

## Excavations at Gotihawa

### A note on the results obtained during the first excavation campaign in winter 1994-95

—Giovanni Verardi

In the winter 1994-95 the Nepali-Italian team (Department of Archaeology of HMG, Kathmandu; Lumbini Development Trust, Lumbini; Istituto Italiano per l'Africa e l'Oriente, Rome) began its activity in the Kapilavastu District of the Terai. As most readers are certainly well-acquainted with the nature of at least some of the sites of the region and the questions involved, I will limit myself to bring to their attention the fact that up till now the most noticeable information on these sites has been from S.B. Deo (1968) and D. Mitra (1972); that excavations at Tilaurakot and Lumbini have been carried out by Nepalese as well as by Japanese archaeologists (Mishra 1977; Nakamura 1978; Rijal 1973, 1974, 1975-77, 1979, 1996); and that an analysis of the archaeological evidences of the region in relation to the still unsettled question of the identification of Kapilavastu was made by Haertel a few years ago (Haertel 1991). It must be noticed that the territory of the District is crowded with sites, which are much more numerous than commonly believed or even reported in the

literature.

Our excavation work focussed on Gotihawa, a well-known site because of the presence of the stump of an Ashokan pillar, which is situated to the southwest of Taulihawa at about two kilometers east of the present-day course of the Banganga river, and is apparently related to the large Pipri mound half a kilometer away. Like other sites of the plain, that lie on relatively high lands (which protects them from seasonal floodings and the periodical migration of rivers), it lies on a sandbar. It is made of a number of small mounds, partly cleared from the huts built on them and partly still hidden under the present village.

The stupa mound has been attracting the attention of researchers since the end of the last century, when Major L.A. Waddell cut a narrow trench connecting the centre of the stupa with the pillar - a digging partly documented by P.C. Mukherji in his Report of 1901 (pp. 31-33; here see fig. 6). We availed ourselves of the old trench, reopened it, and

dug deeper so as to control the internal structure of the monument and the layers below (figs. 3, 8). Waddell's trench, however, was not reopened for all its length, and both its ends, affecting the central part of the stupa and the Ashokan pillar respectively were left untouched (fig. 2). As to the western end of the trench, it must be noticed that in 1959 the pillar was given a sort of monumental arrangement, which caused the trench to be cut and obliterated (figs. 1, 2, 7).

### I. The stupa.

The stupa (figs. 1, 3, 8-11; the reader is especially referred, here and in the following pages, to the section shown in fig. 3) appears below the layer of humus and layer 3, and shows damage caused by the long frequentation of the site after its final abandonment (out Period IV; see fig. 5). Two building Periods (our Periods III and II) have been recognized.

The early stupa is an apparently tight-connected, brick-made structure. It is still unchecked, but seems to be made of concentric rings of bricks. An outer pavement (25), the *pradakṣināpatha*, is related to this early building. The bricks are rectangular and wedge-shaped, contain a large amount of rice husk as temper, and are ill-baked. A few of them bear marks in the shape of crosses, crosses within circles, or circles internally barred (figs. 12-14). In this Period the diameter of the monument was ca. 19,5 m. The dating of the stupa at this stage is highly conjectural, although there are reasons to believe that it was built in the 3rd century B.C. It can be surmised that it is contemporary with the erection of the pillar nearby, but nothing certain can be said on this at present. As to the pillar, it appears from the longitudinal

section (fig. 2) that it is placed below the original ground level, and we cannot even say if it stands in its original position.

The second building Period is characterized by the addition of two more rings (38, 37) and the laying of a new *pradakṣināpatha* (35) at a higher level than the previous one. It is worth noting that the new rings are made of rectangular bricks only. As before, the stupa ended abruptly with a low vertical side, but it had now a diameter of about 21,5 m, being therefore the monument measured by P.C. Mukherji, according to whom the stupa at Gotihawa had a diameter of 68 feet (Mukherji 1901, p. 31). The outermost ring (37) eventually collapsed (see layer 48), after which the stupa was deserted. Later occupation shows the presence of local, non-Buddhist cults. It can be conjectured that the enlargement of the stupa was carried out in Saka and Kushana time (from the end of the 1st century B.C., in this part of the subcontinent, to the 2nd-3rd century A.D.), but no proper archaeological evidence is available as yet for stating this. A more careful examination of the monument will be possible when a larger part of it is exposed, and a safer chronology will be given when materials related to the two building Periods are found.

Both in Period II and III the monument corresponds, typologically to other stupas of the region, as for instance to the so-called Suddhodana stupa at Damnihawa outside Tilaurakot (Rijal 1973, pl. IX) and to the unexcavated one at Beluhawa (*ibid.*, p. 63).

### II. The Pre-stupa Deposit

Our attention should turn now to the sequence preceding the building of the stupa, which is not yet firmly established, but which gives important evi-

dence for the chronology of the site. In particular, a *post quem* comes from a charcoal found in trench MMK to the west of Waddell's trench (figs. 1, 3).

### 1. The Northern Black Polished Ware and the Animal Bones

In the sandy-silty layers (26, 33) immediately below the stupa and towards its centre, small fragments of *NBPW* were found in association with small charcoals and animal bones. The *NBPW* sherds allowed us to reconstruct several forms, all globular bowls with thin walls (fig. 17), which points to the presence of a high-standard, specialized production. We could not instead, up till now, confront ourselves with the numerous questions concerning the manufacturing of the ware. The sherds display a polished black and/or red surface, and may have an outer red surface with a black inner one or viceversa.

As to the bones, their finding was, at the same time, expected and of the greatest interest. "A large number" of them, along with teeth which "were many and certainly belonged to animals" (Mukherji 1901, p. 32) had been found one century ago at about 50 cm below the first row of bricks at the centre of the stupa. John Irwin, in one of his papers, considered this piece of information as evidence that the stupa at Gotihawa was not a Buddhist monument - a stimulating but unlikely hypothesis (Irwin 1977, p. 815). The bones found by us have been examined by Jacopo De Grossi Mazzorin of the Soprintendenza Archaeologica di Roma, who succeeded in identifying some of them. The species *bos indicus* predominates in the sample, which yielded also two remains of *gallus gallus* (cock). The bone fragment of a rodent and that of an unidentified reptile (most likely late

intruders) were also identified. The fragment of the pelvis of a *bos* shows clear traces of slaughtering by means of a sharp tool (figs. 15-16). The blow was struck at the height of the pectineus line, and the pelvis was broken.

The *NBPW* sherds and the bones seem to be concentrated below the central part of the stupa, and seem to be related to a layout made of unbaked bricks (?), of which only a few traces have been observed up till now. If confirmed, this would be the evidence of the existence of a pre-stupa structure connected with the use of selected shapes of a high quality pottery (the *NBPW*) and the consumption of animals' meat and/or animal sacrifices.

We do not have objective data for giving the absolute chronology of this part of the deposit, and we must therefore rely upon the dating of the *NBPW*, which varies according to the evidence from different sites and to scholars' views. The 7th-6th century B.C. can be taken as the beginning of this period (our Period I), which lasted up till the construction of the stupa.

### 2. The Pottery of Prehistoric Tradition and the C14 Dating

Waddell's trench reached a depth of only about 30 cm below the first row of bricks of the stupa (the depth was greater only at the centre of the monument). At the southwestern corner of the trench, we dug up to the height of 2,14 m from our Point O (i.e. the top of the remains of the Ashokan pillar), reaching the level of the water-table below the upper interface of the sterile clays. A deep digging was also made in Trench MMK, but without reaching the water-table. The layers which can be seen in the section of fig. 3 (27, 28) have

vanishing, uncertain limits, and even the base of layer 28 can be distinguished from the sterile soil below (29) only because of a minor chromatic change and the presence of a few sherds. These are of cord-or basket-impressed ware (like others found in Trench MMK, see fig. 18), one of them having been found at a height corresponding to the interface separating layer 28 from the sterile soil below, and being therefore referable to the very beginning of the Gotihawa deposit. This kind of ware is known from about the mid-2nd millennium B.C. from Neolithic sites of Northern India such as Kaldihawa in the hilly part of the Allahabad District (of Allchin and Allchin 1989, pp. 117-18), where it is associated with stone blades, ground stone axes and the like. At Gotihawa we deal, rather, with a pottery of Neolithic tradition belonging to a more mature context. It has been noticed that in the Lower Ganges Plain elements of the Chalcolithic culture "continue to exist even in the succeeding phase of Early Iron Age" (Roy 1983, p. 17). As an example of this a few sherds from Kausambi, found in a context presumably similar to ours, are noticeable. Erroneously called "incised ware", they are associated to the *PGW* and are dated to the 7th century B.C. (Sharma 1960, p. 61; pl. 53, 5; cf. pl. 4). More evidence (though one which needs a careful examination) has recently come from Narhan, a site south of Gorakhpur on the Ghaghar river taken to represent a "Narhan culture" which flourished between the 11th and the 10th-9th century B.C. (Singh 1994, pp. 29-30, 43-44, 75 fig. 25). However, whereas in the reopened Waddell's trench (i.e. below the stupa) these sherds (very few, actually) have been found the *NBPW* layers, in Trench MMK they are associated with the *NBPW*, so that nothing can be

said at present on the existence of pre-*NBPW* strata in the deposit.

In layer 86, again in Trench MMK (cf. fig. 5) also fragments of red ware have been found which belong to a well-known class of prehistoric pottery (figs. 19-20). They are associated as well with the *NBPW*, so that we can only say that at Gotihawa there is a continuity of prehistoric artifacts through time. The red pottery fragments find comparison in other sites of the Ganges plain, as for instance Atranjikhhera, Period III (where they are associated to the Grey Ware), as can be seen from several examples in Gaur (1983). Fragment no. GTH-p 191 (fig. 20) finds very close comparison at Narhan Period I (cf. Singh 1994, fig. 34 on p. 92, 20-27; here fig. 21), at Sravasti (Sinha 1967, fig. 11, XVVIX; here fig. 22) and at other sites as well.

The lower part of layer 86, which is one characterized by a very slow growth (see again the Matrix, fig. 5) is approximately contemporary with layer 28. It yielded a few charcoal samples, one of which underwent C14 examination by the Beta Analytic Radiocarbon Dating Laboratory, Miami. As can be seen in fig. 4, the sample goes back to about 800 B.C., which gives us a *post quem* for layers 86 and 28. We hope that a careful scrutiny of the lowermost layers will clarify the nature of the Gotihawa deposit, allowing us to understand why so distinctly different pottery classes are found together.

Also at Tilaurakot, sherds of impressed ware, all "invariably executed either on or immediately below the shoulder" were found by Debala Mitra in the early layers of Period I in association with the *NBPW* (Mitra 1972, p. 22). Thanks to the presence of a dated charcoal in our site, we think, however, that the caution demonstrated by Herbert Haertel

(1991) in evaluating the chronology of the archaeological sites in the District of Lumbini and Kapilavastu and in the adjacent Indian ones is too great, and that the archaeological sequence in this part of the Terai goes certainly back to a period preceding the earlier possible date to which the life of the Buddha can be attributed.

**List of the Units of Stratigraphy Reported in the Matrix (Fig. 5) and in Section 2 (Fig. 3)**

1. Humus
3. Sandy silt with brickbats. Disturbed.
16. Collapse of structure
20. Sandy silt
21. Sandy silt deposited by hydric-gravitational erosion. Rare potsherds
22. Sandy silt due to erosion, very homogeneous. Very rare, minute potsherds and brickbats
25. Pavement
26. Sandy silt
27. Sandy silt with charcoal
28. Sandy silt which rare potsherds
29. natural soil
31. Sandy silt with minute brickbats.
33. Sandy silt with *NBPW* fragments and animal bones
34. Sandy silt with animal bones
35. Pavement
37. Ring of bricks (stupa)
38. Ring of bricks (stupa)
40. Ring of bricks (stupa)
41. Ring of bricks (stupa)
42. Ring of bricks (stupa)
48. Collapse of bricks
75. Sandy silt with few brickbats
81. Pavement

83. Sandy silt
84. Pavement
86. Clayey layer with charcoal and potsherds
100. Core part of stupa
101. Negative interface.

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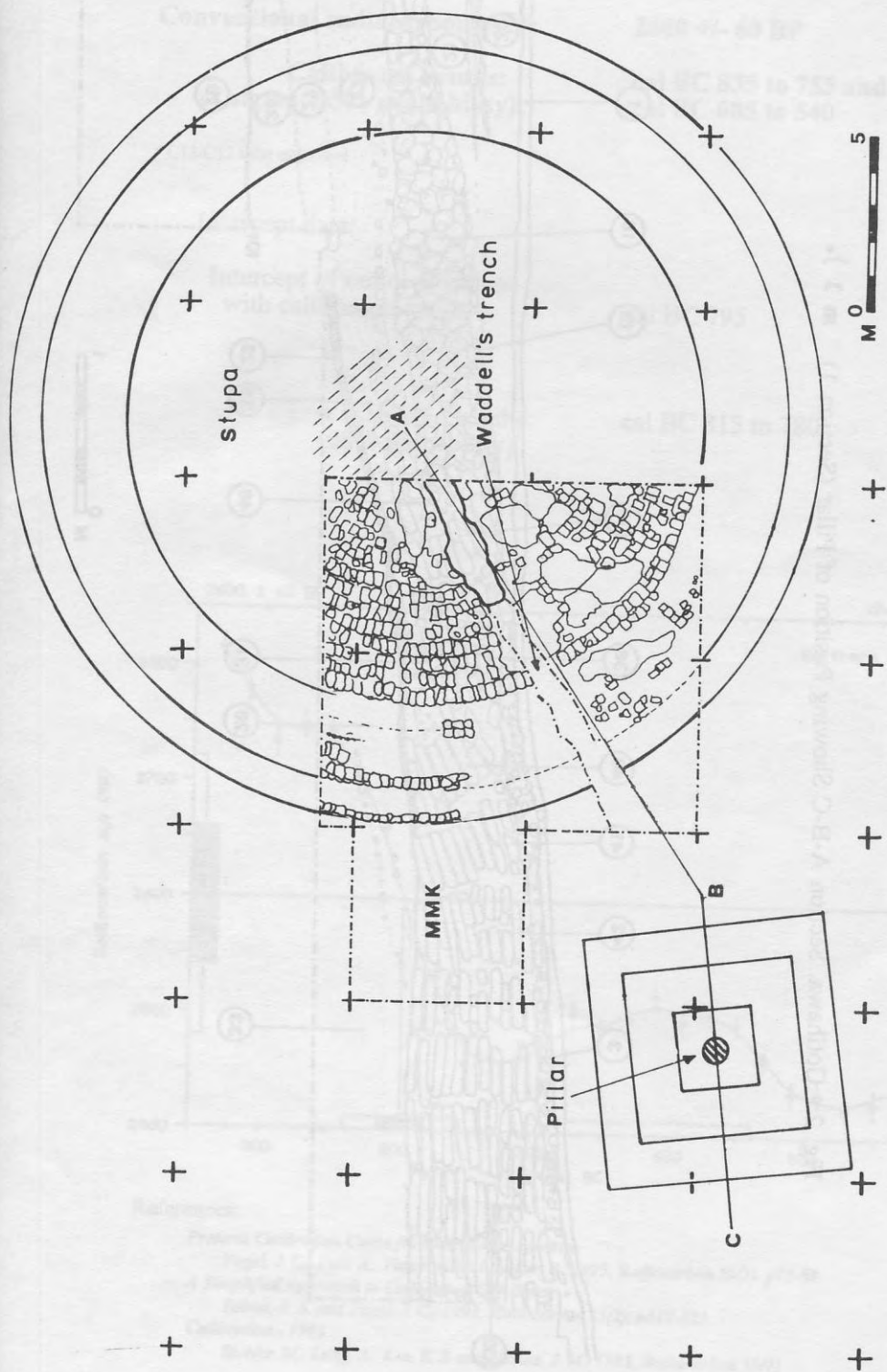


Fig. 1 - Gotihawa. Excavated Area in January 1995.

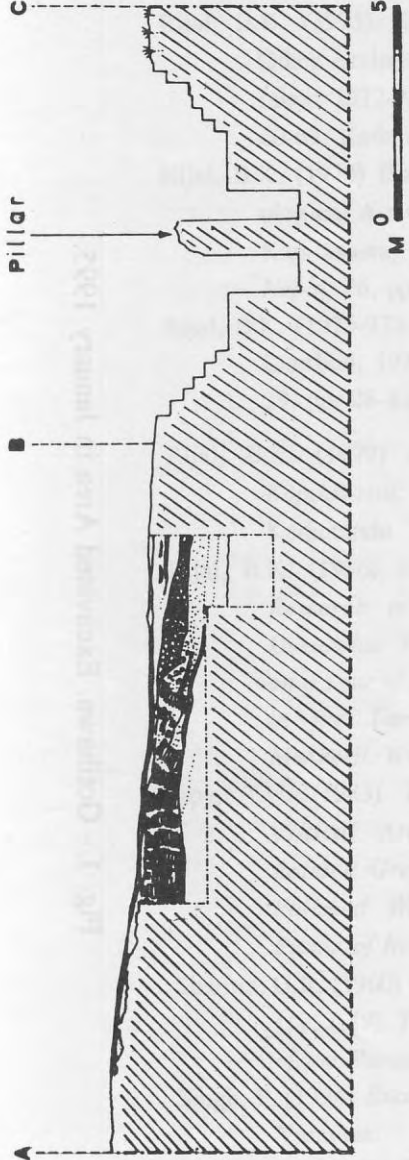


Fig. 2 - Gotihawa. Section A-B-C Showing Position of Pillar (Section 1). m 1 )•

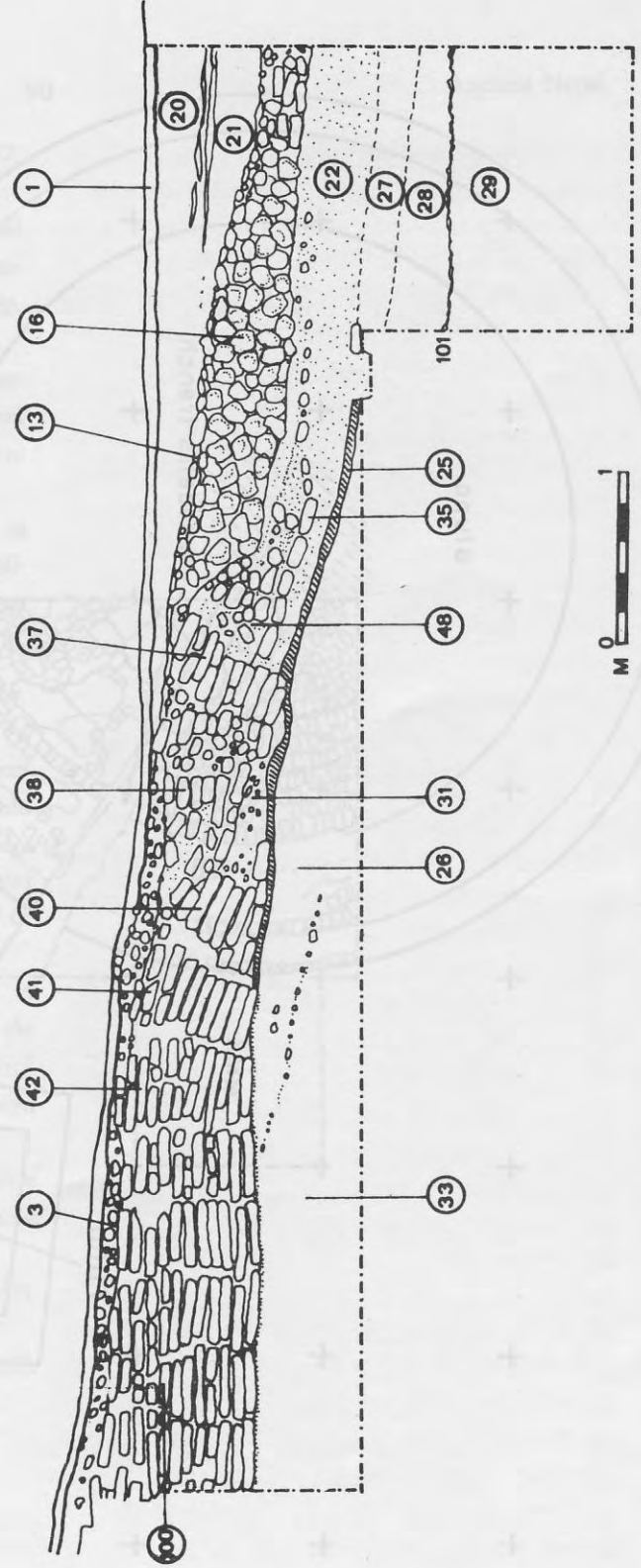


Fig. 3 - Gotihawa. Section Exposed Along Waddell's Trench (Section 2).



Conventional radiocarbon age\*:

2600 +/- 60 BP

Calibrated results:  
(2 sigma, 95% probability)

cal BC 835 to 755 and  
cal BC 685 to 540

\* C13/C12 ratio estimated

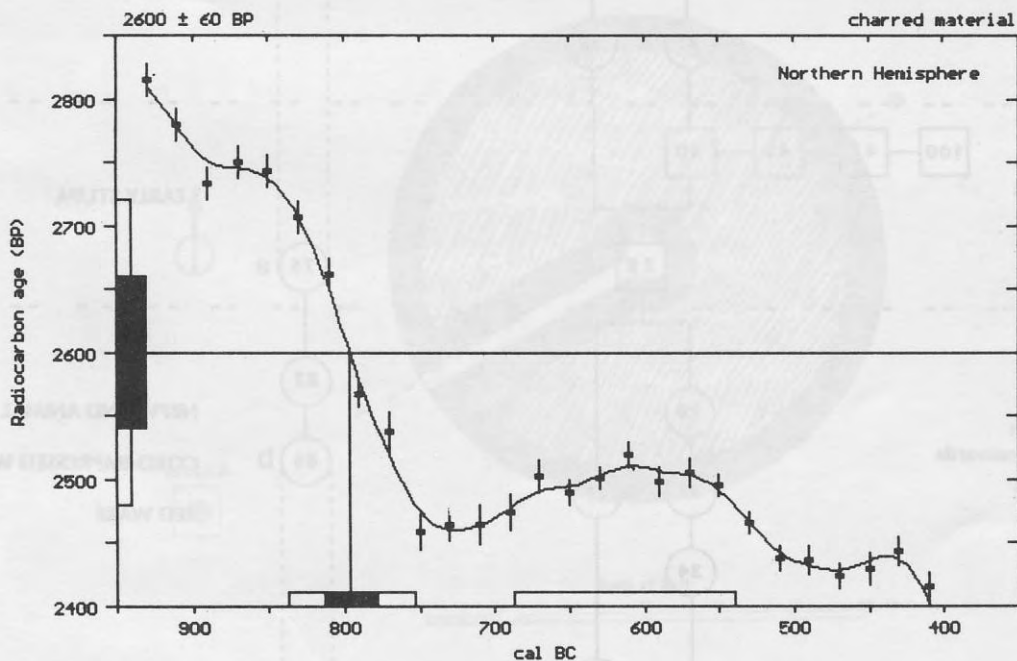
Intercept data:

Intercept of radiocarbon age  
with calibration curve:

cal BC 795

1 sigma calibrated results:  
(68% probability)

cal BC 815 to 780



References:

*Pretoria Calibration Curve for Short Lived Samples*

Vogel, J. C., Fuls, A., Visser, E. and Becker, B., 1993, *Radiocarbon* 35(1), p73-86

*A Simplified Approach to Calibrating C14 Dates*

Talma, A. S. and Vogel, J. C., 1993, *Radiocarbon* 35(2), p317-322

*Calibration - 1993*

Stuiver, M., Long, A., Kra, R. S. and Devine, J. M., 1993, *Radiocarbon* 35(1)

Fig. 4 - Dating of Charcoal Samples from Layer 86 (ca. 800 B.C.). Beta Analytic Radiocarbon Dating Laboratory, Miami (USA).

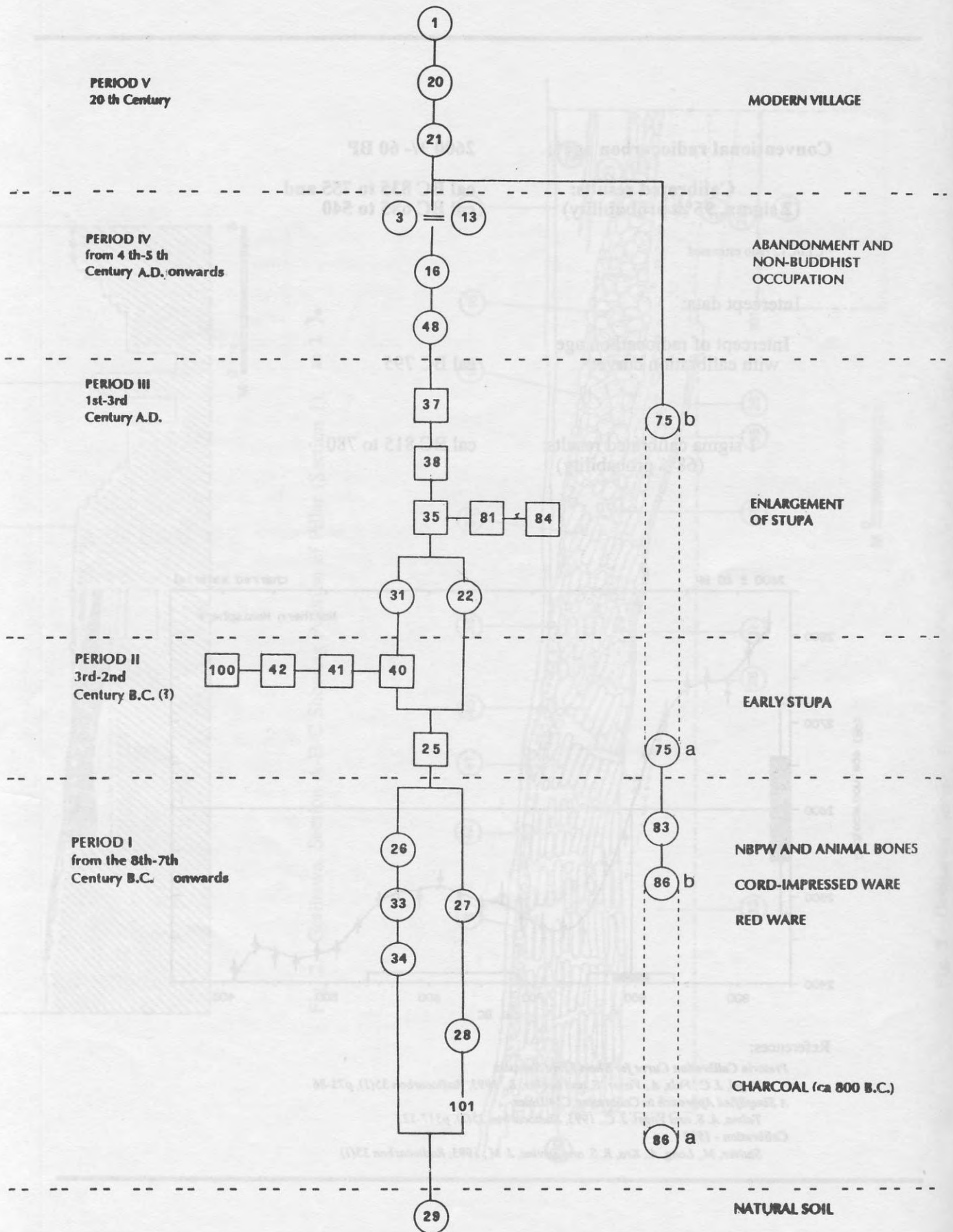
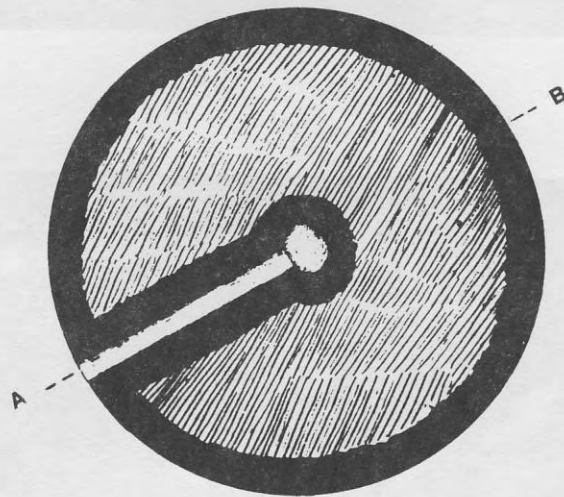
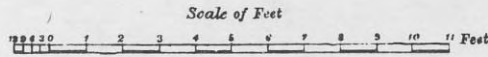
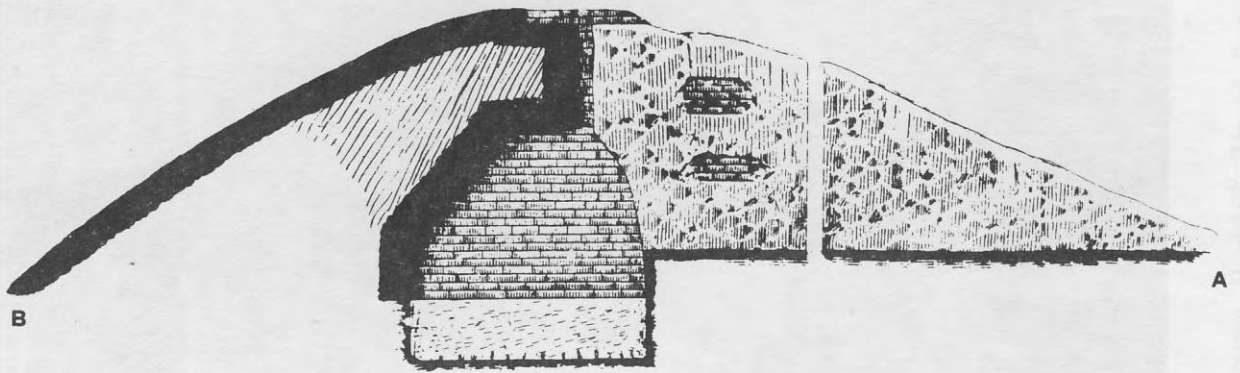


Fig. 5 - Gotihawa. Matrix of 1994-95 Excavation, with Tentative Chronology and Subdivision into Periods.



PILLAR.

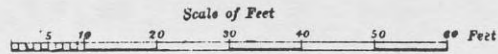


Fig. 6 - The Stupa at Gotihawa According to P.C. Mukherji (1901, pl. XVII).



Fig. 7 - Gotihawa. Ashokan Pillar as Arranged in 1959 and Excavated Area (Winter 1994-95).



Fig. 8 - Gotihawa. Waddell's Trench Partly Re-opened.

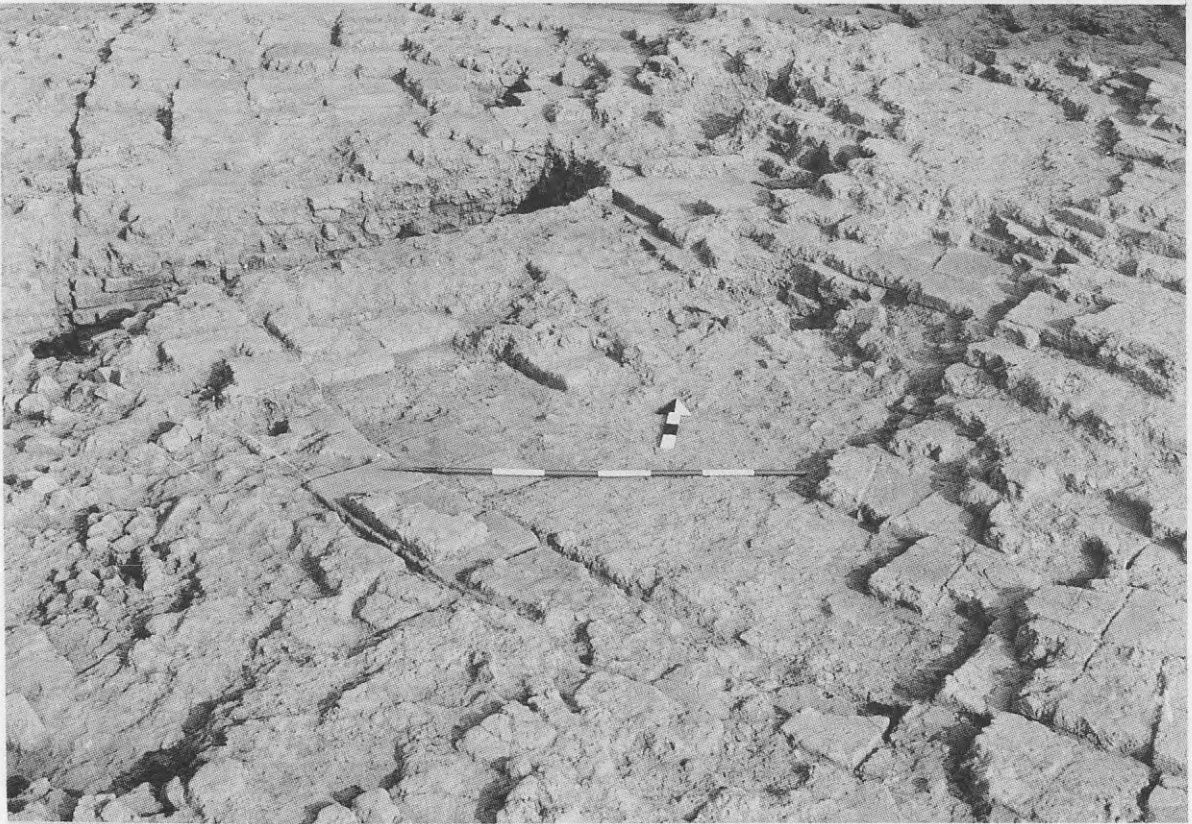
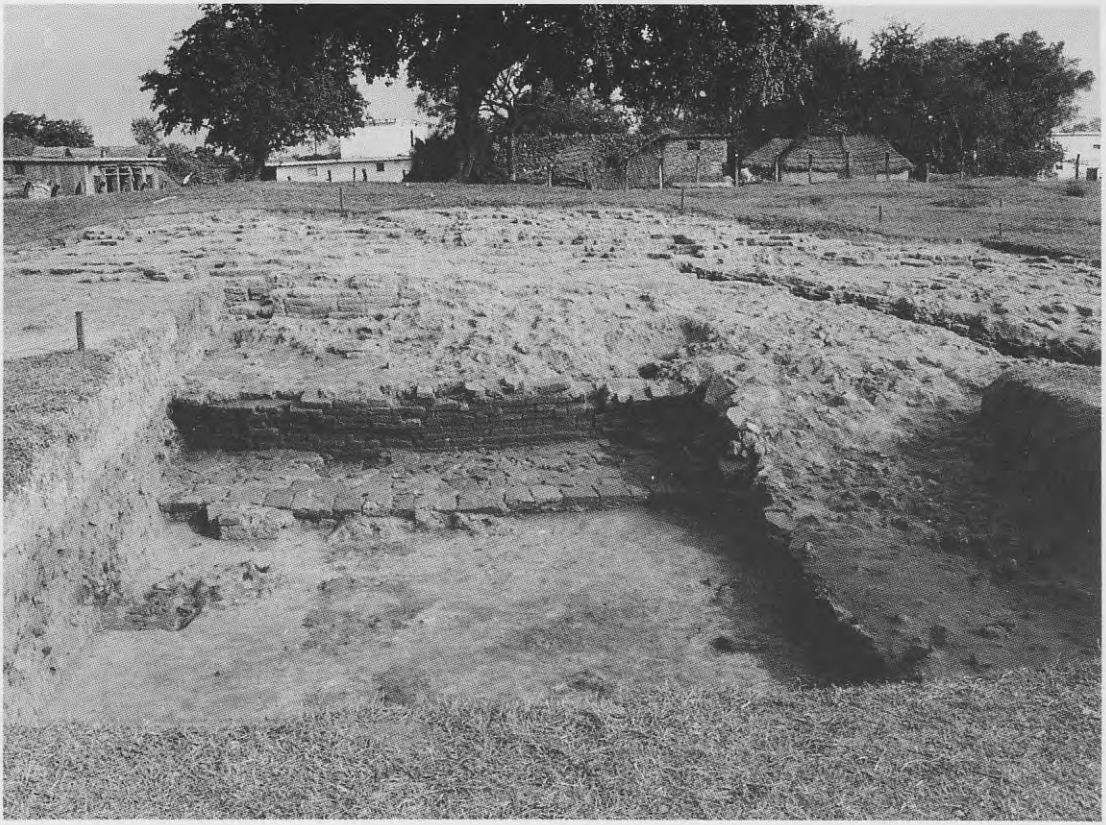


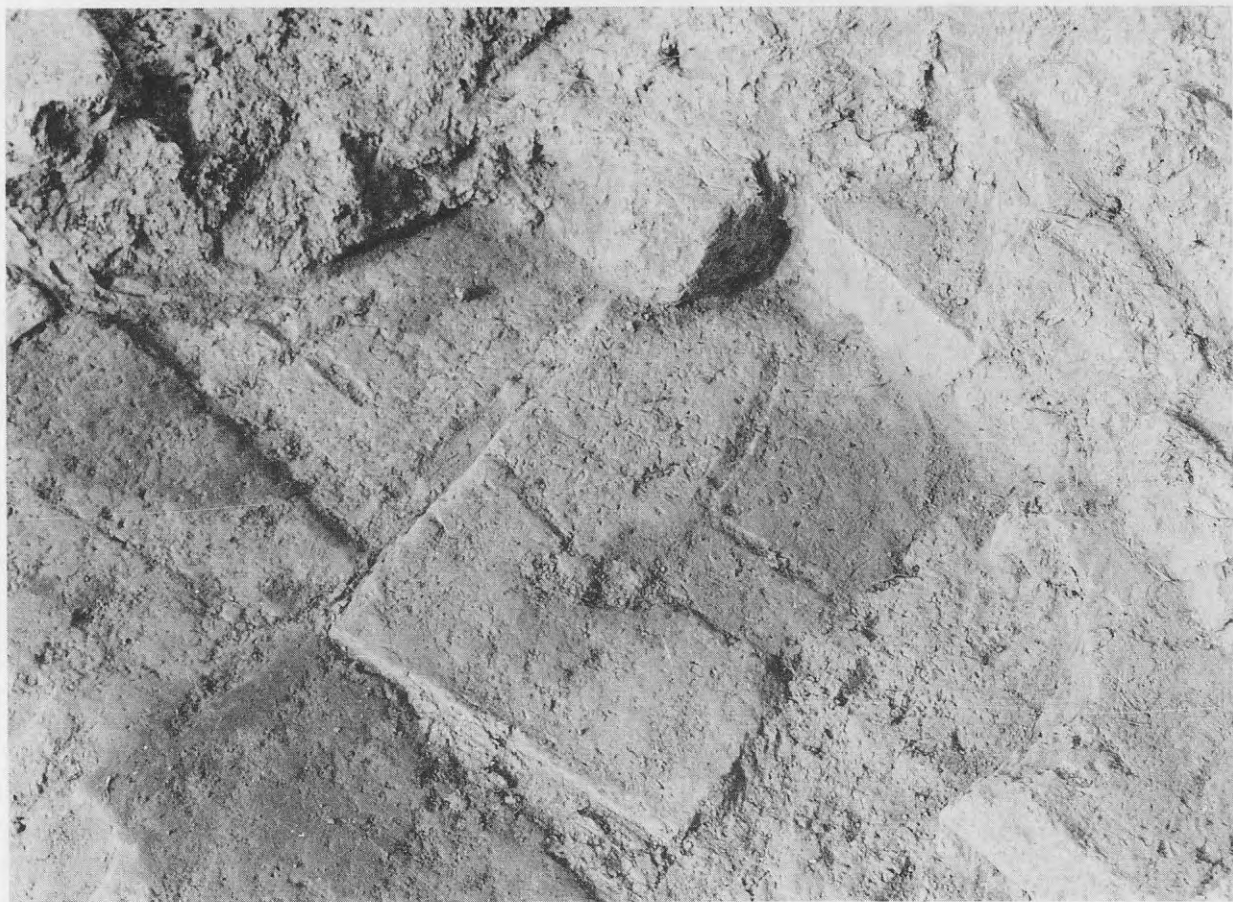
Fig. 9-10 - Gotihawa. Excavated Part of Stupa.



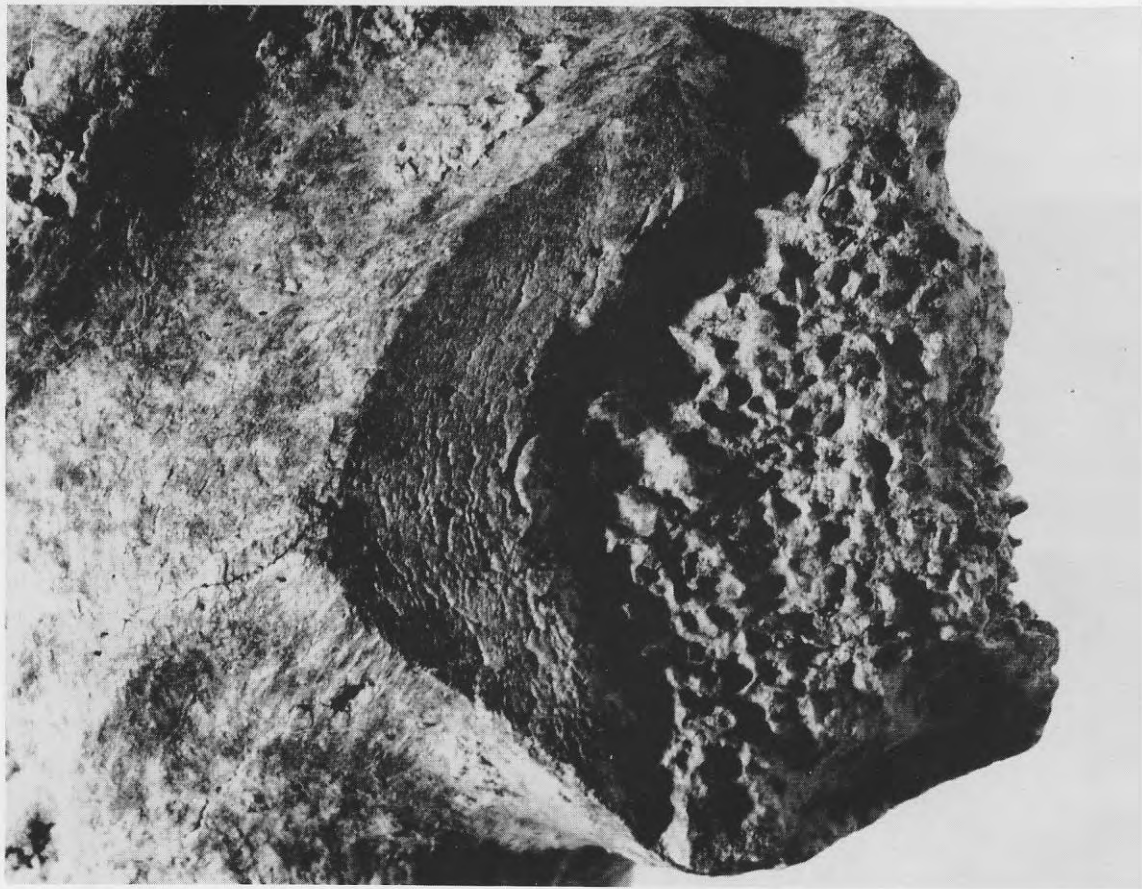
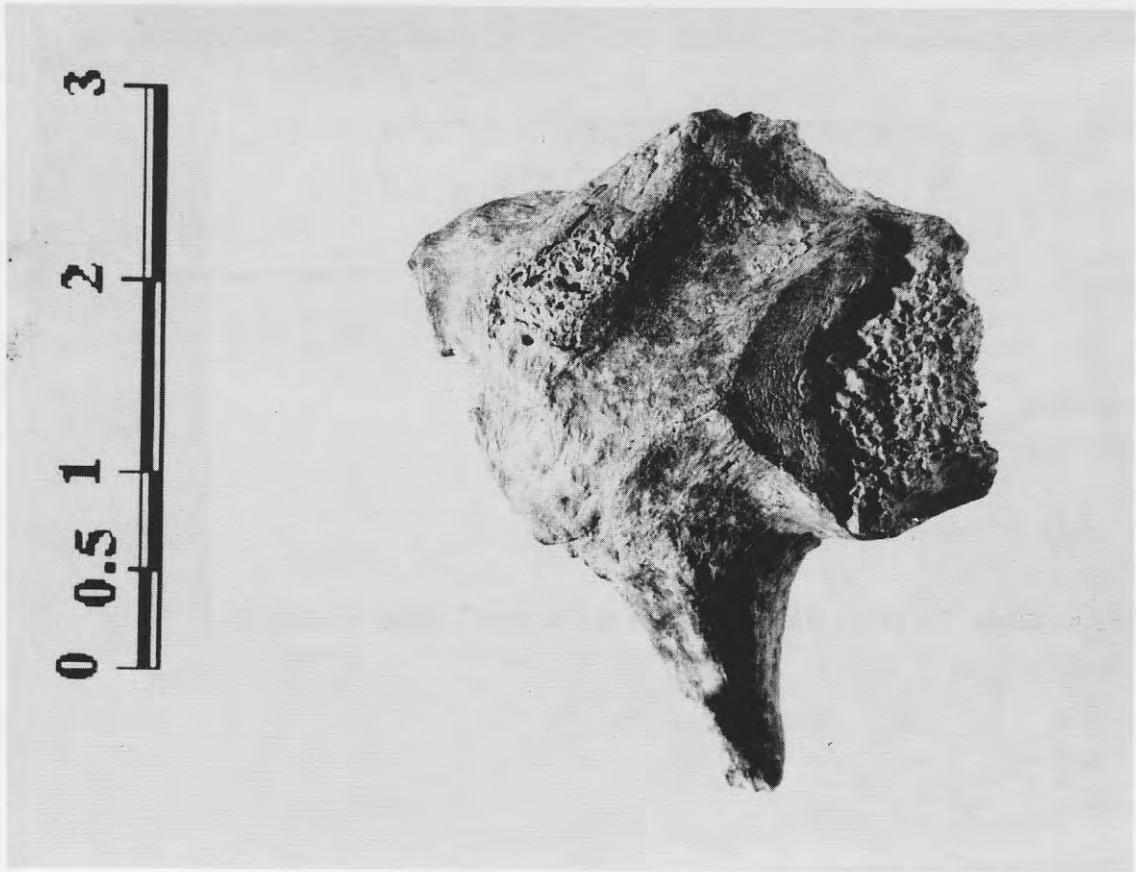
Fig. 11 - Gotihawa. Detail of Stupa.



Fig. 12 - Gotihawa. Wedge-shaped Bricks of Stupa, One with Incised Circle.



Figs. 13-14 - Gotihawa. Incised Bricks of Stupa (Early Period).



Figs. 15-16 - Gotihawa. Fragment of Pelvis of *Bos Indicus* Struck by Violent Blow. From Layer 34.



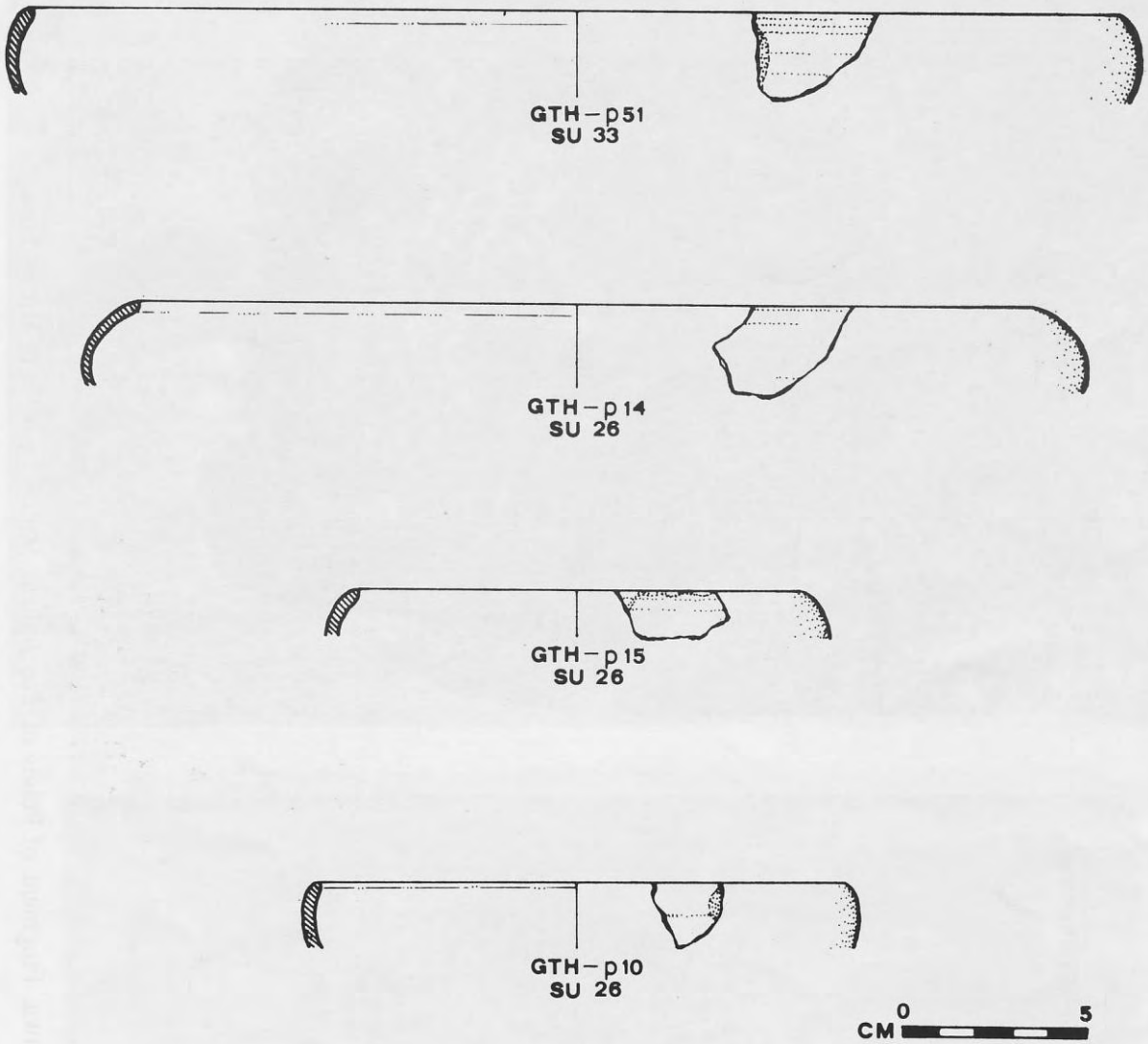
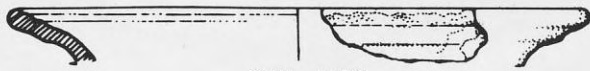


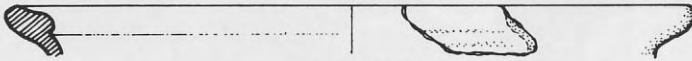
Fig. 17 - Gotihawa. *Northern Black Polished Ware* from Layers 26 and 33.



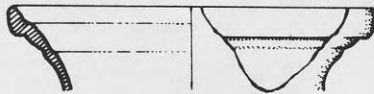
Fig. 18 - Gotihawa. Cord-impressed Ware. Bottom Right Fragment  
from Lower Part of Layer 28.



GTH - p 52  
SU 33



GTH - p 56  
SU 33



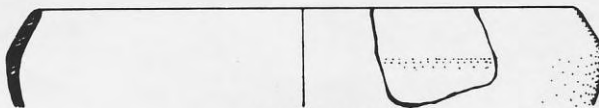
GTH - p 175  
SU 86



GTH - p 170  
SU 86



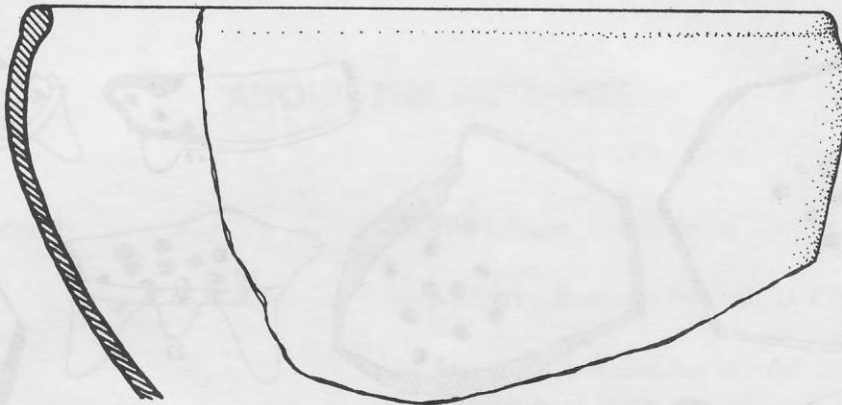
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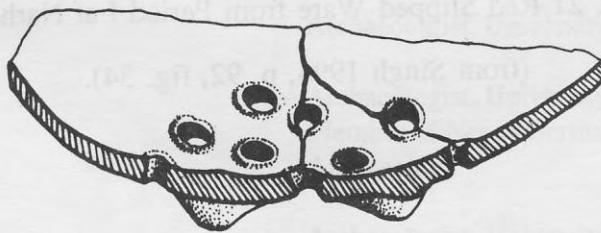
GTH - p 174  
SU 86

CM 0 5

Fig. 19 - Gotihawa. Red Ware of Period I from Layer 86.



GTH - p 182  
SU 86



GTH - p 191  
SU 86

CM 0 5

Fig. 20 - Gotihawa. Red Ware from Layer 86.

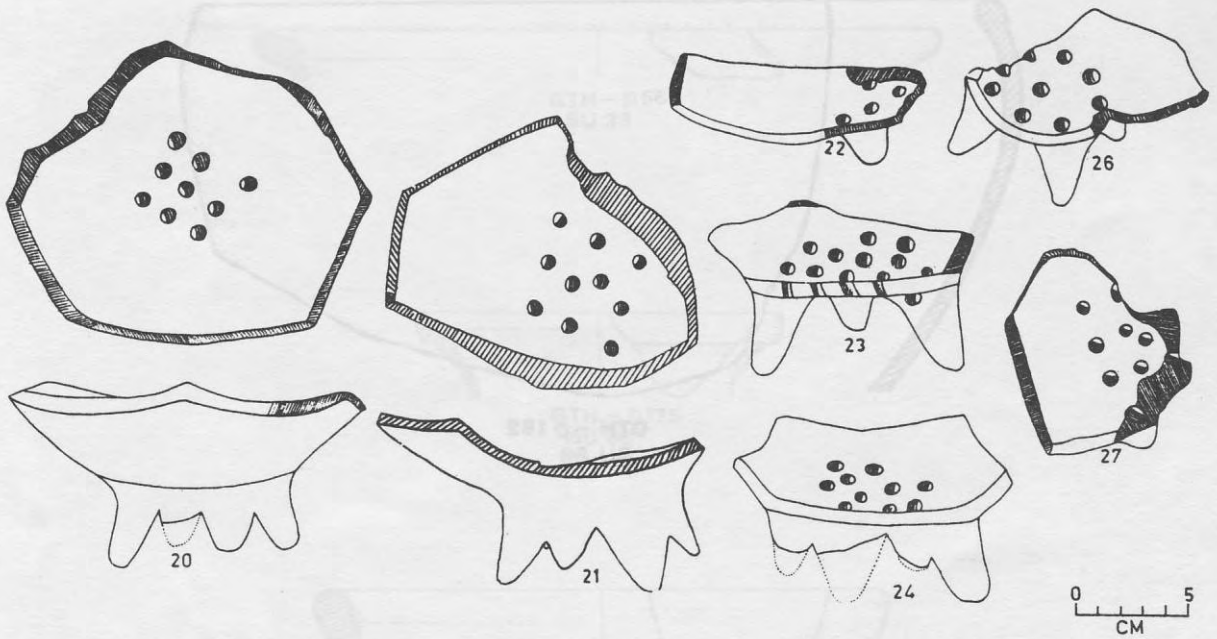


Fig. 21 Red Slipped Ware from Period I at Narhan  
 (from Singh 1994, p. 92, fig. 34).



Fig. 22 - Fragment of Vase of Red Ware from  
 Period I at Sravasti (from Sinha 1967  
 fig. 11, XLIX).