

Dumakhal: A Brief Report on the Excavations

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INTRODUCTION

The report presented here is a very brief statement of some of the chief findings made during the course of excavations in Dumakhal, a small village northeast of Kathmandu. A more extensive statement is now in preparation and will be published later.

The work was begun in January, 1984. After an interruption due to the monsoon, work resumed in October, 1984, and continued into May, 1985.

It should be noted here that Dumakhal was chosen because of the surface evidence that had accumulated over a number of years and because it was clear to any observer that the village contained ruins that warranted investigation. The relative isolation of Dumakhal from the urban turmoil of the major cities of the Kathmandu Valley also supported the possibility that the site had remained relatively undisturbed in recent times. The excavation therefore was carried out for what may be called broadly archaeological reasons. It was not geared to the search for corroborative evidence for any aspect of the history of Nepal as it has been preserved in literary form in texts and inscriptions. This report is therefore tied to no preconceived notions concerning the early history of Nepal, and it makes no claims to a fixed chronology beyond what is most clearly supported by the material evidence. The bulk of the evidence indicates that Dumakhal contains important remains from the pre-Licchavi period. In the absence of adequate chronological data, it is difficult to date the site more precisely. Samples for carbon-14 dating were sent to the Physical Research Laboratory, Ahmedabad and Beta Analytic, Florida, USA. Recent preliminary results indicate only that the first strata is datable to the 14th century A.D. and the third strata to the sixth century A.D. It is hoped also that further excavations will produce the additional evidence needed to make what is tentatively postulated here more certain.

THE SITE

Dumakhal (Nep. Dumakhal) is a small Brahman village that lies on the west bank of the Manohara River at long. 85.25° and lat. 27.43°. It is about ten kilometers from the centre of Kathmandu. It is accessible by a dirt road that leaves the main pitched road between Kathmandu and Sankhu just after the Gokarna forest.

As it exists today, the modern village of Dumakhal is indistinguishable from many other villages in the Kathmandu Valley, and its age, judging from the oldest surface structures, is probably no more than two or three hundred years. Many houses are of sun dried brick with thatched roofs. Some new buildings of modern brick have also been recently constructed, but some, however, are clearly built with old bricks uncovered in the fields.

Historical references to the village are uncertain at best. An inscription at Changu Narayan, mentions a place called *domma*, and elsewhere the word *dommakhara* appears. Whether these refer to Dumakhal or not is not known, but they may, considering the proximity of the inscriptions to the site.

Judging from the surface evidence, the village appears to contain extensive ruins. Whether they are the remains of a large religious complex or the ruins of an ancient town or village has not been ascertained. The placement of the ruins may eventually provide a clue as to their nature, for they lie near a number of important sites, and not far from the major trade routes north to Tibet, including the road from Patan to Sankhu via Thimi. The site lies directly to the west of the temple of Changu Narayan, one of the oldest religious shrines in the Kathmandu Valley. To the south of Changu, along the crest of the ridge, is the modern village of Duvakot. This town also appears to contain ruins, though they are far less extensive than those of Dumakhal, and the surface evidence to date is far less interesting. Farther south is the temple of Nilbarahi. Although this temple is of later date than that of Changu Narayan, it appears to have a history that may date it to Licchavi times. To the west of Dumakhal is the forest of Gokarna and the village of the same name. In the chronicles, the Gokarna forest is said to have housed the Kiratas after their defeat by the Licchavis. There is, however, no supporting evidence for this. In the village of Gokarna, now housed near the main temple, there is a fragment of a Licchavi inscription that may indicate the importance of the site in ancient times. Dumakhal thus appears to be one of a number of ancient sites in this area of the valley.

A land survey of the site was not possible, but examination of the village indicates that the ruins may be spread throughout the settled area and the cultivated fields as well, and extend beyond it to the north, west, and south. In the east they appear to come close to the bed of the Manohara.

THE EXCAVATION

The excavation site chosen is a plot of land on the side of a cultivated land terrace just west of the Manohara and directly opposite the Changu Narayan hill. It is a few meters south and west of a small shrine to the goddess of the village, Dumadevi. The excavation measured

twenty-seven by eighteen meters. A grid was prepared, the trenches of which each measured approximately six by eight and one-half meters. Sections taken just below the excavation revealed extensive pottery and brick rubble. Above it, extensive brick walls, pottery, and other artifacts were clearly visible. While our excavations were in progress, exploratory but extremely harmful digging by some local farmers in the fields above revealed the remains of brick structures below the thin top soil to a depth of approximately four feet. The structures uncovered by the excavation are clearly part of this complex of walls, floors, foundations, and other structures that still lie just below the surface.

GEOLOGY

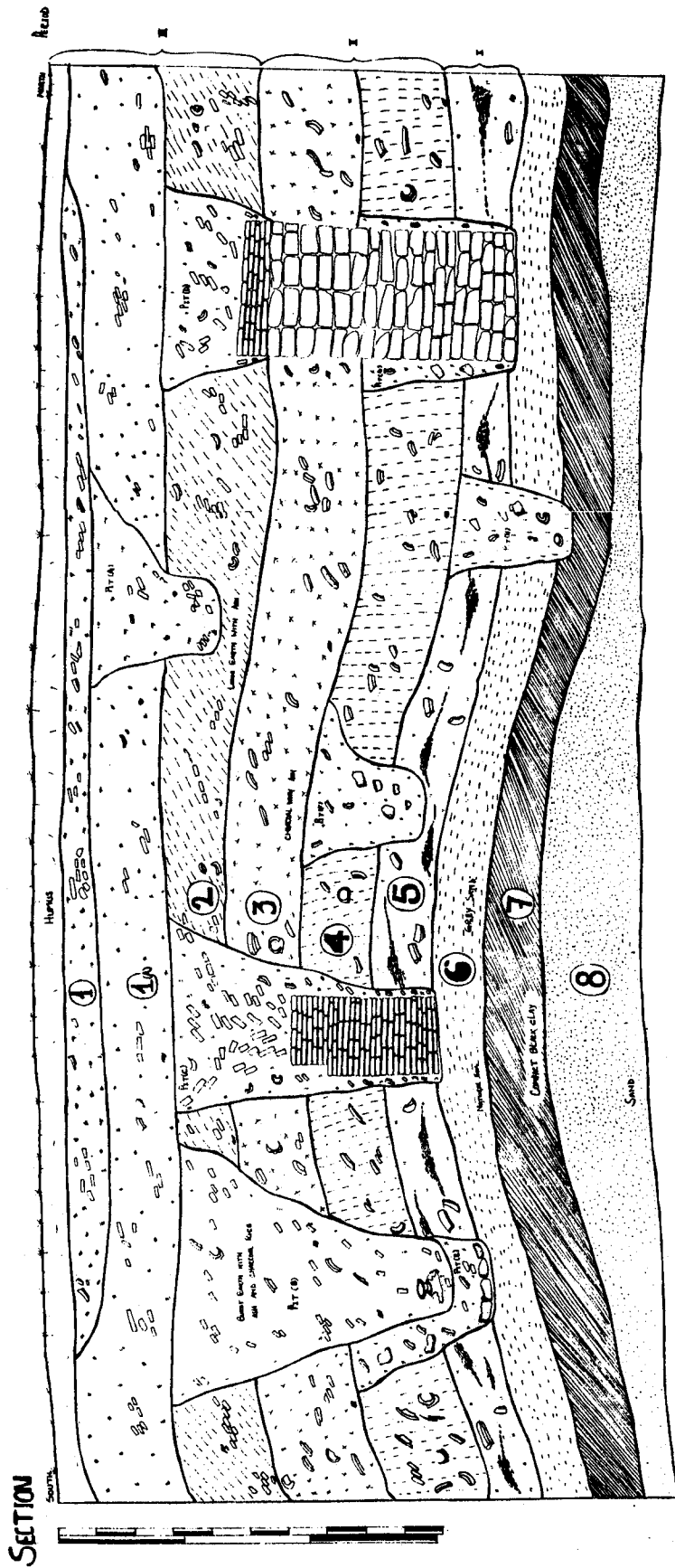
The geology of the Kathmandu Valley is still imperfectly known, and its relation to archaeology even less so. An important early survey was done by R.V. Joshi in 1961, in which he supports the general opinion that the Valley appears to contain deposits that represent water-laid sediments like those formed in quiet waters such as lake basins. The alluvium is deep, in places reaching a depth of more than 200-350 meters. Joshi notes that the two rivers, the Bagmati and the Manohara, cut through this alluvium, forming terraces, two of which have major areal expanse and support a large number of villages located on them. He also undertook a brief survey of the cliff-sections uncovered by these rivers as well as the deposits from them in the river beds. Though his search for prehistoric remains did not prove fruitful, he was of the opinion that the "gravel in the river beds is made up of a mixture of sub-angular and rolled rocks of granite, granite-gneiss, schistose rocks, pegmatites and vein quartz," "all of which, he claims, except for the schistose rocks, is suitable for tool manufacture. Radiocarbon dates of peat-samples from naturally exposed road-cutting on the way to Sankhu, not far from Gokarna and Dumakhai, were found to be 29115 ⁺³²²⁰ -2285 29960 ⁺³³¹⁵ -2350 years B.P., indicating that the peat samples are of late Pleistocene age.

The areas excavated at Dumakhai conforms generally to the geology as outlined by Joshi,

STRATIGRAPHY

The excavations reached a depth of three hundred seventy-two centimeters, at which point untouched soil was reached. Eight strata were distinguished, which varied from a minimum of sixteen centimeters to a maximum of seventy-two. They are as follows:

DUMARKHAL KATHMUNDU - 2001-2005



<u>Strata</u>	<u>Soil Composition</u>
1.	light brown earth mixed with some black soil
2.	light black soil
3.	light grey soil
4.	mixed grey sand and soil
5.	gravel with mixed grey soil and sand
6.	whitish grey sand (lacustrine soil)
7.	black clay
8.	sand

Archaeological evidence was found through the first five strata. Strata 6, 7, and 8, appear to have little archaeological importance at this point, though future excavations should go deeper in order to insure that no archaeological evidence has been missed.

THE STRUCTURES

Immediately below the topsoil, after a few hours of activity, the outline of brick walls began to emerge. When the excavation was terminated, they measured 6.90 cm in length, 64 cm in height, and 60 cm in width. They were clearly part of the structures that extended north below the ground into the side of the hill and those that were revealed by the peasants in the fields above. This wall terminated to the south in 140 cm in C. Below it, parallel to it, and approximately 2.66 cm to the west, was revealed a stone wall, built without mortar, and approximately one meter in height and 80 cm in width. The excavated portion of this wall extended from C to I, but its outline can be seen to extend for several feet until it disappears into the side of the terraced field.

D, E, and F contained a large number of bricks and brickbats that represent possibly the upper portions of the brick wall before their collapse. The stone wall may have been higher than at present also, since some large stones were found in the areas in front of it. It also may have been part of an area to the south of it that contains the remains of large stone structures.

At the lowest level of A and B appeared a structure of the greatest interest. The structure consists of a circle of large stones, about two meters in diameter, in which there was placed a rectangle

of stones. Its exact nature is unknown, and its resemblance to megalithic burials elsewhere may be purely formal and fortuitous. Unfortunately, because of the early onset of the monsoon in May, 1985, the excavation had to be closed before the structure could be examined.

BUILDING MATERIALS

The main building materials found were brick and stone. Bricks varied in size throughout the excavation. They were in general of good quality, but none was of fine manufacture. None is inscribed or decorated. The average size is 22x9x6 cms. A few bricks that were wedge-shaped were found in layer five of D. They may have been made for window trim or possibly to fit around the eaves. All bricks found were kiln baked.

Roof tiles and their fragments were found in considerable numbers, indicating that the roofs were tiled and not thatched.

The stone used in the structures uncovered is not uniform in size, but consists of pieces cut roughly to fit together. Other large stones have been found in strata 2, 3, and 4, and are not readily associable with the structures. They may have formed part of buildings or other structures associated with the stone circle in C.

ORGANIC REMAINS

The organic remains found in the excavation represent some of the most interesting material uncovered, but because of their specialized nature a full statement is not possible at this time.

The southern portions of the excavation appeared to contain most of the organic remains. These were found mostly in 2nd and 3rd in strata. Animal remains include both bones and teeth. Rice grains, both charred and uncharred, were found.

Throughout the excavation, large amounts of charcoal were found. Whether any of this represents the remains of wooden structures or parts of structures is impossible to say at this time. What appear to be post holes were found in strata 1st, but they conformed to no discernible pattern.

SCULPTURE

To date no public or large size sculpture has been found in the excavation. This may support the notion that the excavation lies at the periphery of the site. What has been found are fragmentary figures and many small votive terracotta figures. Among these the following should be mentioned:

- (1) a small (ht. five inches) male figure, headless and footless, presumably a rider of some animal, considering the figure's posture. He is wearing boots, is covered at the loins, and is bare chested except for the sacred thread running across his shoulder. He may

have held a flag or some other object in his right hand. He is wearing bracelets and a necklace. The figure is beautifully modelled. It was found at a depth of 190 c meters in G. (Pl. 9).

Another example of this same figure, identical to it in almost every detail, is in the collection of the Los Angeles Country Museum (Pal, p. 89). This figure, found at Dhumbarahi by Mary Slusser, was originally published by her in *Nepal Mandala* (Vol. II, Fig. 441). It is dated to the seventh or eighth century by Pal and Slusser, though they do not make clear their reasons for doing so.

- (2) the broken fragment of a male figure, possibly an archer. His foot wear and clothing resemble the style of early periods of Indian sculpture, possibly the Sunga period. (Pl. 10).
- (3) a human figure with fly-whisk. The figure has lost much of its detail, but it was of high quality. The face and headdress are almost totally obliterated, but the ear ornamentation and necklace are still visible. (Pl. 11).
- (4) two terra-cotta human heads.
- (5) animal figures include a bull of clay, with red slip typical of Licchavi pottery, This and the other animal figures were made with a double mould. (Pl. 12).
- (6) an animal head, a crude figure unlike the well-modelled figures mentioned above. The eyes are simple incised circles. There is no attempt at modelling the figure. The fragment was covered with a red slip.
- (7) a Buddhist votive seal with inscription in Licchavi or Gupta characters. In the top half in the center is the figure of the Buddha inside a stupa that is topped with harmika and three umbrellas. Around this central figures, are four small votive stupas. The lower portion contains an inscription hitherto unread, presumably one of the common Buddhist sacred formulas.

POTTERY

Pottery found at Dumakhal is of the historic period. No decorated painted ware and other types of pottery associated with prehistoric contexts were found. The types of vessels represented are utilitarian and the pottery shows little fine or luxury ware. The pottery appears to be entirely Nepalese in production, and there are no apparent imports from elsewhere.

The main types of pottery are the following: 1) a red slip ware of various thicknesses; 2) a black ware, some of which shows fine striations on the inside, many of which come together at right angles; 3) a black polished ware that may be related to some of the pottery found by Corvinus in the Gokarna-Dumakhal area and by Allchin at Lagankhel; 4) a distinctive

type of grey ware, not to be confused with the grey ware found at Histinapura; 5) an yellow ware with red slip though in very small amounts.

STAMPED POTTERY

What is of special interest is a number of sherds that bear stamped designs that may act as decorations or as stamps that may have special meaning or both. The number of such stamps discovered so far is well over one hundred. Some of them are remarkable for their beauty and skill of execution. Although most of them are drawn from the common stock of designs found in the subcontinent, they are distinctly Nepalese and so far appear not to be direct copies of those found elsewhere. No seal itself was uncovered by which the stamps were impressed, but on the reverse of the stamped sherds the finger print and nail mark of the potter or potter's assistant is clearly visible, indicating that the stamp was often held against the wet clay between thumb and forefinger.

The designs are variously shaped: circular, rectangular, semi-circle, and diamond. They include rosettes, wheels, birds, the *srivatas*, trees, and what appears to be a nine-headed serpent. Many of the designs appear to have some signification beyond their decorative value. The chief reason for this surmise is that they are often found in unlikely places for designs, often on the inside or top of the lip, or placed very closely together on the side, and in numbers far too few for the common design patterns of the time, which often circle the entire vessel.

Two stamps appear to match Licchavi coins very closely. The first is the humped bull. The stamp is almost identical to the so-called *pasupati* series of coins, so common in the Licchavi period (Pl. 13). These copper coins come in a large variety of detail, but none is dated or bears the name of any king. They therefore contribute no precise dates except the general assignment to the Licchavi period. A second stamp appears to bear the lion found on the so-called *mananka* coins. This is less clear, however.

Though stamped pottery has not been found at any other site in Nepal in the quantity and variety that it has been at Dumakhal, fragments have been found and are reported to be at present in the collections in the Department of Archaeology in Kathmandu and in the National Museum. The authors also found surface examples at Dhumbarahi, though some of the stamps found there were not as skillfully executed.

The stamps are not confined to any particular ware, though they are most numerous on the red and black wares. Most of the stamped sherds were found in D and E in strata 2-4, with a few examples found in A, B, F, and I.

The connections between this stamped pottery and similar pottery found in the Indian subcontinent must be examined in depth. Preliminary examination of pottery in India held in the national collections in Purana Qila, New Delhi, and conversations with archaeologists at the

Archaeological Survey of India, indicate connections with the pottery of Ahicchatra and other sites of northern India, particularly of the Kushan period. It must be emphasized strongly here that the connection between pottery of Dumakhal and that of the Kushan period in various sites of northern India has no immediate chronological significance. Stamped pottery, it is generally believed, was an import into the Indian subcontinent from abroad, possibly through the eastern Mediterranean or possibly through the Greek and Roman-influenced northwest and thence through the Saka-Parthians and the Kushans into the plains of India. When the practice entered Nepal is impossible to say. What must be recognized, however, is what G.R. Sharma has called the "strong ceramic bond" that knit together much of the civilization of ancient northern India. This bond may have included sites like the Kathmandu Valley.

INSCRIBED POTTERY

An important piece of pottery is a black fragment that bears an inscription, or part of one, that at present is not decipherable with certainty. The script is not known before in Nepal, but it appears to be related to scripts found there and elsewhere in the subcontinent. It appears to be a graffito and not a formal inscription, perhaps a potter's notation.

COINS

The excavation has not yielded a large number of coins. Only two were found, both of the Licchavi period. One is a coin of the *pasupati* series, found on the surface. The other is a *mananka* found in stratum 1D. The coin is easily recognizable but is not in good condition. No Malla or Shah coins have been found.

GLASS OBJECTS

A number of glass bangle fragments were found in the excavation. All are polychromed and appear to be of early manufacture and design. There are two main varieties: flat pieces of two colors of plain design, and pieces about half a centimeter in width in which stripes and or dots of various colors are placed against a monochrome background. In some of these the edges are raised. The colors are brilliant and include yellow, blue, red, ochre, and maroon.

METAL OBJECTS

Metal objects are of bronze and iron. The bronze objects consist of a few fragments of what appear to be the remains of bowls or water pots. Some appear to be polished.

The remaining objects are made of iron. They consist of hooks, an arrowhead, some intertwined rings, and a long thin piece that may have been a nail.

A few remaining objects are not recognizable because of their poor condition.

STONE OBJECTS

To date, no recognizable tools of the prehistoric period have been found in the excavation, despite reported finds on the surface of neolithic celts and axes of possibly the paleolithic period.

A variety of stone implements were found that may bear the marks of human use. These include several pieces of quartz and several smoothed stones that may have been used as household implements including what appears to be a ringstone.

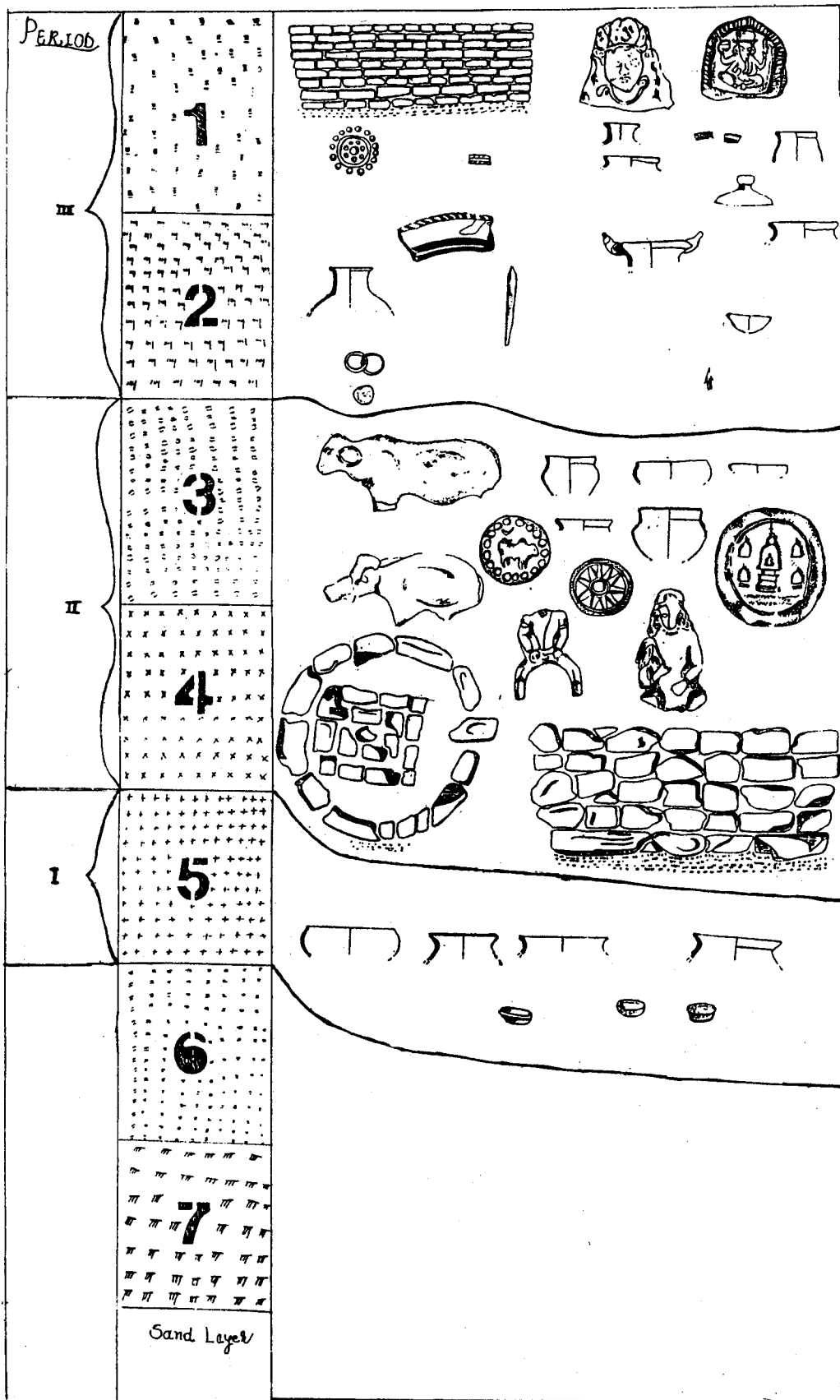
CONCLUSIONS

Some preliminary conclusions may be drawn from the above material. Because of the small size of the trench, however, their tentative nature cannot be overemphasized.

- (1) the exact nature of the ruins at Dumakhal is at present unknown and can only be ascertained through further excavation;
- (2) the site uncovered so far appears to be of the Licchavi period, though determining the chronology more finely is difficult without further excavation;
- (3) no tools or prehistoric contexts have been found in the trench. This leaves open still the question of the relation of the surface finds to the site, and the c-14 tests done previously by Watanabe;
- (4) all pottery found appears to be of the historic period, some of it bearing similarities to pottery of the Kushan period at various sites in northern India;
- (5) the artifacts bear a close relationship to finds at Hādigaon and Dhumbarahi.

Finally, it must be stated that the trench at Dumakhal is one of only three systematic investigations undertaken in the Kathmandu Valley. Because of the enormous urban growth that has taken over the Valley, and the increasing pressure on the farmers to till more and more land, the opportunities for archaeological work have dwindled substantially in the last twenty years. Only a broadened program of archaeology, both of excavation, salvage, and preservation, will allow us to reveal the true nature and extent of the Nepalese cultural heritage.

DUMAKHAL CULTURAL SEQUENCE



SELECT EXAMPLES

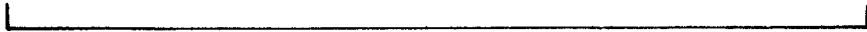
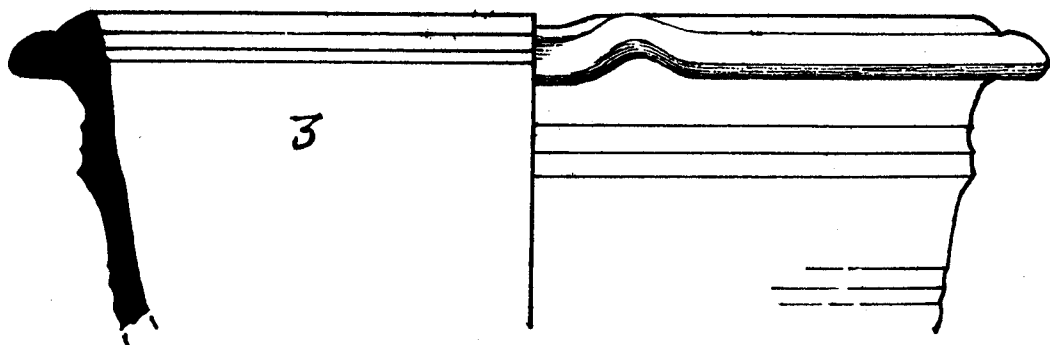
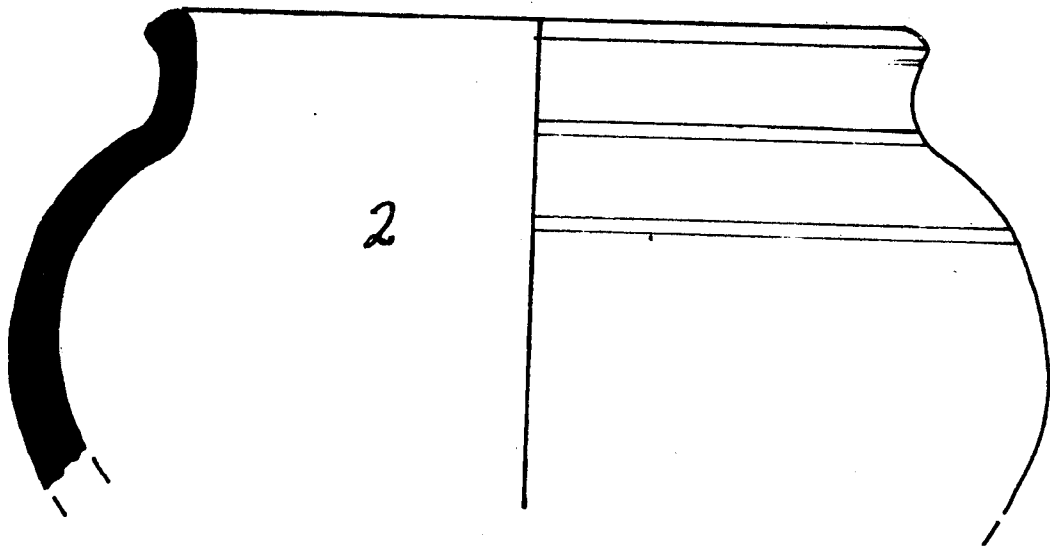
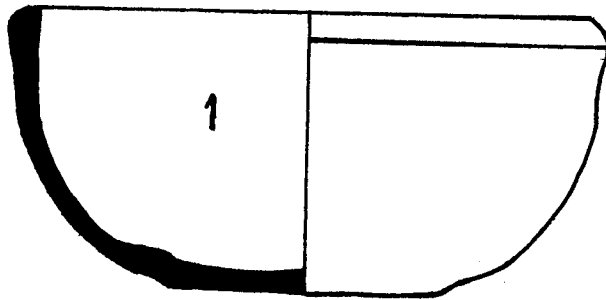
A representative collection of potsherds from the various periods of the Dumakhal culture is here illustrated; an exhaustive classification will be published in the final report.

1. Bowl of buff ware with sharpened and slightly everted rim and flattened base; from stratum II of period III.
2. Vessel of brownish red ware with everted rim and boldly grooved shoulder from stratum III of period II.
3. Fragment of a unique long-necked vessel jar of red slip ware; from stratum III of period II.
4. Fragment of a vessel of red ware with oblique incisions on the shoulder; from a stratum III of period II.
5. Fragment of a lid of brownish red ware with external knob; from a stratum IV of period II.
6. Fragment of a carinated dish of red ware; from stratum I of period III.
7. Fragment of a vessel of grey ware with incurved thickened rim; from stratum III of period II.
8. Fragment of a flat base and rimless basin of buff ware; from a pit contemporary with a late level or stratum II of period III.

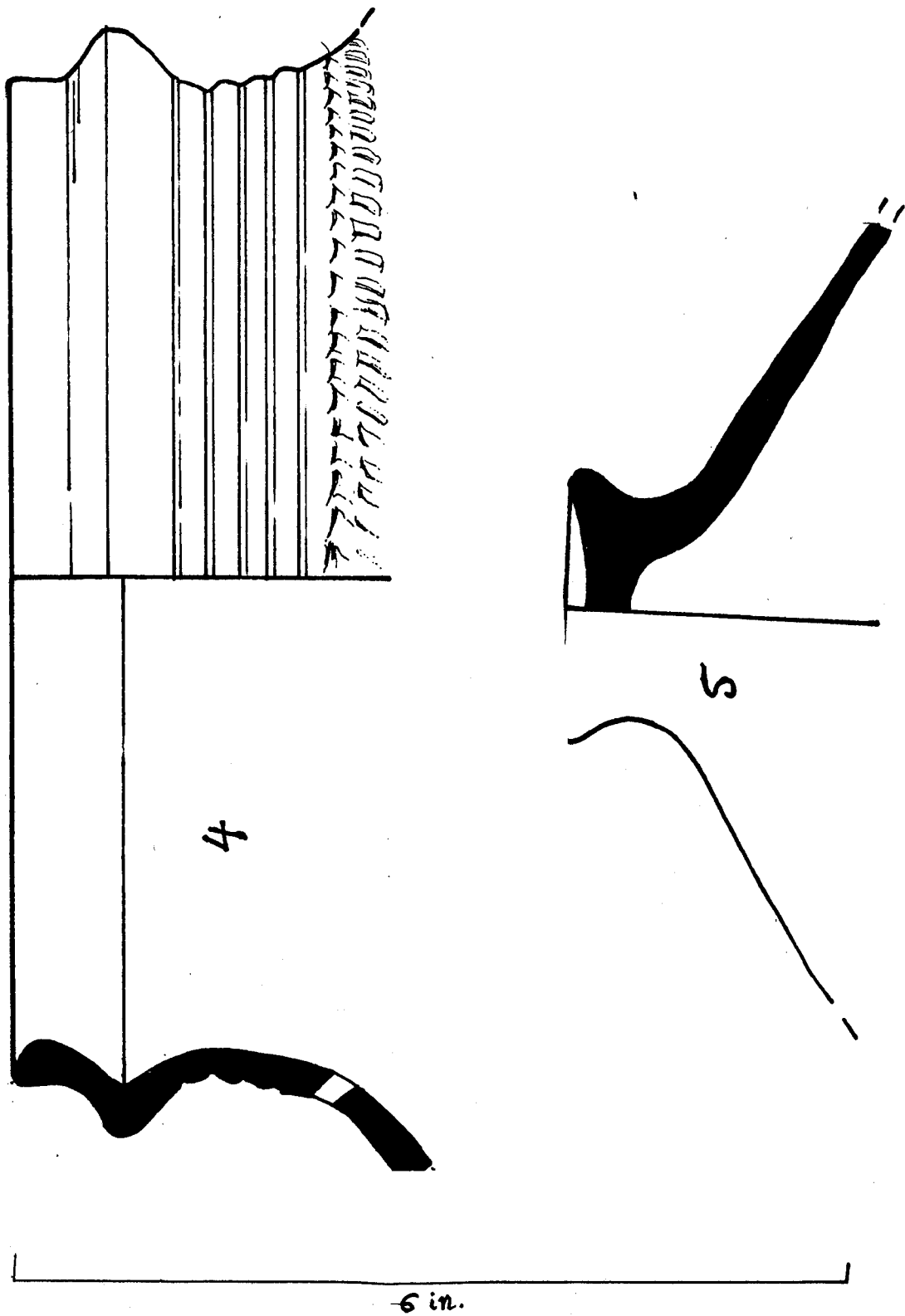
DECORATED POTTERY

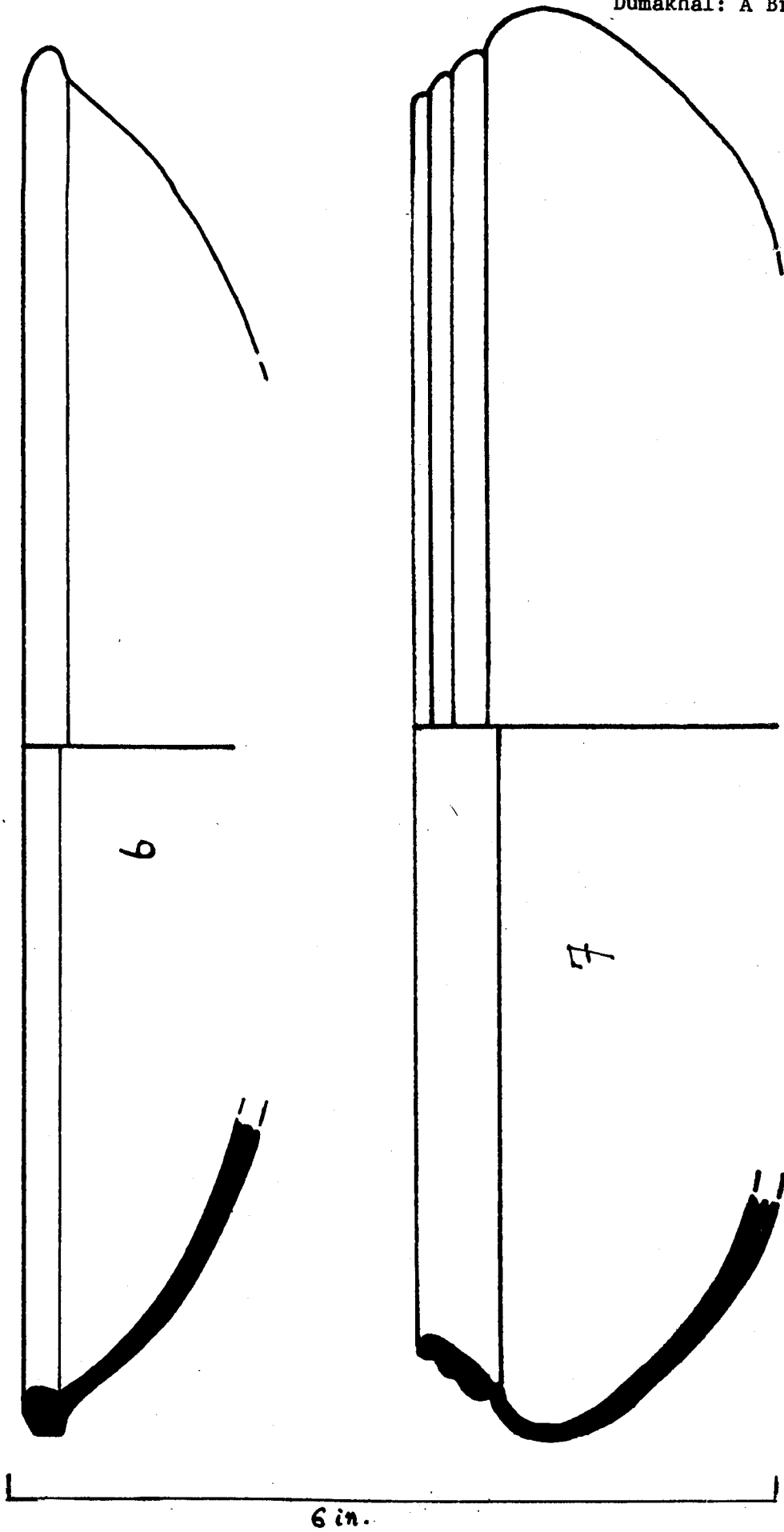
A number of decorated potsherds carrying incised, stamped and applied designs have been found, but only a few are described here.

9. Red-slipped vessel-fragment decorated with a stamp pattern over a twisted-cord design in applique, from a stratum III of period II.
10. Red ware sherd with applied bands bearing finger-tip and rope patterns; from a stratum III of period II.



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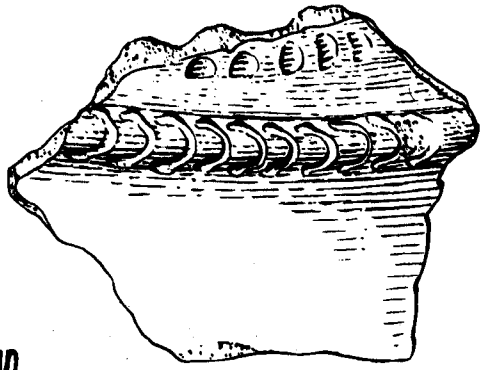
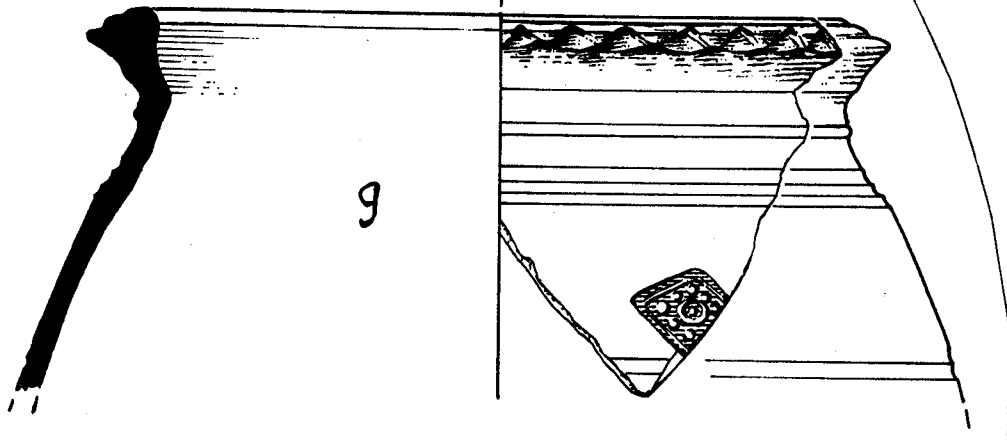
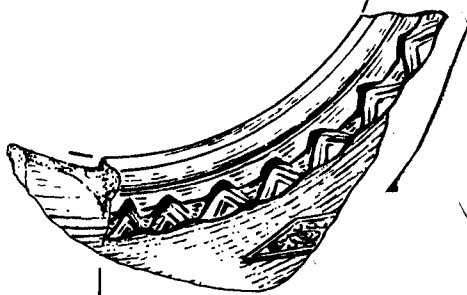
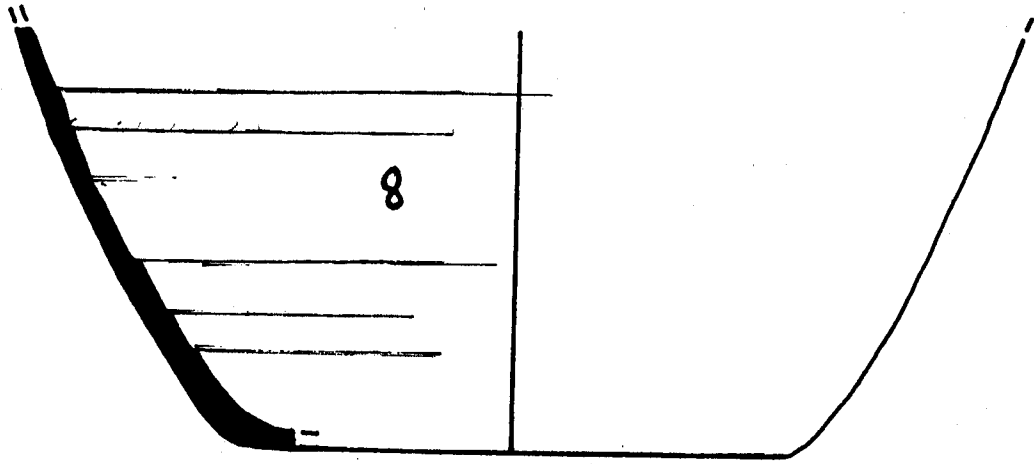




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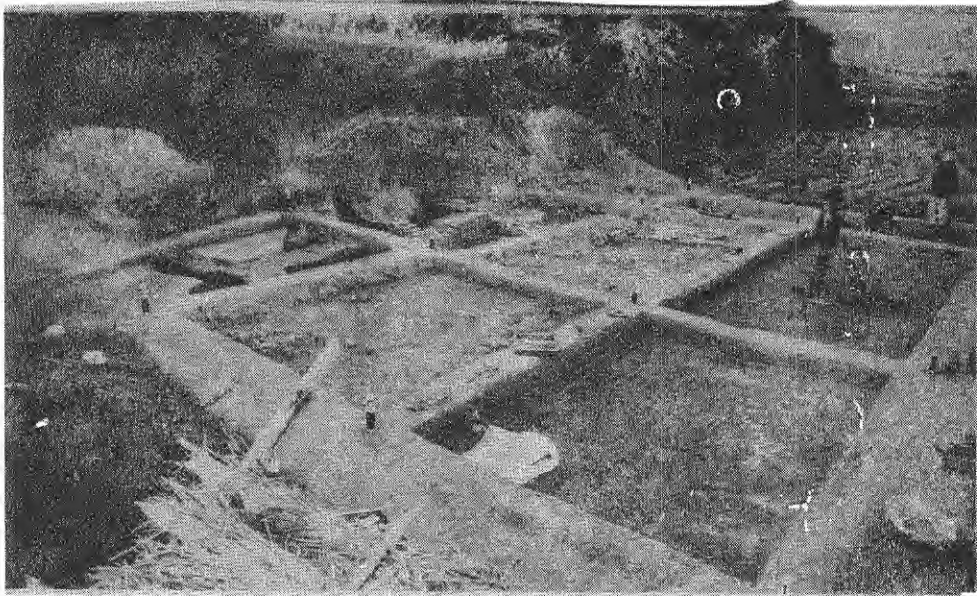


Plate I: General View, Archaeological Site at Dumakhal, looking northwest.

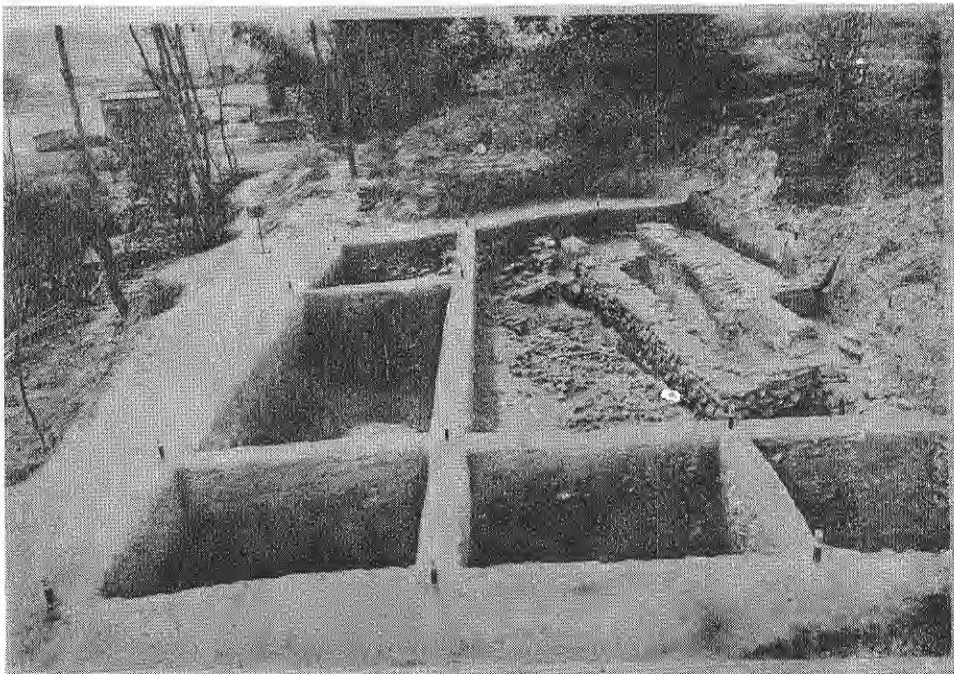


Plate II: General View of Structures and Pits, Looking South.

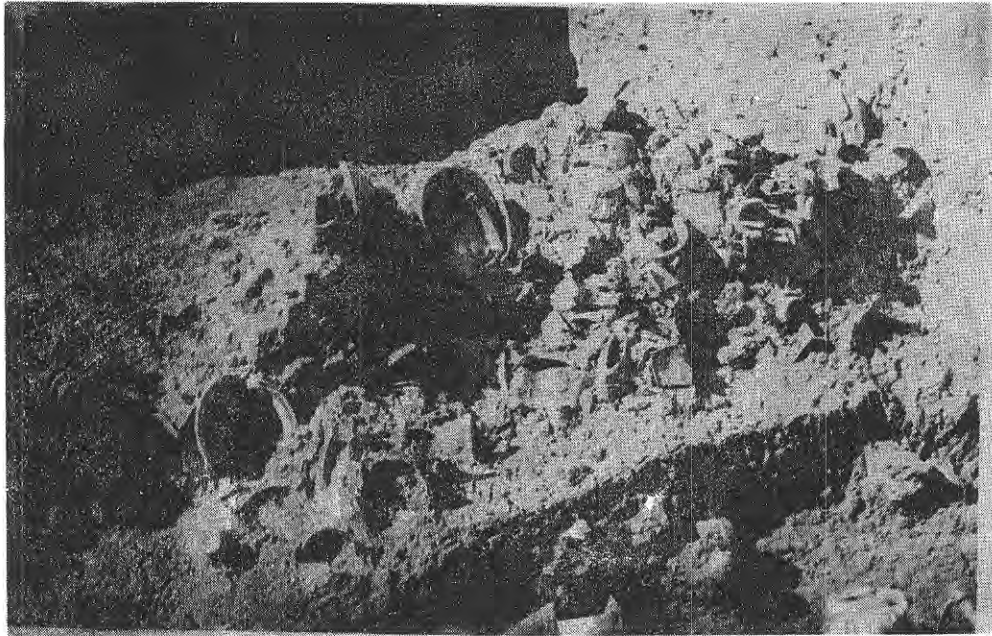


Plate III: Pottery and Other Debris (Trench E).



Plate IV: Flooring and Walls, Looking North



Plate V: Exposed Floor and Walls.



Plate VI: Exposed Brick and Stone Walls.

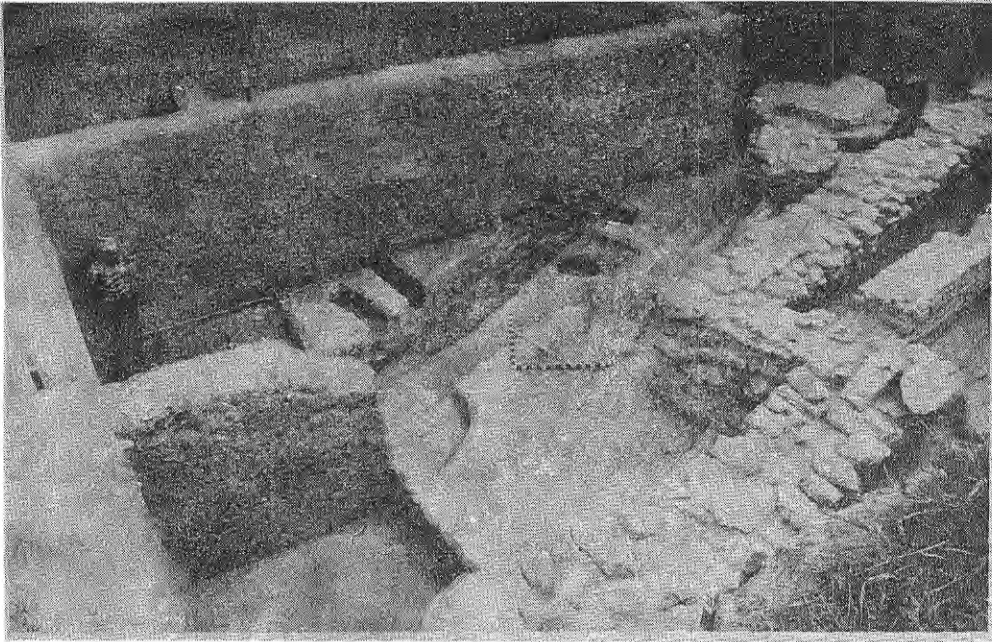


Plate VII: General View of Flooring, Structures, Sections, and Cairn Circle.



Plate VIII: Cairn Circle.

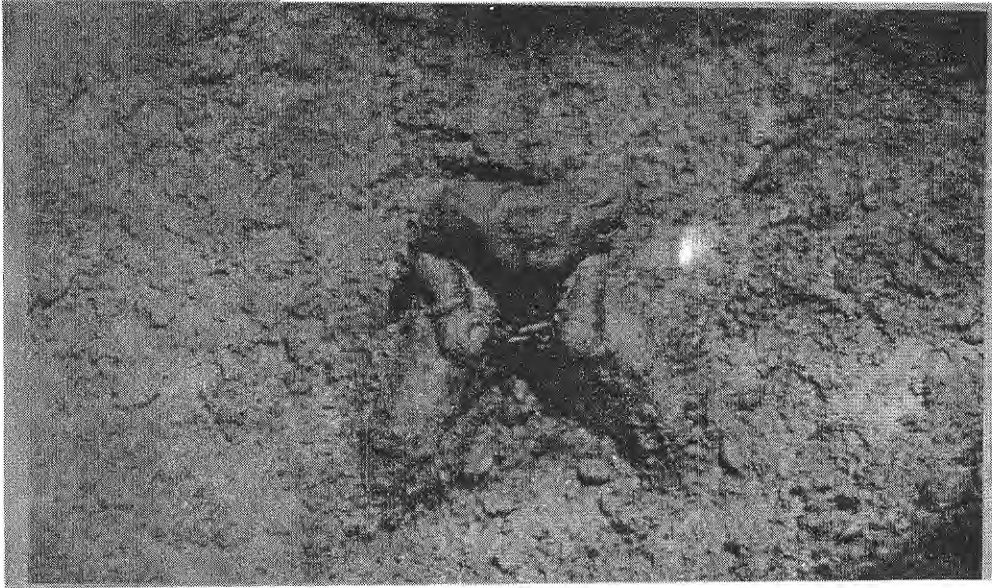


Plate IX: Terracotta Male Figure.



Plate X: Terracotta Figure.



Plate XI: Terracotta Male Figure.



Plate XII: Terracotta Animal (Bull) Figure.

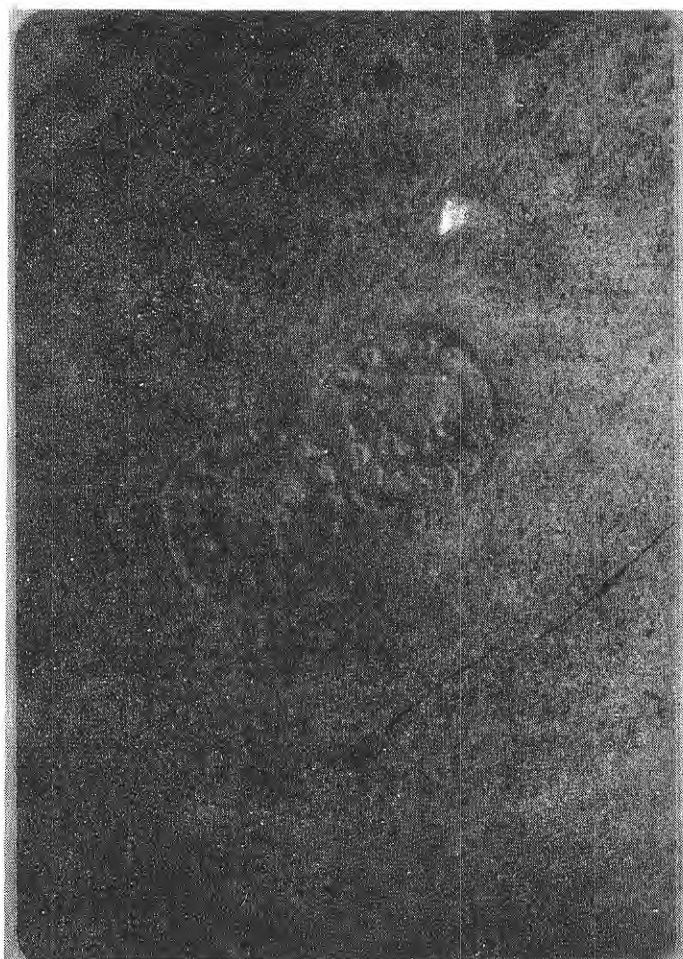


Plate XIII: Pottery Stamps (Pashupati Royal Sealings).