- 1. Report on the Small Finds from the Graves
- 2. Note on an Iron Cheekpiece found at Timargarha

Part 1V

Вy

- 1) ABDUR RAHMAN
- 2) PROF. KARL JETTMAR

Section 1

SMALL FINDS (TMG)

By ABDUR RAHMAN

The recent excavations conducted at Timargarha and Thana have brought to light, apart from a repertoire of pottery, quite a good number of small finds, which pre-dominantly consist of personal objects, a few small weapons and other household utensils. The antiquities other than pottery resolve themselves into the following functional groups: (1) Pins, (2) Toilet objects (3) Needles, (4) Antimony rods (5) Pendants (6) Ear rings (7) Finger rings (8) Net Sinkers and (9) Beads. The remaining small finds which, by their very individuality, do not fall under any of the above mentioned groups are placed under the miscellaneous head. Only representative types and among them selected specimens are illustrated. Grave number is given in bracket for further reference.

(1) PINS

These pins, round in section, are made very scantily of ivory and predominantly of copper bar and are found associated with cremation and fractional burials exclusively. No example has so far been recorded from complete burials (see distribution chart below). The tops of these pins exhibit a variety of devices. They fail into the following types: those with

- a) Globule surmounted by flat top.
- b) Convex top.
- c) conoid top.
- d) conical top.
- e) loop head.
- f) pyramidal top.

TYPE (A) GLOBULE SURMOUNTED BY FLAT TOP

Total: 17 — Copper is represented by sixteen and ivory by one. This type appears to be the prime favourite in view of the greater percentage it enjoys among other antiquities. Not counting two damaged pieces, almost all the specimens in this type precede over others of the similar nature in length as well as in thickness. The tallest example measures 128 mm. from end to end. Moreover, in proportion to the actual size of the rod, the tops of

these pins vary in diameter — 10 mm. being the average size. It should be pointed out by way of negative evidence that the disc-like flat top in this type is plain and undecorated without exception, whereas the actual rod, always gently tapering towards a point, is, in majority of the cases, decorated just above the pointed end or below the globular projection, or, as in two cases, at both places. This ornamentation consists of a panel of zigzags placed within deeply incised lines and hatched triangles (not clear in the photograph). It is worth pointing out that the disc-like top always overshadows the globular projection, with one exception where the case is exactly the reverse. This type is associated largely with fractional burials.

ILLUSTRATIONS

PL. XLVIII, a

- 1. (Grave 139) Copper pin: round in section, with globule at one end surmounted by a disc top and pointed at the other. Decoration consists of incised lines on the actual rod; length 6.5".
- 2. (Grave 202) Copper pin: variant; round in section with globule at one end surmounted by a disc top, and pointed at the other. The globule is slightly irregular; length 5.6".
- 3. (Grave 240) Copper pin: Same as No. 1 above but here the globule is more pronounced; length 6.2".
- 4. (Grave 124) Copper pin: variant; round in section with large globule surmounted by an unproportionately small disc head; length 6.1".
- 5. (Grave 212) Copper pin: variant; round in section with globule at one end surmounted by a circular head which tapers downwards at the neck; damaged.
- 6. (Grave 101) Copper pin: round in section, with globule at one end surmounted by a disc head twisted upwards due to some lateral pressure, and broken at the other. The globule decorated by incised chevrons whereas the actual rod has a panel of zigzags placed between

incised lines on the one side and hatched triangles at the other.

7. (Grave 114) Ivory pin: Same as above but without decoration. It is smoothly polished, and the pointed end is damaged.

TYPE (B) CONVEX TOP

Total: 5. Out of them copper is represented by three and ivory by two. The convex or umbrella shaped top with a downward trend at the circumference is invariably preceded by an irregular globule, or just two projections on opposite sides, probably indicating the same idea. All the examples are smaller in size as compared to other types. They are sharply pointed.

ILLUSTRATIONS

PL. XLVIII, b

- 8. (Grave 218) Ivory pin: round in section with convex top at one end preceded by a globule like raised surface. The top is slightly tilting to one side. It is broken at the other end.
- 9. (Grave 256) Copper pin round in section with a globule at one end surmounted by a convex top; sharply pointed at the other end; length 2.8".
- 10. (Grave 217) Copper pin: round in section with convex top at one end preceded by two projections instead of globule; length 2.8".

TYPE (C) CONOID TOP

Total: 2. both in copper. These are quite as big in size as those representing type (a) mentioned above, but without globular projection. Their big size may not be without significance, as this type is also associated with fractional burial.

ILLUSTRATIONS

- 11. (Grave 176) Copper pin round in section with conoid top placed directly above the vertical rod at one end, and pointed at the other. No globule. Pl. XLVIII-b.
- 11- a (Grave 176) Copper pin: round in section with conoid top placed directly above the vertical rod without being preceded by any globule. It is much damaged and given for chemical analysis. Not illustrated in photograph.

TYPE (D) CONICAL TOP

Total: 8. All of them are made of copper. None of them has been provided with the globular projection, except one. They are comparatively thin but sharply pointed. They are equally distributed in fractional as well as in cremation burals.

ILLUSTRATIONS

- 12. (Grave 251) Copper pin: round in section with conical top at one end and a point at the other; length 5". Pl. XLVIII-b.
- 13. (Grave 157) Copper pin: variant; round in section with conical top at one end and pointed at the other. It has a narrow neck below the top; length 5.7".

PL. XLVIII-b.

TYPE (E) LOOP HEAD

Total: 1. It is illustrated below It was associated with a cremation burial.

DISTRIBUTION OF METAL, BONE & IVORY

Objects in different periods

(Figures indicate number of graves)

Material	Complete burial	Cremation		Fractional Burials			 I	
		Mixed Burial	Burial Pot	Children's	Mixed Burial	Fractional Burials	Fractional chilren	TOTAL
Iron	: <u></u> :	1	S	_	_	4		5
Iron & Cop together	per	2	_	_	1	1	N	2
Copper	2	4	4	1	1	16	5	33
Gold and Cotogether	opper —		1	_	_	_	· -	1
Silver	h 2		X	y	e 2 -		1	1
Silver & Co	pper 1	_	11	7—2		_		1
Bone	_	-	-			1	_	1
Ivory	1	1	1	-	_	2	_	5
	4	6	6	1	2	24	6	49

14. (Grave 201) Copper pin: round in section with one end twisted to form a ring or an incipient spiral, and pointed at the other. Apparently it was hammered out of a rounded wire; length 4.8". Pl. XLVIII-b.

TYPE (F) PYRAMIDAL HEAD

Total: 1. It is illustrated below.

15. (Grave 203) Ivory Pin: round in section with ring like projection instead of globule at one end surmounted by a pyramidal top. It is broken at the other end; Surface smoothly polished. Pl. XLVIII-b.

(2) TOILET OBJECTS

Total: 2. Made of copper, both appear to have been hammered out of square sectioned thin bar. Curiously enough, they have been provided with unproportionately square sectioned long stems with a hook at the end. It is difficult to determine the function of unproportionately long stem, though it is relatively easy to understand the purpose of the blade sharp at both the sides. It should be noted that both of them are thin and almost incapable of being used with force; they could only have been worked with delicate handling. It would be a pardonable exaggeration to say that one of their distant function might be mixing *Sindur* (red pigment). All the two examples are associated with urn burials.

- (Grave No. 122) Toilet Object; with a long square sectioned stem which terminates in a hook at one end and a small, thin blade sharp at both edges at the other. Tip of the blade is broken. Measurements of blade: Length = 44mm, width = 9mm; those of stem excluding book: length m. width 2 mm. sq. Pl. XLIX-a.
- 2. (Grave 218) Toilet Object: with a square sectioned stem which terminates in a hook at one end and a small, thin blade sharp at both edges at the other. Here the stem is comparatively short. Measurements of blade: length = 38mm; width 9mm; those of stem excluding hook: length 65 mm width 2 mm sq. Pl. XLIX-a.

(3) NEEDLES

- Total: 3. All of them are hammered out of thin copper rod with a sharp point at one end and eye at the other. Apparently the eye is made by bending the stem end. Two of them are illustrated below.
- 3. (Grave 218) Copper needle: round in section with elliptical eye at one end and a sharp point at the other. It measures 4.6" from top to end. Pl. XLIX-a.
- 4. (Grave 213) Copper needle: Same as above, but bent in the middle. It measures 3.5" from top to end Pl. XLIX-a.

(4) ANTIMONY RODS

Total: 4: Copper and ivory are equally represented, each by two spe-

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cimens. They can be easily distinguished from pins not merely because they do not possess any decorative device upon the top 'but also because they are provided with ends which have been carefully rounded off. The examples in ivory are slightly swollen in the middle. Only one is illustrated.

- 5. (Grave 183) Copper antimony rod: round in section, it tapers gently towards the ends which have been smoothly rounded off, length 5.8". Pl. XLIX-a.
- 5-a. (Grave 2, trench CO, 1964) Ivory antimony rod: Oval in section with one end smoothly rounded off, whereas the other is missing, swollen in the middle. Not illustrated.

(5) PENDANTS

- Total: 2. One represented by copper and the other by bone. Both of them are associated with fractional burials. The one made of bone has its exact parallel in Swat². These are illustrated below:
- 6. (Grave 146) Copper pendant: Crescent shaped pendant made of thin sheet, broad in the middle but gradually narrows towards the ends which are twisted for further attachments. There are three rows of pin hole decoration running parallel to each other on the outer face. The outer edge appears to be indented. Pl. XLIX-a.
- 7. (Grave 182) Bone pendant³: consisting of rhomboid plate with a waist groove flanked by two holes—one on each side. Pl. XLIX-b.

(6) EAR RINGS

- Total: 7. Four represented by copper, two by gold and one by silver. Those of copper and silver are by far the most common types. They are made of thin rounded wire twisted in the form of a circlet to join at the ends, with the provision of expanding the ring when putting on or putting off. Those in gold are comparatively ornate. Made of thin gold sheet each has been provided with four tiny bead-like attachments soldered at regular intervals at the outer edge. Illustrations.
- 4. (Grave 107) Copper ear ring made of thin rounded wire. The ends are twisted so as to bring them close to each other. Plain. Dia. .5". Associated with fractional burial. Pl. XLIX-b.

5. (Grave 122) Gold ear ring: made of a flat gold sheet with four tiny bead-like attachments at the outer edge. Dia. .5". Associated with urn burial. Pl. XLIX-b.

(7) FINGER RINGS

- Total 2: Both are spiral shaped, made of round sectioned thin copper wire, the ends of which have been smoothly rounded off. They vary in size and number of coils they contain. Both of them belong to the fractional burials. Illustration.
- 6. (Grave 197) Copper finger ring consisting of four coils. Dia. .7". Pl. XLIX-b.
- 6-a (Grave 157) Copper finger ring consisting of two coils. Dia. .6". Not illustrated.

(8) BEADS

Total 17: Ten of them come from one grave (Gr. 192)—which is a fractional burial.

Quartz is the material of the largest number (seven) of beads. Of these one was obtained from the urn burial (Gr. 122), whereas others were found associated with fractional burials. The commonest shape in this material is the barrel-bicone-circular type of which six specimens were recovered. The other shape being long-cylinder-circular represented by two beads. Two varieties of quartz—rosy and pure white—were most favoured. There is one example, however, of smoky quartz as well- Meagre as the number of these beads is, and notable as their concentration in a few graves is, it would be scarcely profitable to earmark the association of certain specialised types with different periods.

Grey schist which comes next to quartz in order of frequency, is the material of five beads. Three of them were obtained from fractional and two from urn burials. With the exception of one—conical in shape, all the others are of the type here labelled as conjoined or composite beads. Shell is represented by a solitary half bead of this type.

Of agate, two varieties, banded black and banded red were used for two specimens; and that only is the total number of beads in this material. In shape one of them is of short-barrel-circular, whereas the other is of the standard-barrel-circular type. They belong to fractional burials.

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Magnesite is the material for three beads—two of them are of the short-cylinder-circular type, whereas the third is a tiny bead. All the three come from Gr. 192 (fractional burial).

Illustrations

- 1. (Grave 251) Grey Schist: disc-shaped composite or conjoined bead made up of two-parts—both of schist. On the flat side of one portion there is a grave .1" wide, whereas the other is slightly rounded off. The other portion is thinner than the one having grooved face. Apparently they were joined together by some adhesive of which no trace is visible at present. The two parts were found lying separately in the same grave. Dia. .7"; thickness 3mm Pl. XLIX-b.
- 2. (Grave 247) Shell: Only one half of the disc shaped composite bead-It is the upper portion and thus without groove. Dia. .7"; thickness 1 mm. Pl. XLIX-b.
- 3. (Grave 247) Black Schist: disc-shaped composite bead, only lower half with a central groove. Dia. .9"; thickness 1mm. Pl. XLIX-b.
- 8. (Grave 192) Rosy quartz: Standard-barrel-circular. Pl. XLIX-b.
- 9. (Grave 192) Smoky quartz: Long-bicone-circular. Pl. XLIX-b.
- 10. (Grave 182) Magnesite: Long-cylinder-circular. Pl. XLIX-b.
- 11. (Grave 192) Magnesite: Long-cylinder-circular. Rough surface. Pl. XLIX-b.
- 12. (Grave 192) Banded agate: Short-barrel-circular Pl. XLIX-b.
- 13. (Grave 192) Banded agate: Short-barrel-circular. Pl. XLIX-b.

(9) NET SINKERS

Total 12: Terracotta is the material for eleven and schist for one. Unlike magnesite or quartz, terracotta net sinkers appear through out in all the three periods. They show little variation in shape except that those belonging to the last period are comparatively better finished with an occasional coating of slip. The normal colour being terracotta red or grey.

Illustrations

- 1. (Trench D-Gr 1) Grey: Short-barrel-bicone-circular. Truncated cones; rough surface, and a spacious axial hole. Pl. La.
- 2. (Trench B-Gr 1) Light grey: Short-barrel-bicone-circular. Truncated cones, with spacious axial hole. Pl. La.
- 3. (Grave 101) Terracotta red: Short barrel-bicone-circular. Truncated cones, with spacious axial hole. Pl. La.
- 4. (Grave 183) Grey: Same as above. Median ridge worn off. Pl. La.
- (Grave 192) Light grey schist: Conical at one end and closely truncated at the other, with a wide axial hole. It is smoothly polished. Pl. La.

(10) MISCELLANEOUS

- (Grave 109) Iron Spear head with rectangular sectioned stem for fixing in wooden shaft. It is relatively heavy at the base and tapers gently towards the ends. No mid rib is seen; length 5.3". Pl La.
- 7. (Grave 103) Copper: Rectangular shaped object made of a thin flat sheet, Pl. XLIX-a.
 - 8. (Grave 194) An unidentified object made of flat copper sheet with ends twisted so that they cross each other in the middle. Pl. XLIX-a.
 - (Grave 177) Copper bangle made of thin rounded wire, the ends of which have been joined to gether by twisting into each other. Pl. XLIX-a.
 - 7. (Grave 192) Iron nail with a thick circular top at one end and broken at the other. There are two more specimens of similar nails—one from the same grave and the other from Grave 112. Pl. La.
 - (Grave 149) Iron spoon made of a beaten bar, having a circular shallow saucer and a long rectar gular sectioned handle which terminates in two rings, one on each side; length 8.1". Heavily encrusted Pl. La.

9. (Grave 149) Terracotta antimony phial: bladder shaped. It has a long narrow neck and is rounded off at the base. Coated with reddish slip. The whole surface, except neck portion, is divided into rectangular panels demarcated by incised line and a row of pin holes. The panels are either left empty or decorated with incised zigzags. Pl. La.

Pl. LI-b.

- 10. (Grave 183) Terracotta anthropomorphic figurine: It is hand made, terracotta red in colour with pinched face and a depression at the back of the head. Eyes are marked by two dotted circles, one on each side of the face. It has two deeply incised lines—chhannavira hanging down the shoulders and crossing each other at the chest. Front part of the neck is decorated by dotted circles. Pl. LI-a & LI-b.
- (Grave 2) An indeterminate copper piece with a flattened end. Not illustrated.
- 2a. (Grave 142) Cheek-bar of horse's harness⁴, of a rectangular sectioned straight bar with three elliptical holes made at equal distance from each other. The ends are provided with one knob each; length 6.3". Pl. L-b.

CONCLUSION

It is evident from the description of various objects given above that the materials employed for their manufacture comprised of (a) metals consisting of copper, iron, gold, and silver in the similar order of frequency, (b) organic materials consisting of ivory and bone; (c) stones including quartz, magnesite, agate and schist; (d) terracotta. That iron was pre-eminently employed, in the last period of TMG for making weapons or utensils meant for a rough type of job is suggested by the spear head (P1. L a, No. 6), a spoon (P1. L a No. 8) and a few thick nails (P1. La No. 7) and other non-descript but heavy pieces of iron; in striking contrast to other metals which were evidently used for making either ornaments or other objects which could have been worked with delicate handling. The use of bone as a material for making small objects is attested very sparingly. The specimens of ivory, however, exhibit much advanced manipulation of the material. Igneous rocks, apparently, were exclusively used for making small beads.

It remains to be added that the techniques of drilling beads from both ends for making an axial hole was employed and the results were very adroitly achieved. It does not, of couse, necessarily imply the existence of a local industry. On the contrary there is nothing to disprove, and to call them import is a guess but is consistent with the meagre number of graves which yielded beads.

It is worth noting that all the copper pins (loop headed pin is the only exception) are made of cast metal. It has also been abundantly noted in almost similar graves in Swat⁵.

On the basis of the present data we may pinpoint well-defined custom or rigid practice which might have guided the arrangement of funerary equipment in relation to the skeletal remains. However, the recurrent occurrence of some copper pins along the occipital part of the skull, as evidenced in many cases⁶ tends to indicate that their position as such may not be without significance. That some sort of spatial relationship of pins with skulls can be postulated, is amplified by a few examples⁷ in which the pin was found lying near the western wall — the place normally occupied by skull. Let it be interpolated here that similar pins have also been found evidently scattered in the grave chamber, at least, in case of fractional burials (see Gr. 139) apparently unconnected with any skull. Thus the picture remains hazy but in the ultimate analysis some nebulous association of pins with skulls begins to loom up. It is, however, relatively easy to understand the position of ear-rings, as they were found, in tombs where inhumation was practised, sticking to the temperal of the skull^s: and in cremation burials they were found mixed up with burnt bones.

As to the position of anthropomorphic figurine one can hardly arrive at any precise conclusion on the bas is of a single specimen. However, when it is taken together with the observation made by Stacul in Swat, it would appear that the position of such figurines must have been governed by some definite practice which required them to be placed near the body.⁹

Out of 133 tombs ¹⁰ exposed at Timargarha and Thana metal objects were found in 43 tombs altogether: 36 of these contained only copper objects and those of metals other than iron, 5 had iron objects alone and 2 both copper and iron mixed up. New if this meagre number of iron objects is to be relied upon, one can easily point out not only specific grouping of metal objects but also their associative tendency towards skeletal remains and for that matter, burial customs in an overall view of the cemetery. Here

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it is worth noting that iron is conspicuous by its absence in tombs which yielded evidence of cremation — complete or semi-burning¹¹. Similarly no iron object was found with complete burials of period I. Apparently iron objects are exclusively associated with fractional burials (period-III). Striking as the association of iron with fractional burials at TMG is, it is at the same time consistently in line with Swat Period III tombs where inhumation burials had almost absolute prevalence over cremation¹². In the present context it is not something to be taken lightly. One can argue, does it not indicate that a certain people who had altogether different traditions of the disposal of their dead, as they practised fractional burial, prevailed over the population which practised cremation, with the help of a superior metal-iron, which they appear to have brought alongwith them? As the evidence stands at present, it is favourably inclined towards such an hypothesis.

Quantitatively as well as qualitatively the copper pins (P1s. XLVIII-a, XLVIII-b) occupy a place of prominence among the metal objects found at Timargarha. The actual purpose of these pins is problematical. It has often been suggested that they could have been either used as garment pins or hair ornament. As to their use as garment pins for holding the clothes in position, the bulk of evidence revealed in our excavations militates against any such hypothesis. One can argue that there could hardly have been any necessity of providing pins for the fractional burials, if it is to be taken for granted, that the dead bodies were exposed to animals before their final disposal in graves. But the fact remains that out of 29 copper pins at least 19 were found alongwith fractional burials. Thus it is far from easy, at the present state of our information, to label them as garment pins. No less confusing is the next alternative for the association of pins with cremated bones is incompatible with any decorative purpose which they might be expected to have served. They appear to be objects of some ritual significance. It should be admitted however that the problem remains unsettled.

The tops of these pins, however, exhibit a variety of shapes and a typological comparison with those found in different stratigraphical horizons at Hissar and some other western Asiatic sites brings out intriguing parallels which go as far back as the third millennium B.C. It should be emphasised right here that the objects found in our excavation do not claim any such great antiquity, though they do mark the ebb and tide of several cultural waves from that direction at a relatively later age. Thus it is worth repeating that when interesting individual cases can be brought forward

for comparison, they should not be taken to mean an identical depth of chronological or cultural levels with all their inherent implications. Nevertheless a similar comparison with the metal objects found in Swat excavation indicates a striking similiarity. Although certan types present at one place have not come to light at the other as yet; but it need not worry us much for the impact of parochial traditions can not be ignored altogether. The large pin with big disc-head (Ma/I)!3, for instance, found in Swat period II and another type with five globules at one end¹⁴ is conspicuous by its absence at Timargarha.

The large pin with globule surmounted by a small disc-head (our type a, P1. XLVIII-a, Nos. 1-7) wide spread in Swat Period II¹⁵ is associated wih fractional burials at Timargarha (See distribution chart P. 15), although a fair scatter of them has also been found in mixed as well as cremation burials¹⁶. Associative relationship of the ornate example in this type with fractional burials exclusively is noteworthy.

Our type "C" with conoid or hat-shaped head appears to have enjoyed a widespread spatial and chronological distribution as it is reported from Swat Period II¹⁷, Sialk VI¹⁸ and Giyan I¹⁹. At Hissar it occurs as early as Hissar IB and IC²⁰, and continues during the last sub-phase Hissar IIIC²¹, in addition apparently to pins with double and single loop head. In West Pakistan it occurs even in a much later context in the Saka-Parthian levels at Taxila.²² In such a depth of time stretching almost over two millennia it would be no more than a guess to assign any well defined fixed horizon to this pin, but as its use lingers on at Taxila its association with fractional burials at TMG is fairly consistent with the known evidence.

Copper pins with conical tops, our type 'd', Pl. XLVLLL-b, Nos. 12, 13) are distributed equally in cremation and fractional burials. In Swat they appear to have been related to Period I tombs²³.

Due to the wide chronological and spatial distribution the loop headed pins (our type 'e' Pl. XLVIII-b. No. 14) enjoyed, they have been a subject of heated discussions among the scholars. A similar illuminating commentary²⁴ has been given by Stuart Piggot on the two examples known from the Indus Civilization, West Pakistan. Out of these two the one from Mohenjodaro²⁵ consisting of a single spiral head is most interesting for us, as it gives us the earliest clue to the use of these pins in this part of the country. It has often been pointed out that the very rarity of these pins emphasises their intrusive nature. Now as the number is increasing, the

weight of evidence is probably shifting to the other side. The specimen from TMG. consists of a single coil or an incipient spiral made by twisting the flat end of the rod. Probably a few examples have also been recorded from Swat, though none of them is illustrated. However the description "large pin, round in section, one end bent round to form a ring" conforms very closely to the shape of this type of pin. Similar three examples have recently been obtained from our Balambat Excavation where they were found in a rather later context, associated with the last building phase. Whatever their implication, the new finds have broadened in orbit of distribution from the lower Indus Valley up to Dir and Swat. Our find, however, is more akin to those found in Hissar III and Shah Tepe where eight specimens were recorded.

Another type having pyramidal top (our type f; Pl. XLVIII-b. No. 15) though represented by a solitary example in ivory at TMG. has its identical parallel in Swat.³⁰

Needles of copper offer similar interesting parallels. In Egypt they have been found as early as the pre-historic times³¹ and at Hissar they occur in all principal strata of the mound.³² However, the nearest parallel again comes from Hissar III³³ and Susa³⁴ which correspond in all details to those found in association with cremation burials at TMG. Similarly identical cases are recorded from Shah Tepe³⁵ and Swat.³⁶

Little is known as yet about the use and character of finger rings of the remote past in this part of the country, and those belonging to the historic period, many of them ornate and much sophisticated or even in the simplest form consisting of a single circlet of wire, are altogether different from the spiral finger rings (P1.XLIX-b No. 6) which have come to light in this cemetery. Is it not likely that a similar idea can be traced, though in a much later context and also in an improved form, in the multiplicity of rings worn on fingers and thumbs shown in the early school of sculptures³⁷? The suggestion should not be pressed too much as it is not free from its own limitations. However, when we turn to Hissar III, where finger rings of coiled wire are frequent in all sub-layers of stratum³⁸ III, iden tical cases can be brought forward. Again cultural affinity of TMG, with the neighbouring Swat is emphasised by the recovery of similar rings³⁹ in that region.

The anthropomorphic figurine (P1.LI-a) associated with a fractional burial in the present excavation is the most interesting find. Al-

though its facial features are most sketchily drawn it, however, reveals some of the distinctive characteristics — the pinched face and the applique technique-of the so-called "baroque ladies" so common at the prehistoric and historic sites. The present example is not provided with elaborate coiffure, the very absence of which is highly suggestive of an intermediate period. Similar terracotta human figurines are known from Swat⁴⁰ and from our Balambat excavations related to the first building phase.⁴¹

Let it be added that the cheek-bar of horse's harness obtained from our excavation is of the protected snaffle type. The use of protected snaffle with a large ring or bar at each side to prevent it from slipping into the mouth was already known in Western Asia. Initially the bit with side bar arose from using tusk, bone or horn to prevent the horse from playing tricks with the harness. Then in order to keep the animal under greater control the cheek bar was provided with cross ties through holes on the bar. Our example belongs to a fairly developed stage and has great affinity with those found in Marlik⁴² and Sialk necropolis B.⁴³ Similar cheek bar but slightly bent in the middle was known to Petrie from Egypt about which he remarked that "it may have been left behind by an Assyrian invasion⁴⁴".

DISTRIBUTION CHART OF COPPER AND IVORY PINS

	Complete Burial	Cre	emation		Fractional			
Туре		Mixed	Urn or cremated bones.	Children	Mixed	Adults	Children	Total
A		4	2	50e F	1	8	2	17
В		1	1	-	<u> </u>	2	1	5
C		—	1	_	-	1	_	2
D	2==2	-	4	****	_	4	-	8
E	_	-		-	_	1		1
F		_	1	()	-		_	1
TOTA	L: — s	ee i 5	9	15.	1	16	3 3	34

CHEMICAL ANALYSIS OF BRONZE

1) ANALYSIS OF THE SAMPLE (A) — Grave. No. 185

Weighed sample was taken and was dissolved in H No. 3 Copper was determined volumetrically (Iodiometrically) as well as Instrumentally (Electrodepodition), and average percentage is being reported.

Zinc Was determined gravemetrically as Zn2 P² 07) as well as Tin was determined gravimetrically.

RESULT

Copper:— 72 Percent Zinc :— 4 "
Tin :— 8 "

2) ANALYSIS OF THE SAMPLE (B). Grave No. 119

Copper Zinc and Tin were determined by the same methods as for the sample (A).

Iron was determined gravimetrically as Fe 2 03 (Fe 2 03)

RESULT

Copper:— 76 Percent
Tin :— 12 "
Iron :— 1.3 "
Zinc :— 12 "

3) ANALYSIS OF THE SAMPLE (C) Grave No. 122

Copper Zinc and Tin were determined by the same methods as stated for the other two samples.

RESULT

Copper:— 81 Percent Zinc :— 4 "
Tin :— 9 "

By Jawaid Akhtar Lecturer Deptt. of Chemistry University of Peshawar

- 1. With the exception of pottery of course.
- 2. East and West, New series, Vol. 16-Nos. 1-2 (March-June 1966 Fig. 67, type S/VI.)
- 4. For discussion see below by Professor Jettmar P.
- 4. For discussion see appendix by Proferssor Jettmar P. 283
- 5. East and West (Is Meo), New Series, Vol. 16—Nos. 1—2 (March-June 1966) Preliminary Report on the Pre-Buddist Necropolis in Swat', p.
- 6. See Graves 148, 119, 114.
- 7. See Grave 110.
- 8. There is only one example-Grave No. 107. disappeared alongwith earlobes.
- 9. East and West op. cit., p. 49.
- 10. This is the total number of tombs excavated at Timargarha and Thana,
- 11. Grave 149 is the only exception. It is a mixed bursal and the likely hypothesis is that the piece of iron found there entered the grave when fractional burial was accommodated in it at a subsequent date.
- 12. East and West, op. cit., p. 66.
- 13. East and West, op. cit., p. 76, Ma/I.
- 14. Ibid p. 57, type Ma/V; illustrated on p. 76.
- 15. Ibid
- 16. Two specimens were found with urn burials (Graves 218, 212), and two in mixed burials (GRs. 240, 114).
- 17. East and West, op. cit., p. 77.
- 18. Ghirshman, Fouilles de Sialk, Paris, Pl. 29. 2.
- 19. G. Contenau, R. Ghirshman, op. cit, Pl. 36, No. 2.
- 20. Sehmidt, Tepe Hissar, (the University Museum of Philadelphia) p. 57 and Pl. XVI, No. 2972.
- 21. Op cit, pp. 205-206. Pl. L. JH, Fig. 4878.
- 22. Marshall, Sir J. Taxila, P. 586, Pl. 182, No. 2.
- 23. East and West, op cit. p. 77.
- 24. Piggott, S. 'Notes on certain metal pins and a mace head in the Harappa culture'; Ancient India No. 4; p. 26.
- 25. Mackay. E.J.II; Further Excavation at Mohenjodaro, Vol. I, P. 539; Vol. II, Pl. C, No. 4.
- 26. East and West, op. cit., p. 205.
- 27. Balambat Excavation, Iron Objects: Pl. L1/a, Nos. 1-3.
- 28. Schmidt, op cit. Pl. L III, p. 205.
- 29. Arne T.J. Excavation at Shah Tepe. p. 301: Nos. 648-a, b and c.
- 30. East and West, (New series, Vol. 14—Nos. 1—2 March-June 63) 'Preliminary Notes on the excavation of the Necropolis found in West Pakistan', p. 22.
- 31. Petrie, F. Tools and Weapons: p. 53, No. 147.
- 32. Schmidt, op cit. p. 206.
- 33. Ibid. Pl. L. III, H 5265.
- 34. Petrie, F. Tools and Weapons: Pl. LXII, No. 18.
- 35. Arne, T.J. Shah Tepe, p. 301; No. 644—a and 644—b.
- 36. East and West, Vol. 16-Nos. 1-2, 1966; p. 57, Type Ma/IX.
- 37. Cunningham, Bharhut, Pls-XXII, 1; XXIV, 4.
- 38. Schmidt op. cit., p. 207; Pl. LIII, H 4263, and 4262.
- 39. East and West.
- 40. Op. cit, Fig. 65; Types ch/1-a, see also East and West, Vol. 14-Nos. 1-2, 1963, Fig. 11.
- 41. See small finds from Balambat, Pls. LIIIa, Nos. 5, 6; Pls. LIIIb and LIIIc.
- 42. F. Negahban, E.O. A Preliminary Report on Marlik Excavation Rudbar 1961-62; Fig. 134.
- 43. Ghirshman, R. Iran, (Penguin Books, 1961) p. 81. Fig. 31.
- 44. Petrie, F. Tools and Weapons, p. 56, LXXI, 39. (London, 1917) see also Nos. 15 and 17.