remains of the period. There is not one deposit containing a pot with Palestinian Bichrome affinities which requires a date later than the end of the Hyksos period. Indeed it is precisely to this phase that most of the pots in question can be assigned; and this conclusion is reinforced by the discovery of sherds of "bichrome" ware, together with a very little Tell el-Yahudiya Ware, in level D/1 at Tell ed-Dabca (Bietak, 1968a, p. 102), which has been dated to the time from the late Hyksos period to the early XVIIIth Dynasty (Bietak, 1968a, p. 88).

The distribution of the Bichrome inspired pots in Egypt is also not without bearing on the internal history of the Nile Valley during the second half of the Hyksos period. Recent research has made it clear that the political situation in Egypt at this time was much more complex than previously thought and the respective spheres of physical control and political influence exercised by the powers then dominant was far from being clear cut and distinct. As far as can be determined from the extant literary records, suzerainty over Nile Valley was shared between three different rulers, the Hyksos in lower and middle Egypt with their capital at Avaris in the Delta, the native Egyptian dynasts based on Thebes in upper Egypt, and the kings of Kush who had extended their hegemony into lower Nubia from the centre of their civilisation in Dongola. The exact boundaries of their respective holdings at any one time after the rise of the Hyksos XVth Dynasty appear difficult to define with certainty, but it has been argued, admittedly on

circumstantial evidence, that Mayebre Sheshi, first king of this Dynasty, may have extended Hyksos rule into upper Egypt, perhaps as far south as the First Cataract (Hayes, 1962, p. 20). Certainly the occurrence of blocks bearing the names of his successors, Seuserenre Khyan and Auserre Apopi, at Gebelein south of Thebes point to the existence of Hyksos overlordship until some time during the latter's reign (Hayes, 1962, pp. 21 f.; Redford, 1967, pp. 45 f.). By the time of the third regnal year of Kamose, last king of the Theban XVII Dynasty, the Egyptians had re-established their sovereignty over upper Egypt and the Hyksos had been driven back to Cusae (Hayes, 1962, p. 23; James, 1965, pp. 4 f.). In this year Kamose launched an attack against Nefrusy, a town in the hands of pro-Hyksos forces north of Cusae, and even raided Hyksos held territory as far north as their capital, Avaris (James, 1965, pp. 4 f.). If, as seems likely, he did not succeed in gaining a permanent foothold in the land occupied by the Asiatic rulers, his brother, Ahmose I, who founded the XVIIIth Dynasty, vigorously followed up his predecessor's lead and after a siege of possibly four years' duration stormed the Hyksos capital sometime between his seventh and seventeenth regnal years (Redford, 1967, pp. 47 ff.).

The extent of the contemporaneous kingdom of Kush can only be inferred from passing references in Egyptian records, according to which, at the time of Kamose, the Nubian chief is said to have ruled "over a territory which extended from Elephantine in the north, southwards into the region of the Second Cataract" (James, 1965, p. 10), and down to Dongola, whence the territory was ruled. The kingdom appears to have emerged as a separate political entity after the collapse of Egyptian power at the effective end of the XIIIth Dynasty (O'Connor, 1969), and though there is some slight evidence that Kamose may have fought the Kushites (James, 1965, pp. 11 f.), it was not until the reign of Ahmose I that Nubia was brought back under the hegemony of the Theban dynasts (James, 1965, p. 12).

From this information the fluctuating fortunes of the Egyptian rulers may be deduced. It would seem that from the time of Mayebre Sheshi until the reign of Auserre Apopi, probably after his thirty-third regnal year (Hayes, 1962, p. 23, n. 7), the Thebans were administratively in charge of their own portion of Egypt, probably only as far north as the junction between middle and upper Egypt, but were nominally subject to the overlordship of the Hyksos, to whom they evidently paid tribute (James, 1965, p. 3). This extension of power would doubtless have served to bring the Hyksos into closer touch with the Nubians beyond the First

Cataract early in the XVth Dynasty. It appears to have been only during the reign of the Egyptian ruler, Seqenenre Tao II, penultimate king of the XVIIth Dynasty, that the first efforts were made by the Thebans to free themselves and the Nile Valley from Asiatic domination (Hayes, 1962, p. 33).

The exact nature of Hyksos, Theban and Kushite sovereignty over the sections of the Nile Valley which they respectively occupied is even more problematical than the limits of their territorial holdings. While it need not be doubted that the Hyksos accomplished their expansion into middle and upper Egypt by force of arms, once established they appear to have governed much of the area they occupied, which probably extended no further south than middle Egypt, more through indigenous adherents and others in their pay than by the implantation of colonists and supporting administrative and military services (Hayes, 1962, p. 16; James, 1955, p. 3). There is, for example, evidence to argue that the Hyksos employed native Egyptians to help run and garrison their territory (Hayes, 1962, pp. 16, 21; James, 1965, p. 5), which implies a certain looseness and adaptability in the management of their territory. Especially indicative of this informal state of affairs is the arrangement whereby under Kamose at least the supporters of the Theban dynasts were allowed to graze their livestock in the papyrus marshes of the Delta "(the only satisfactory grazing area in Egypt) according to ancient practice" (James, 1965, p. 4). James rightly observes that this provision seems inconsistent with the hostilities alleged to have broken out between Seqenenre Tao II and Auserre Apopi (Hayes, 1962, p. 33; Merrillees, 1968, p. 192), and suggests the hypothetical struggle could have been "so indecisive that an uneasy peace was concluded, under which the Thebans were allowed to pasture their cattle in the Delta."

There is probably, however, no need to seek an elaborate explanation for these facts, since a war of liberation of this kind would most likely have involved only the ruling elite of both sides in localised engagements, and have had little effect on the everyday life of the peasants or townfolk (except, of course, in garrisons and strongholds) or on intercourse along the Nile Valley and even between it and the outside world (Merrillees, 1968, p. 192). Certainly the advice of Kamose's counsellors (Merrillees, 1968, p. 192), the element of surprise achieved by him in his attack on Nefrusy (James, 1965, p. 5), and the evident speed and ease with which the raid into the Delta was executed, as well as its ephemeral results (see above, p. 18), do not give the impression that these manoeuvres were undertaken in response to a widespread upsurge of Egyptian antagonism against the Hyksos or that they led to

a general outbreak of hostilities between the different communities in the Nile Valley. Yet whatever the historical background to this development, it does point to an important feature of contemporary life in Egypt, the scope that existed for the movement by people along the Nile Valley.

The relations between the princes of Kush and the rulers in Thebes seem to have been no less flexible. Expatriate Egyptians who remained behind in Nubia after the XIIth Dynasty Pharaohs surrendered their control over the region are found to have worked for the Kushites (James, 1965, p. 11; Bietak, 1968, pp. 156 f.), and other Egyptians from outside Nubia are known to have sold their services to the southern kings during this period (Redford, 1967, p. 67). The movement, however, was not all in one direction, as is shown by the employment of Nubian warriors of the Medjay tribe in the Theban army (see below, p. 21) and the occurrence of Kerma-group burials north of the First Cataract (O'Connor, 1969). According to Redford, "It is not unlikely, in view of the heavy influx of Nubians into Upper Egypt, that the family of the Seventeenth Dynasty could boast of a large admixture of Nubian blood" (Redford, 1967, p. 68).

Of particular importance are the contacts which took place between the Hyksos and the kings of Kush in the late Second Intermediate Period, for there seems to have been a closer political and commercial liaison between them than either enjoyed, except culturally, with the native Egyptians, especially those in Thebes. Not only have the seals and seal impressions of the Hyksos rulers from Mayebere Sheshi onwards, as well as their officials, been found in lower Nubia and as far south as Kerma in Nubia (Hayes, 1962, pp. 20 f.; O'Connor, 1969), but the existence of direct and friendly communications between the two non-Egyptian kingdoms is proved by the second Kamose stela, in which is recorded the interception by Kamose's forces of a letter from Auserre Apopi to the Prince of Kush. In this despatch the Hyksos ruler calls the Nubian chieftain "my son", reproaches him for not having sent word of his accession, and even calls on him to attack the Egyptians from the rear (James, 1965, pp. 11 f.).

Turning now to the archaeological data, we are confronted with two phenomena which must be related to our literary knowledge of the time. The first concerns the Pan-grave culture, which is said to have extended from Deir Rifa in middle Egypt, where the most northerly remains have to date been encountered, to Serra West in the south (Bietak, 1966, pp. 64 ff.). Traces have even been identified at Kerma (Bietak, 1966, p. 70). The people of this culture are thought to have been nomads who migrated

from the eastern desert and began to settle in lower Nubia possibly as early as the XIIth Dynasty (Bietak, 1966, pp. 71ff.; Bietak, 1968, pp. 149 f.) but more likely during the XIIIth Dynasty (O'Connor, 1969). They have been equated with the Medjay whose land is referred to in Egyptian records first during the VIth Dynasty (Bietak, 1966, p. 73). These Medjay served as mercenaries for the Egyptians in the late First Intermediate Period (Bietak, 1966, pp. 73 f.), but in the XIIth Dynasty the Egyptian authorities considered them enemies (Bietak, 1966, p. 75). By the XIIIth Dynasty the Medjay had begun to arrive peaceably and settle in upper Egypt, and hostile mention of them disappeared from Egyptian texts (Bietak, 1966, p. 76). Furthermore the discovery of an axe with the name of Nebmaatre in a Pan-grave at Mostagedda (Tomb 31353 (Brunton, 1937, Pl. LXXIV. 9, pp. 117, 127, 131) has led Bietak to conclude that already by the late XIIIth Dynasty the Medjay had taken up duty with Egyptian forces as special troops (Bietak, 1966, pp. 76 f.), and that the prominent role they played in Kamose's campaigns against the Hyksos at the end of the XVIIth Dynasty (Hayes, 1962, p. 36) was nothing more than the culmination of a tradition of mercenary service that had grown up in the intervening period of time.

These historical facts have misled scholars into believing that the Medjay or Pan-grave peoples were wholly contained within the Egyptian orbit of influence and into precluding the possibility that they became attached to other than the Theban rulers. In the first place the distribution of their remains shows, contrary to Hayes' assertion (Hayes, 1962, p. 36), that far from being confined to the realm governed by the Egyptian kings of the XVIIth Dynasty, they settled in territory that, if not physically occupied by the Hyksos, must at least have been nominally subject to their control (see above, p. 18). In this connection it is a fact of some significance that one of the Pan-graves at Deir Rifa produced a scarab of Meyebre Sheshi (Petrie, 1907, Pl. XIII. 3, pp. 20, 21). It should also be noted that evidence for the Pan-grave culture has also been encountered in the region south of Elephantine, which marked the northern limits of the kingdom of Kush (see above, p. 16). This kingdom is almost certainly synonymous with the Kerma-group civilisation (Bietak, 1968, p. 155), of which remains have been encountered between the First and Fourth Cataracts, with their heaviest concentration at Kerma itself in Dongola (O'Connor, 1969).

It will therefore be seen that the Medjay straddled the Hyksos, Theban and Kushite domains and must clearly have enjoyed a certain mobility in taking up residence along the Nile Valley.

Though there is clear proof that the Egyptian kings employed Pan-grave warriors in their army, it should not be assumed that the Medjay were necessarily wholly or exclusively under the Egyptians' authority. Indeed O'Connor, after referring to the archaeological evidence for Pan-grave inhabitants in Egypt proper, maintains that "It is not surprising to find Medjaya associated with both the Thebans and Kush; Kushite warriors themselves served the Thebans and the co-operation of the Medjaya was probably needed by the Kushites in Lower Nubia in order to gain access to the gold mines of the eastern desert" (O'Connor, 1969). Nevertheless, no matter where the Pan-grave peoples settled or by whom they were employed, their Egyptianisation must have got under way almost immediately. While it is obvious that those who established themselves in Theban territory would have been readily assimilated, the adoption of Egyptian culture by others who settled outside this area need have been no less inevitable. To begin with, it must be assumed that the bulk of the native Egyptian populace was not displaced by either the Hyksos or Kushite invaders, and remained during the Hyksos period where it had been before. Furthermore, far from altering its way of life to accommodate the foreigners, it was the latter who modelled themselves on the Egyptians, and there is ample evidence for the progressive cultural assimilation of the Hyksos (Hayes, 1962, pp. 16 f.), the Medjay (Hayes, 1962, pp. 36 f.) and the Kerma-group people (James, 1965, pp. 10 f.) during the latter half of the Second Intermediate Period. By the New Kingdom the Pan-grave people had lost their separate cultural identity (Hayes, 1962, p. 37; Bietak, 1966, pp. 73, 77). In the light of the pattern of Medjay settlement and of the processes of Egyptianisation, the presence of a largely integrated Pan-grave community in the Maiyana region of Sidmant at the end of the Hyksos period becomes a more easily explicable phenomenon.

What use, if any, the Hyksos made of these people can only be inferred from the archaeological data, but certain features of Cemetery K at Maiyana provide clues as to the reasons for the occurrence of this Medjay settlement in the region. The most noteworthy fact is the paucity of male burials in the cemetery (Petrie and Brunton, 1924, I, Pl. XLVI). Of the 33 bodies identified in graves which can be traced in the plan of the cemetery, only eight were attributed to men, and half of these were said to be old. The rest belonged in almost equal proportion to women and children. When to this situation is added the fact that no weapons were recovered from the cemetery, in contrast to the numerous armaments found in other Pan-grave burial-grounds (Hayes,

1962, p. 36), the conclusion becomes inescapable that the young men of fighting age were absent from this community during the limited time of its residence at Maiyana, leaving for the most part only the old men, women and children behind. In this context note should also be taken of Brunton's comment that "we may doubt whether the Pan people made any of the weapons which are found in their graves, and we can suppose that they were supplied to them in their capacity as mercenaries" (Brunton, 1937, p. 128). The presence of Palestinian inspired pottery of the bichrome variety, not to mention a Hyksos produced Tell el-Yahudiya juglet (Petrie and Brunton, 1924, I, Pl. XLV. 64, p. 20), in Maiyana Cemetery K leaves no doubt that this group of Egyptianised Medjay at least were closely involved with the Hyksos, evidently to the extent of rendering them military service.

Though no other traces of the Pan-grave peoples have yet been directed north of Deir Rifa, with the possible exception of some unpublished pottery from Kahun (Petrie, 1901, p. 48), there now seems no reason to doubt that other groups of largely assimilated Medjay could also have moved beyond Deir Rifa into lower Egypt. While the other Bichrome style pots found in Egypt cannot be so closely associated with southerners installed in the Nile Valley, it may be significant that none probably occurred in areas outside Hyksos or Kushite control. El-Lisht, Sidmant and Dishasha were all located in the territory over which the Hyksos certainly ruled and Qaw el-Qebir, if not physically governed by the Hyksos, must have been nominally under their sway. In any case the secondary deposit in Tomb 902 has some tenuous connections with the Pan-grave culture, and there were Pan-grave burials in the vicinity (Brunton, 1930, pp. 3 ff). Indeed it is interesting to note that the two major concentrations of Medjay remains in the Nile Valley occur in a kind of no-man's land which probably lay between the Hyksos and Theban territories, and between the First and Second Cataracts (Bietak, 1966, p. 66, Fig. 5), which was governed by the kingdom of Kush. Aniba not only lay in this portion of Nubia, but bore witness of occupation by Pan-grave peoples (Bietak, 1966, p. 69), and Tomb S 87 even contained evidence for cultural contacts with the Kerma-group civilisation (see above, pp. 16 ff.).

The presence of a Tell el-Yahudiya juglet in Aniba Tomb S 87 has added significance, since the occurrences of this Hyksos product coincide with the geographical distribution and political association of the Bichrome influenced vases. Though examples of the Ware are found the full length of the Nile Valley from the Delta down to the Second Cataract (Aström, 1957, pp. 233 ff.),

their greatest concentration is to be found in the Delta (Reisner, 1923, IV-V, pp. 386 ff.; Bietak, 1968a, p. 108), at sites such as Tell ed-Dab^a (Bietak, 1968a, pp. 93 ff., 99 ff., 106), which might have been the Hyksos capital, Avaris (Bietak, 1968a, pp. 113 f.), and Tell el-Yahudiya itself ((Petrie, 1906, Pls. V, VII, VII, VIIa), which lay in the Asiatic domain, and in lower Nubia, at sites such as Aniba (Steindorff, 1937, Pl. 86. 45a, 45b, pp. 136 f.) and Buhen (Randall-MacIver and Woolley 1911, Pls. 49, 92), governed by the kings of Kush. Tell el-Yahudiya juglets have even been found at Kerma itself (Reisner, 1923, IV-V, p. 383, Fig. 264. 24). Equally important is their direct association with the Pan-grave culture. Tell el-Yahudiya vases have been found in Pan-grave contexts in Cemetery K at Maiyana (see above, p. 3), in Cemetery S at Deir Rifa (Petrie, 1907, Pl. XXVI. 90, 92-94, p. 21), Mostagedda (Brunton, 1937, Pls. LXXII. 60, LXXIV. 5 Tomb 3146, pp. 117, 124), Qaw el Qebir/Badari (Brunton, 1930, p. 6—"Of 'Syrian' pottery we found . . . a scrap of black ware incised in white"), and in Cemetery YS at Hu (Petrie, 1901, Pl. XXXVI. 186-188, p. 52). Practically no examples have come from non-Pan-grave contexts in the region considered to have been governed from Thebes. None has yet been found at Thebes itself, and few are known to have come from Abydos (e.g., Merrillees, 1968, pp. 96 f., 116).

The occurrence of these vessels in Cemetery YS at Hu has a special significance, since the uncontaminated Pan-grave Cemetery X (Petrie, 1901, pp. 45 ff.) produced specimens of the precursor black incised patterned style (Petrie, 1901, Pl. XL. 43, p. 48; Reisner, 1923, IV-V, p. 383, Fig. 264. 23, 25, pp. 386 ff.), which is sparsely represented (Bietak 1968a, Pl. XXXII. a. right), along with the typical Tell el-Yahudiya Ware (Bietak, 1968a, pp. 93 ff.), in Tell ed-Dab^a Level E, dated to the second half of the 17th century B.C. (Bietak, 1968a, p. 89). It did not apparently occur later. Like Maiyana Cemetery K, where this earlier black incised ware is not attested, Hu Cemetery YS (Petrie 1901, pp. 50 ff.) exhibited marked affinities with the Pan-grave culture and was without doubt a burial ground for Medjay who had already reached an advanced stage of Egyptianisation. As Petrie remarks, "Though the graves of this cemetery are Egyptian, both by their shape and the mode of burial, yet they are closely connected with the 'Pan-graves'. Many of the graves contained specimens of the incised and black topped pottery common in the X cemetery, and also of the fine, thin, polished variety which was found in grave E 2. . . . Animal bones, generally those of gazelles, were common and there were several instances of bucrania, both plain

and painted. Sheep or goat skins, leather work, and twisted fibre are very common, as they were in X: many of the pots were filled with aromatic fat: one grave contained the fragments of an ostrich egg. All these things occur frequently enough in 'Pan-graves', but are, if not unknown in all cases, at any rate uncommon, in the ordinary tombs of the period. Shell and blue glaze disc beads of the 'Pan-grave' type also occur in great number" (Petrie, 1901, p. 51). Though Petrie was not prepared to give Cemetery YS any more specific date than the Second Intermediate Period, it may be argued on historical and archaeological grounds that Cemetery X can hardly be any earlier than the XIIIth Dynasty, and that Cemetery YS, which is later, must belong to the Hyksos period.

It would appear from this evidence that the Hyksos not only had close commercial relations with the kingdom of Kush, but gave special attention to their trade with all southerners, particularly the Medjay. Given the distribution of Pan-grave settlement, the warrior reputation of the people, and the use that appears to have been made of them by the Hyksos and Thebans (and even presumably the Kushites), it may be wondered whether the rulers of the Nile Valley did not vie with each other to secure the allegiance of these desert peoples to fight for them. If this were so, there would be justification for arguing that the goods of foreign manufacture or inspiration, such as the Bichrome style vases and the Tell el-Yahudiya ware, found in these Pan-grave cemeteries, which were evidently the burial grounds of people with few and poor material possessions, were acquired not so much through trade as by gift to win and keep the people on the Hyksos side. In any case there is good reason to believe that the Hyksos made it part of their policy to cultivate friendly relations, even to the point of proposing military alliances, with the rulers of Kush, as well as the Medjay, in order to keep the Thebans in check both by direct and indirect action in support of the *status quo*. The expulsion of the Hyksos brought to an end not only their collaboration with the southerners, who had doubtless profited from this relationship to hold on to their own enlarged territorial holdings, but also terminated the traffic in Tell el-Yahudiya and Bichrome Ware styles in Egypt.

July, 1970.

ACKNOWLEDGEMENTS

I should like to express my gratitude to Dr. H. G. Fischer of the Metropolitan Museum of Art, New York, and to Miss J. A. Franke of the Oriental Institute, Chicago, for making available to me information and photographs for this study. I am indebted to

Dr. D. B. O'Connor of the University Museum, Philadelphia, who has not only given me access to published and unpublished works of reference, including his own doctoral thesis, without all of which this article could not have been written, but has also read through the typescript and offered numerous valuable suggestions and comments. The views expressed in this article do not, however, necessarily coincide with his own. Quotations from his thesis are made with his permission. My thanks are also due to the Wilbour Library of Egyptology in the Brooklyn Museum, in particular to Miss E. F. Wedge, for enabling me to use the outstanding book collection under her charge, and to Mrs. J. Crowfoot Payne of the Ashmolean Museum, Oxford, and Dr. D. M. Dixon of University College, London, for supplying me with details about pottery mentioned in this paper.

BIBLIOGRAPHY

- Aström, 1957: Paul Aström, *The Middle Cypriote Bronze Age*. Lund.
- Bietak, 1966: Manfred Bietak, *Ausgrabungen in Sayala-Nubien, 1961-1965. Denkmäler der C-Gruppe und der Pan-Gräber-Kultur*. Vienna.
- Bietak, 1968: Manfred Bietak, *Studien zur Chronologie der nubischen C-Gruppe. Ein Beitrag zur Frühgeschichte Unternubiens zwischen 2200 und 1550 vor Chr.* Vienna.
- Bietak, 1968a: Manfred Bietak, "Vorläufiger Bericht über die erste und zweite Kampagne der österreichischen Ausgrabungen auf Tell Ed-Dab'a im Ostdelta Ägyptens" in *Mitteilungen des Deutschen Archäologischen Instituts, Abteilung Kairo*, Vol. 23, pp. 79 ff.
- Birmingham, 1968: J. M. Birmingham, review of Claire M. Epstein, *Palestinian Bichrome Ware*, in *The Australian Journal of Biblical Archaeology*, Vol. 1, No. 1, pp. 105 f.
- Brunton and Engelbach, 1927: Guy Brunton and Reginald Engelbach, *Gurob*. London.
- Brunton, 1927: Guy Brunton, *Qau and Badari I*. London.
- Brunton, 1930: Guy Brunton, *Qau and Badari III*. London.
- Brunton, 1937: Guy Brunton, *Mostagedda and the Tasian Culture*. London.
- Epstein, 1965: Claire Epstein, "Bichrome Vessels in the Cross Line Style" in *Palestine Exploration Quarterly*, 1965, pp. 42 ff.
- Epstein, 1966: Claire Epstein, *Palestinian Bichrome Ware*. Leiden.
- Frankfort, 1927: H. Frankfort, *Studies in Early Pottery of the Near East II*. London.
- Hayes, 1959: William C. Hayes, *The Scepter of Egypt Part II*. Cambridge, Mass.
- Hayes, 1962: William C. Hayes, *Egypt: From the Death of Ammenemes III to Sequenre II in the Cambridge Ancient History Vol. II Ch. II*. Cambridge.

AUSTRALIAN JOURNAL OF BIBLICAL ARCHAEOLOGY

- Hennessy, 1963: J. B. Hennessy, *Stephania. A Middle and Late Bronze-Age Cemetery in Cyprus*. London.
- Heurtley, 1938: W. A. Heurtley, "A Palestinian Vase-Painter of the Sixteenth Century B.C." in *The Quarterly of the Department of Antiquities in Palestine* Vol. VIII, pp. 21 ff.
- James, 1965: T. G. H. James, *Egypt: From the Expulsion of the Hyksos to Amenophis I* in the *Cambridge Ancient History* Vol. II Ch. VIII. Cambridge.
- Kantor, 1965: Helene J. Kantor, "The Relative Chronology of Egypt and Its Foreign Correlations before the Late Bronze Age" in Robert W. Ehrich, *Chronologies in Old World Archaeology*, Chicago, pp. 1 ff.
- Mace, 1914: Arthur C. Mace, "Excavations at the North Pyramid of Lisht" in *Bulletin of the Metropolitan Museum of Art* Vol. IX, pp. 207 ff.
- Merrillees, 1965: R. S. Merrillees, review of Hennessy, 1963 in *Palestine Exploration Quarterly*, 1965, pp. 94 ff.
- Merrillees, 1968: R. S. Merrillees, *The Cypriote Bronze Age Pottery Found in Egypt*. Lund.
- Merrillees, 1971: R. S. Merrillees, "The Early History of Late Cypriote I" in *Levant* III—forthcoming.
- Nolte, 1968: Birgit Nolte, *Die Glasgefäße im alten Ägypten*. Berlin.
- O'Connor, 1969: David Bourke O'Connor, *Nubian Archaeological Material of the First to the Second Intermediate Periods: an analytical study* (unpublished doctoral dissertation submitted to the University of Cambridge).
- Oren, 1969: Eliezer D. Oren, "Cypriot Imports in the Palestinian Late Bronze I Context" in *Opuscula Atheniensia* IX, pp. 127 ff.
- Petrie, 1901: W. M. Flinders Petrie, *Diospolis Parva. The Cemeteries of Abadiyeh and Hu* 1898-9. London.
- Petrie, 1906: W. M. Flinders Petrie, *Hyksos and Israelite Cities*. London.
- Petrie, 1907: W. M. Flinders Petrie, *Gizeh and Rifeh*. London.
- Petrie, 1917: W. M. Flinders Petrie, *Tools and Weapons*. London.
- Petrie and Brunton, 1924: W. M. Flinders Petrie and Guy Brunton, *Sedment I and II*. London.
- Randall-MacIver and Woolley, 1911: Randall-MacIver and C. Leonard Woolley, *Buhen*. Philadelphia.
- Redford, 1967: Donald B. Redford, *History and Chronology of the Eighteenth Dynasty of Egypt*. Toronto.
- Reisner, 1923: G. A. Reisner, *Excavations at Kerma* Parts IV-V. Cambridge, Mass.
- Steindorff, 1937: Georg Steindorff, *Aniba* Vol. II. Glückstadt.
- Tait, 1963: G. A. D. Tait, "The Egyptian Relief Chalice" in *The Journal of Egyptian Archaeology* Vol. 49, pp. 93 ff.
- Ucko, 1968: Peter J. Ucko, *Anthropomorphic Figurines of Predynastic Egypt and Neolithic Crete*. London.
- Wainwright, 1920: G. A. Wainwright, *Balabish*. London.