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CHANHU-DARO EXCAVATIONS

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XU, 330

207 had clearly been 9 feet 10 inches long by 6 feet wide. The remaining walls still stood 18 inches high.¹²

The wide doorway leading from the north-east into 190 suggests that, small as it was, this was once a courtyard. A number of unfinished disc-shaped steatite beads (No. 2301), similar to those illustrated in Pl. LXXXIII, 36-39, lay on the floor of this court at the level + 10.4 feet. Outside the 22 inch-thick north-eastern wall of this court at locus 212 was a pavement, 3 feet 8 inches square, with the usual edging of brick around it standing some 2½ inches high;¹³ and two pottery drain-pipes (1991, Pls. XVI, e, LXXXVIII, 14, 15) found in the close vicinity possibly once drained this little bath or privy. Just north-east of this pavement and about a foot lower, we came upon a group of copper and bronze tools and utensils (2593, Pls. LXIV, 1-11, LXV, 1-9, LXVI, 1-5, LXXIV, 10-17), including a casting, all so corroded together as to be inseparable until they had been chemically cleaned. The fine clay figure of a rhinoceros (2701) in Pl. LVI, 8 also came from the same spot, but another foot higher. Near by, at locus 213, another hoard of metal objects (2360, a-g, Pl. LXVII, 13-19) had been buried at the level + 10.4 feet, and a bronze model cart (2291, Pl. LVIII, 2), together with the dish of a food-stand (2815, Pl. XXV, 3), was found at the same level. The toy cart was not so well preserved as the specimen found in Square 7/C, but is valuable for being of a different type.

A large storage jar (3323, Pl. XXIV, 1) was unearthed at the level + 7.2 feet at locus 296, and an axe and a knife near by, of either copper or bronze (2382, Pl. LXVII, 20, 21), lay at about the same level as the hoard described above. A seal (2559) illustrated in Pl. LII, 20 was also found at locus 296, about 2 feet above the jar that was also unearthed there.

The long, thin wall 291, 294 must have had some special purpose. It was only three bricks high, but at its north-western end there was the lower part of a blocked-up doorway, 2 feet 3 inches wide,¹⁴ with an earthen sill. Beside this wall there were a number of finds. At locus 291, a pottery kohl-jar (3484, Pl. XXVII, 92) and a copper knife (3486, Pl. LXXII, 1) lay on the mud-brick platform here at the level + 7.1 feet. A shell cone (3533, Pl. LX, 31) was recovered at locus 208, and near locus 292 some flint drills (3457, 3526), like those illustrated in Pl. LXXXVI, b, 8, lay at the level + 7.0 feet. The finely painted jar (3011) shown in Pls. XXIII, 6 and XXXIX, 23 was unearthed just west of locus 208 at the level + 9.6 feet and formed a group with two less important pieces.

In this vicinity also, these ruined walls stood on part of an extensive mud-brick platform, whose average level was 9.2 feet above datum.

Bead Factory with Furnace

Farther along the main street towards the north-west (Square 9/D) was a remarkable building (215, 286, 287, Pl. VIII) with several unusual features.

The main portion of this very intriguing building is some 33 feet long by 12 feet 6

¹² Their base level averaged 9 ft. above datum.

¹³ At the level + 10.2 ft. This floor was constructed of two courses of brick.

¹⁴ Its base was at + 9.1 ft.

this amulet. One or two other amulets in the Jhukar level show definite indications of the influence of the Harappā Culture, notably Nos. 7 and 8 in Pl. L, the pattern on which is obviously derived from the intersecting-circle design of former days. Despite this resemblance, however, neither of these two amulets is in make and shape really like any from Mohenjo-daro and Harappā. I am doubtful about No. 6 in Pl. L, which was found at a level which would lead one to date it to the Harappā Period. It is made of dark brown steatite, and on it is engraved an antelope standing in a thicket, a somewhat unconventional device for a seal of the Harappa Culture. Save for these few examples, the Jhukar amulets are quite unlike those used by the people of the earlier period.

The designs in Pls. XLIX, 5, L, 8, a, 13 are undoubtedly solar motifs; the radial markings in the first are very pronounced. A human figure is certainly portrayed in Pl. L, 3, very stiffly executed and not unlike some of the figures common in the Harappā script. Animals are somewhat rare. The two couchant antelopes, one above the other, on the pottery seal in Pl. XLIX, 10, certainly show an Elamite touch in their arrangement. Couchant animals very rarely appear in prehistoric Indian glyptic art. I know of only one example from Mohenjo-daro, which, for this and other reasons, I regard as an importation.² Both sides of the white steatite bead-amulet in Pl. L, 1 show scenes that are unusual on Indian seals. The standing ibex with massive horns and the conventional leaf motifs used to fill in the bare spaces around it are unknown on the seal-amulets of the Harappā Culture; so also is the couchant antelope on the reverse, with the secondary flower motif (pomegranate?) and other devices. Both the shape and the animals engraved upon this seal are quite foreign to anything found in the Harappā Culture.

Particularly interesting is the seal pictured in Pl. L, 4, 4, a. It is fashioned from a very hard, cream-coloured stone, its faces are rounded, and its motifs most unusual.³ The endless coil pattern on one side is quite unlike the rare coil patterns of Mohenjo-daro.⁴ On the other side there is an apparently composite animal, a combination of a humped bull and a rhinoceros, with a tail bent over its back that does not properly belong to either of these animals. This seal, for as such it was probably used, was very carefully cut and has a milled edge shown in Pl. LXXXVII, 1, through which it is pierced for suspension.

In Pl. XLIX, 1, a two oxen, one above the other, face to the right, and on the much defaced amulet, No. 9 in the same plate, there seems to be an antelope, facing to the left. There are also two animals on each side of the pottery amulet in Pl. L, 14, 14, a. Very conventional trees are seen on the copper or bronze seal (Pl. XLIX, 8, a) and the clay amulet (Pl. L, 11). The coiled pattern on the reverse of this last amulet is similar to the pattern incised on the handle of a jar-cover of Jhukar date, seen in Pl. XLVIII, 11. No. 15, a in Pl. L is rather a puzzle. Though there appear to be three serpents on the upper part of this pottery amulet, erect and ready to strike, the markings below are not correctly placed if they are indeed intended to represent the tails of the supposed reptiles.

² F. E. M., pl. C(b).

³ The stone from which this seal was cut appears to be identical with that of the seal mentioned in note 1 above.

⁴ M. I. C., pl. CXVIII, 5; F. E. M., pls. LXXXII, 3, XC, 23.

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frequently containing mica. Nos. 10 in Pl. XLIX and 11 in Pl. L were made of drab-coloured clay, and No. 1 in Pl. XLIX and No. 12 in Pl. L of grey clay. Not one of the amulets had either slip or wash to improve its appearance, as was almost invariably the rule with the pottery amulets of the Harappā Period.⁹

On those amulets which had handles the latter were rarely sufficiently large or suitably shaped for them to be held easily between the fingers. Like those on the seal-amulets of the Harappā Culture, they could only have been held firmly with the assistance of the cord which passed through them, and it is not surprising to find that the handle was dispensed with on many of the amulets and a hole through the article itself substituted.

In most cases the designs on the amulets, whether of pottery or faience, were cut with a knife or some other sharp tool, though possibly not always so, for the glaze is apt to obscure such details. There is no doubt, however, that a chisel or gouge was used on the amulets in Pls. XLIX, 15, L, 3. The roughness of the former suggests that it was left unfinished.

A certain resemblance can be traced between these amulets and those of the archaic period of Elam, the chief difference being that the latter objects were mostly made of stone and the majority of those from Chanhu-daro of pottery.¹⁰ Even the very curious amulet in Pl. XLIX, 7, is comparable with a limestone seal from Persia both in shape and in the pitted design it bears.¹¹ No. 13 in Pl. L also has the same motif as on a stone amulet unearthed in Persia.¹²

But the amulets from Chanhu-daro are of later date than the archaic objects from Elam—probably a thousand years later—and we must look further afield for resemblances of contemporary date. The coil pattern on the fine stone seal Pl. L, 4 is practically identical with that on a round haematite seal said to be Hittite;¹³ and, indeed, many of the other amulets in Pls. XLIX, L resemble in designs and shape certain Syro-Cappadocian seal-amulets. It would seem that in Elamite art there was a resuscitation of old forms of seals and their primitive designs, which doubtless arrived from the west, and it is to the same source that we may perhaps also trace the new form of seal-amulet that quite suddenly appeared in India after the long vogue of the square and rectangular Harappā seals with their animal devices.

It is even possible that the stone seal pictured in Pl. L, 4a came from Elam or Cappadocia despite the fact that the rhinoceros that is engraved on one side suggests Indian work.¹⁴ The shape of this seal-amulet and, in particular, its rope design, together with the unusual stone of which it is made,¹⁵ appear to me to point to western workmanship. About

⁹ Generally this was red.

¹⁰ Delaporte, *Cat. des Cyl.*, t. I, pl. 14, nos. 4a, 4b, 5, 6a, 6b. Stones suitable for seals and amulets were more plentiful in Elam than in the Indus valley.

¹¹ *Op. cit.* pl. 16, no. 17.

¹² *Ibid.*, no. 17.

¹³ Ward, *Seal Cylinders of Western Asia*, p. 269, no. 802.

¹⁴ The rhinoceros here appears to have been carved by someone who had never actually seen this animal.

¹⁵ A cream-coloured hard stone which cannot be scratched with a knife. It is possibly a quartz of some kind.

1750 B.C., there was an influx of peoples from the west into Mesopotamia, and it was perhaps about this time that an Indian merchant had this seal made in its foreign pattern. The fact, also, as I have already shown, in Chapter VII, that the polychrome pottery found with these new types of Indian seals and amulets has many points in common with certain North Syrian pottery,¹⁶ despite the much earlier date of the latter, might ultimately assist us in the elucidation of the dark period that followed the disappearance of the Harappā Culture.

Seal-amulets and Impressions of the Harappā Period

That seal-amulets were manufactured as well as used at Chanhudaro is evident from the number of unfinished specimens found at that site. Unfortunately, owing to the use of a substance that appears to have been powdered steatite compressed into block form, a few of the seals were in very bad condition; salt attacks this composition more readily than the natural stone.¹⁷ Their fragility made it unsafe to take impressions of some of them and they were accordingly photographed direct (Pl. LII, 1-6, 11). The remainder of the seal-amulets in Pls. LI, LII are full-sized photographs of impressions in plasticine.

The unfinished specimens (Pl. LI, 1-10) are of particular interest, but whether seal-amulets were made only for local use or to be traded over an extended area it is impossible as yet to say. Examination shows that the engraving of the animals and signs was commenced before the backs were completed, as is seen in Pl. LI, 2, 5, 8 and other specimens whose reverses are not illustrated. The engraving, of course, was the most difficult part of making the amulet; its shaping and the perforation of the boss-like handle were comparatively easy. Yet accidents frequently occurred, particularly in the preliminary rough shaping of the handles, and several seal-amulets had to be discarded for the reason that the handle split away from the body of the seal while being shaped. As a saw was invariably used for this purpose (Pl. LI, 1, 2, 5, 8), with teeth of a rudimentary type,¹⁷ it is not at all surprising that these accidents were frequent, even in working a homogeneous stone like steatite. On two of the unfinished amulets (Pl. LI, 4, 5) the handles were perforated before being finally shaped; in others, such as No. 2 in the same plate, the making of the hole was left until the engraving was done. In Nos. 2, 6, 8, 10 in Pl. LI work on the face of the seal-amulet was well under way before the reverse was done, and in No. 9 in the same plate, the inscription had apparently been finished before the animal was completed. The obverse had already been finished in Nos. 12, 18, 21, in Pl. LI; whereas the handle of No. 12 is only a roughly square, unperforated projection like that of No. 2 in the same plate. No. 18 was very nearly finished except that there were saw marks at the back to be removed, and in No. 21, though the handle was perforated, the back was unfinished and there was still much to be done.

As all these seal-amulets were made to be carried on a cord at either neck or wrist,

¹⁶ The later Tell Halaf ware.

¹⁷ Several saws have been found at Mohenjo-daro and one at Chanhudaro, for which latter see Pls. LXIII, 1, LXXIV, 4.

Several breeds of dogs have been identified among the models from Mohenjo-daro. From the way they carry their tails, the two illustrated here are of the pariah breed common all over India.

No. 7 in Pl. LVI is a ram's head of pottery, which was once inserted in a hollow body mounted on two wheels to be drawn along as a plaything, as in Pl. LVIII, nos. 11, 12, 15.

The horn of the strange-looking animal in Pl. LVI, 8 identifies it as a rhinoceros, though this animal is nothing like so realistic when modelled as when carved on the seals. The body is too short and the muzzle too attenuated. This figure was evidently modelled by somebody who was not well acquainted with the real animal; even the horn is curved the wrong way. A deep groove at the end of the snout indicates the mouth, above which are two deep holes for the nostrils. Despite its inaccuracy, some care was evidently taken with the modelling, though but for the horn it would be difficult to recognize it. It is covered with a cream-coloured slip.

Models of elephants are rarely found in the Indus valley sites, though this animal frequently appears on the Mohenjo-daro seals (see also Pl. LI, 20). The figure that we illustrate in Pl. LVI, 9 was a very welcome find. The short legs, spinal ridge, and sloping hind-quarters are carefully portrayed, but the trunk is much too short. The vertical and horizontal red lines all over the body of this animal may represent trappings (or perhaps a net). A ring of red round the end of the trunk and the painted line down its front doubtless represent those that are frequently seen on elephants when dressed for state and festive occasions; great ingenuity is shown in decorating the heads and trunks of the real animals with various patterns in coloured paints.

No. 3 above in the same plate may also have been intended for the figure of an elephant. It has no eyes and the ears must have been unduly small.

No. 10 in Pl. LVI, like No. 7 above it, is a ram's head, formerly part of a toy like those in Pl. LVIII. Red lines, now far from clear, indicate the rough fleece of the animal.

The alert-looking beast, No. 11 in Pl. LVI, is undoubtedly an antelope. The large ears, one of which is missing, are a feature rarely found on any model of a horned animal. Both pairs of legs are joined, and the body shows some traces of red slip.

Representations of ducks, in whatever medium, are very scarce. This bird appears once among the pictographs on a seal from Mohenjo-daro,²⁰ and a fragment from a model also comes from that site.²¹ From its weight the model bird shown in Pl. LVI, 12 has a solid body, and it is complete save for a small portion of the bill. Another duck (Pl. LVII, 2) is more realistic, though more roughly modelled; unfortunately, the tail and part of the body are missing. No. 3 in the same plate has lost part of the tail; it has round pellets for eyes, and broad vertical red lines across the back and tail represent the plumage. All these model ducks are legless; nor have they any holes to attach them to anything. They were probably toys, though none of them will float.

Several other model birds, too mutilated to photograph, are shown by their broad bills to be ducks. Two of them were roughly ornamented with light red lines to represent the

²⁰ M. I. C., pl. CVI, 93.

²¹ F. E. M., pl. LXXX, 16.



