Seals and Inscriptions
Seals of the Early Harappan Period in Light of the Seals Discovered at Kunal

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BACKGROUND AND AIMS

Although there are many studies on Indus seals, little research has been conducted on the seals of the Early Harappan period. As the results of recent excavations have shown, though, it is gradually becoming clear that the seals which are of a different design to the typical Indus seals were used in the area which now constitutes Northwestern India and Pakistan in the Early Harappan period. To date, however, only the basic data of the excavated seals has been reported and the majority of reports only point out the differences between Early Harappan seals and Indus seals based on a comparative study of engraved motifs.

In this paper, the seals used in the area spanning Northwestern India and Pakistan – the ‘heartland’ of the Harappan Civilisation in the Early Harappan period (i.e. before the emergence of Indus seals) – and their significance will be appraised. A detailed study will be made of the seals in the Ghaggar Basin, and especially those from the site of Kunal in Fatehabad District, Haryana. The relationship between seals of the Early Harappan period and Indus seals will also be analysed.

SEALS AND SEALINGS IN THE EARLY HARAPPAN PERIOD

Before proceeding further, a description of the classification of seals in the Early Harappan period will be given in order to avoid complicated descriptions in the course of the discussion and analysis. There are two types of seal in this period, namely the stamp-type seal which has a boss on the reverse side (Figs. 1-2 to 7, 2-1 to 4) and the button-type seal which has one or more perforations on the surface instead of a boss (Fig. 1-1). In this study, the former type is called ‘stamp-type seal’ and the latter type is called the ‘button-type seal’. It is difficult to accurately pinpoint the function of button type seals, or even to determine whether they are truly seals or not, due to the shapes. The present study, though, assumes the normal convention that the button-type are seals, since there is no evidence for the contrary.

The seals are formed in various shapes, namely; square, round, indefinite, and animal-like. Oval-shaped seals come under the heading of ‘round shapes’. In the course of this study, individual objects will be referred to both by shape and type, such as ‘square stamp-type seal’, ‘indefinite-shaped stamp-type seal’, ‘animal-shaped stamp-type seal’, ‘square button-type seal’ and ‘round button-type seal’.

The majority of seals bear geometric motifs or groups of concentric circles. Although there are various geometrical motifs constituting straight lines, they are described here simply as belonging to the group of geometrical motifs because their subdivision is not important for this study. The raw material and manufacturing technique will also be explored.
Seals and a Sealing
Excavated from the Site of Kunal

The presence of cultural deposits of the Early Harappan period was confirmed during excavations at the small site of Kunal which spreads over ca. 1.2 hectares. Though Period I of the Early Harappan period at Kunal is subdivided into three sub periods, namely Periods IA, IB and IC, almost all aspects of Kunal after Period I are not clearly discernible because the upper part of the site has been destroyed by modern agricultural activities.

Period IA is characterised by Hakra pottery and large-sized pits which are assumed to be dwelling pits (c. 2 metres in diameter and c. 1 metre in depth). Although the use of such pits continued into Period II, some new aspects such as laying sun-dried bricks to construct the walls are confirmed in this period. The majority of pottery from this period is bichrome, painted with black and white pigments. A number of scholars have pointed out that this pottery shares a lot in common with the pottery excavated from Period I of Kalibangan which belongs to the later part of the Early Harappan period.

Period IC is further subdivided into IC(i) and IC(ii) phases; this period is understood as the transitional phase from the Early Harappan period to the Mature Harappan period. The dwelling architecture changes from large-sized pits to rectangular architecture constructed with sun-dried bricks. In addition, fired steatite seals and a substantial hoard of ornaments made of gold, silver, bronze or copper are reported from this period.

Eleven seals and one sealing were excavated from the IC(i) phase of Kunal (Figs. 1, 2 and Tab. 1). The raw materials of the seals comprise of steatite, jasper, shell and terracotta. The findings from Kunal will be discussed more comprehensively in the following part of this paper. The basic data about the size and weight etc., of the seals and a sealing are recorded in Tab. 1.

Of the fired steatite seals some are the square stamp-type and one is a round button-type seal. The former seals share common designs such as simple cylinder-shaped bosses on the reverse side. The majority of the engraved motifs are geometrical with straight lines or concentric circles (Fig. 1). The function of the latter ‘seal’ is not clear because it has motifs on both sides and no boss. However, as mentioned earlier, the present study follows the convention established by the excavator. The engraved motifs of this seal depict two deer or ibexes on one side and concentric circles on the other side (Fig. 1-1).

A seal made of jasper (Fig. 2-1) and another made of shell (Fig. 2-2) are of the square stamp-type with a triangular-shaped cross section. Both seals bear geometrical motifs comprised of straight lines.
A seal with a perforated boss (Fig. 2-3) and another with a non-perforated boss (Fig. 2-4), both made of terracotta have been found at the site. They can be classified as the stamp seal based on the shape. The motifs on these seals are not clear.

A terracotta sealing with an impression originating from a square stamp seal was also found (Fig. 2-5). It is engraved with a geometrical motif composed of straight lines.

**Seals and Sealing Excavated from other Sites**

The seals and sealings discovered from other sites excluding Kunal are analysed in detail in this section (Tab. 2). Each site will be discussed individually and the site distribution with the representations of the seals from each site will be shown below (Fig. 3). The following is a list of examples from various sites in the Ghaggar Basin. Detailed descriptions of the sites have not been given, since the focus of the study is on the seals themselves.

**Baror (Fig. 3-8)**

Six indefinite-shaped button-type seals made of fired steatite (Figs. 3-1 and 2) have been unearthed from Period II (the Early Harappan period of Baror). Only concentric circle motifs have been found on the seals from this site.

**Tarkhanewala Dera (Fig. 3-7)**

A broken piece of a round button-type seal made of fired steatite (Fig. 3-1), which has something in common with a round button-type seal discovered from Kunal (Fig. 1-1), has been excavated at this site. Although the detailed motif is unknown because of breakage, a deer or ibex and a motif based on concentric circles are engraved on either surface of the seal.

**Harappa (Fig. 3-6)**

Five square stump-seals made of fired steatite (Fig. 3-4) and one terracotta sealing have been discovered from Period II of Harappa – the transitional phase between the Early Harappan period and the Mature Harappan period. The seals have many similarities with the seals from Kunal in terms of shape, motif...
Table 1: Catalogue of basic data of the seals and a sealing discovered from the period IC(i) at Kunal.

<table>
<thead>
<tr>
<th>Figure no</th>
<th>Register no</th>
<th>Period</th>
<th>Motif(s)</th>
<th>Crosswise (mm)</th>
<th>Lengthwise (mm)</th>
<th>Thickness excluding boss (mm)</th>
<th>Thickness including boss (mm)</th>
<th>Weight (g)</th>
<th>Material</th>
<th>Remarks</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fig. 1-1</td>
<td>KNL-1,438</td>
<td>IC(0)</td>
<td>Two deers (or ibexes) / Group of concentric</td>
<td>maximum diameter = 28.5</td>
<td>3.9</td>
<td>-</td>
<td>4.31</td>
<td>Fired steatite</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fig. 1-2</td>
<td>KNL-1,118</td>
<td>IC(0)</td>
<td>Geometric motif</td>
<td>20.5</td>
<td>20.3</td>
<td>3.0</td>
<td>6.1</td>
<td>3.28</td>
<td>Fired steatite</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fig. 1-3</td>
<td>KNL-1,415</td>
<td>IC(0)</td>
<td>Group of concentric circles and cross</td>
<td>21.0</td>
<td>21.0</td>
<td>3.0</td>
<td>5.1</td>
<td>1.02</td>
<td>Crosswise and lengthwise are restored</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fig. 1-4</td>
<td>KNL-1,616</td>
<td>IC(0)</td>
<td>Geometric motif</td>
<td>16.0</td>
<td>16.0</td>
<td>2.4</td>
<td>4.9</td>
<td>1.30</td>
<td>Fired steatite</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fig. 1-5</td>
<td>KNL-1,29</td>
<td>IC(0)</td>
<td>Geometric motif</td>
<td>14.0</td>
<td>15.1</td>
<td>2.4</td>
<td>6.0</td>
<td>0.82</td>
<td>Fired steatite</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fig. 1-6</td>
<td>KNL-1,??</td>
<td>IC(0)</td>
<td>Geometric motif</td>
<td>13.0</td>
<td>13.9</td>
<td>2.3</td>
<td>5.0</td>
<td>0.93</td>
<td>Fired steatite</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fig. 1-7</td>
<td>KNL-1,??</td>
<td>IC(0)</td>
<td>Group of concentric circles and geometric motif</td>
<td>13.3</td>
<td>13.0</td>
<td>2.0</td>
<td>4.0</td>
<td>0.85</td>
<td>Fired steatite</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fig. 2-1</td>
<td>KNL-1,153</td>
<td>IC(0)</td>
<td>Geometric motif</td>
<td>14.5</td>
<td>14.8</td>
<td>-</td>
<td>9.1</td>
<td>2.42</td>
<td>Jasper</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fig. 2-2</td>
<td>KNL-1,??</td>
<td>IC(0)</td>
<td>Geometric motif</td>
<td>12.2</td>
<td>13.5</td>
<td>-</td>
<td>8.0</td>
<td>1.67</td>
<td>Shell</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fig. 2-3</td>
<td>KNL-1,35</td>
<td>IC(0)</td>
<td>Geometric motif</td>
<td>maximum diameter = 17.0</td>
<td>-</td>
<td>18.5</td>
<td>4.56</td>
<td>Terracotta</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fig. 2-4</td>
<td>KNL-1,??</td>
<td>IC(0)</td>
<td>Geometric motif</td>
<td>maximum diameter = 26.1</td>
<td>-</td>
<td>30.5</td>
<td>18.48</td>
<td>Terracotta</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fig. 2-5</td>
<td>KNL-1,372</td>
<td>IC(0)</td>
<td>Geometric motif (as an impression)</td>
<td>25.0</td>
<td>24.5</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Crosswise and lengthwise are restored from an impression</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
and raw material. One seal, though, has an elephant motif on the surface, while other examples bear geometrical motifs consisting of straight lines, concentric circles and a combination of these. The terracotta sealing has an impression which could have originated from a square stump seal, but the details of its motif are not discernible.

Rehman Dheri (Fig. 3-5)

A round button-type seal made of ivory has been discovered and belongs to Period IA (c. 3300-3000 BCE). Two scorpions, a frog and a T-shaped motif are engraved on one side, two deer or ibexes and a T-shaped motif are engraved on the other side. Continuing through Periods II and III, many seals, which are made of fired steatite or shell, are reported. Although there is a bird-shaped button-type seal, the majority of the seals are stamp-types, indefinite-shaped stamp-types and indefinite-shaped button-types, characterised by geometrical motifs constituting straight lines and concentric circles (Fig. 3-5 to 3-8).
Figure 3: Distribution pattern of the seals and the representative pottery types in the Early Harappan period (drawings of the seals are not to scale and the numbers correspond to the site).
Tarakai Qila (Fig. 3-3)

Four seals made of fired steatite are reported from this site belonging to the Early Harappan period. There is one square stamp-type seal (Fig. 3-9), two indefinite-shaped stamp-type seals (Fig. 3-10 and 12) and a round button-type seal (Fig. 3-11). Concerning the square stamp-type seal and the indefinite-shaped stamp-type seals, the motifs consist of a geometrical motif, which comprise straight lines and concentric circles. It can be presumed that the motifs of the round button-type seal represent two deer or ibexes. Although this round button-type seal is similar to the examples discovered from Kunal (Fig. 1-1) and Tarkhanewala Dera (Fig. 3-3), a seal from this site (Fig. 3-11) has the same motif on both faces, without a motif based on concentric circles seen on either side.

Lewan (Fig. 3-4)

One terracotta sealing is reported from this site which has a few impressions originating from a square stamp-type seal. It is presumed that the motif here is of the geometrical type consisting of straight lines.

Nausharo (Fig. 3-2)

An animal-shaped stamp-type seal made of bronze is reported from the period IB which belongs to the Early Harappan period of this site. It can be presumed that this seal was made in the shape of a humped bull (Fig. 03-13).

Mehrgharh (Fig. 3-1)

The first report of a round button-type seal goes back to the Period IV (c. 3300-3000 BCE) of this site. Continuing through Periods V to VII, some square, round and indefinite-shaped button-type seals (Fig. 3-14 to 20) are reported, but there is no stamp-type seal. As for the raw material of the Mehrgharh seals, the majority of them are terracotta, while there are some made of stone, shell and ivory. However, there is no example made of fired steatite, which is a raw material common at the other sites. In Period VII, the round stamp type seals (Fig. 3-21 to 23) are confirmed. The motifs of the seals consist of deer and geometric designs.

**DISCUSSION**

**Distribution Pattern**

The details of the seals in the Early Harappan period have been explored above. As is indicated by the observations, it is evident that seals similar to those found at Kunal had been used in this vast area before the invention of Indus seals (Fig. 3).
The seals of the Early Harappan period comprise the stamp-type and button-type, that have square, round, indefinite-shaped and animal-shaped surfaces. In terms of raw material, there are seals made of terracotta, jasper and shell, in addition to the more common fired steatite. Although there are some examples which are characterised by animal motifs such as elephant and deer or ibex, the majority of the motifs are geometrical, consisting of straight lines and concentric circles.

The distribution pattern of the seals in the Early Harappan period is shown in Fig. 3. All sites with seals or sealings have been mapped. Notably, no seals or sealings have been reported from the rest of the area covered by the map. For instance, no seals have been reported from the Sindh region.

Round button-type seals with two deer or ibex depicted on the surface have been reported from Tarakai Qila, Tarkhanewala Dera and Kunal. Two examples from Tarkhanewala Dera and Kunal are different from a Tarakai Qila seal, because they have a motif based on concentric circles on one side. It is very interesting to note that these seal types, which bear similar designs, were distributed across a vast area. This type of seal is always made of fired steatite.

Two animal-shaped stamp-type seals are reported from Nausharo and Rehman Dheri respectively. This type of seal is not common in the Early Harappan period.

The majority of square or indefinite-shaped stamp and button-type seals are distributed in the northern area which spans the Gomal, Punjab and Haryana regions, including the Ghaggar Basin (circled area by broad line in Fig. 3). These seals are mostly decorated with geometrical motifs consisting of straight lines and concentric circles. It is noteworthy that the motif based on a group of concentric circles is a very distinctive feature and characterises the seals from this period. The most common form of raw material is fired steatite.

Three sealings with an impression from a square stamp-type seal have been also discovered in the northern area (i.e. Lewan, Harappa and Kunal).

As is indicated by this analysis, it is most likely that the stamp and button-type seals, made of fired steatite and typified by similar motifs were present in the northern regions at the same time. Although understanding the meaning of different seal types is difficult, it is worth mentioning here that the seals characterised by common motifs have been used in specific areas during the Early Harappan period.

Vis-à-vis the relationship of the seals in the Early Harappan period and Indus seals, it should be noted that both the seals that were square in shape and those made of fired steatite with a boss on the reverse side, were distributed in the northern area. It can be presumed, therefore, that the manufacturing technique is also common, because the motifs of the seals are expressed by the same carving techniques. It can also be noted that these features give us important clues for considering the origin of Indus seals.

**SIZE OF THE SEALS IN THE EARLY HARAPPAN PERIOD**

The graph in Fig. 4 plots the measurements of seals belonging to the Early Harappan period (i.e. square stamp seal and round button seal in fired steatite). The measurements (lengthwise and crosswise or maximum diameter in round button seals) are simply taken by measuring drawings or photographs of each seal published in excavation reports. Measurements were recorded in millimetres.

Size categories for seals of the Early Harappan period are not as clear as those for the Indus seals. However, although data for this analysis is not sufficient, the Early Harappan seals were classified into two size categories based on a scatter plot of their measurements (Fig. 4); a large-size category (32.5 to 28.0 mm) and a small-size category (22.0 to 12.5 mm). All of the round button seals belong to the large-size category.
**HISTORICAL SIGNIFICANCE OF SEALS IN THE EARLY HARAPPAN PERIOD**

The historical meaning of seals in the Early Harappan period, on the basis of their relationship with the distribution pattern of representative pottery types will be explored in this section. The Indus seals were part of a functioning system that controlled the flow of merchants, goods, and information within urbanised centres along with the weights and measures system of the Harappan Civilisation.33 In other words, the existence of the seals (typified by common designs), and sealings with the impression(s) of the seal, can inform us about the flow of merchants, goods, and information in the distribution area of the seals or between the sites with seals. The same can be said for the role of Early Harappan seals.

In Period IC(i) at Kunal, a total of eleven seals and one sealing have been excavated along with a hoard consisting of 3,370 carnelian beads, 2,806 fired steatite beads, 5,690 lapis lazuli beads, 487 shell beads and 92 agate beads.34 Similar archaeological evidence which shows a relationship between the seals and the manufacturing or trading of beads is also reported from Rehman Dheri.35 As this evidence indicates, the usage of seals in the Early Harappan period is related to the flow of goods such as beads, which were of considerable importance in the Indus region.

Next, the meaning of the relationship between specific distribution patterns of the seals and the representative pottery types in the Early Harappan period will be explored. Quetta pottery (including Faiz Mohammad Ware), which is characterised by various animal, naturalistic and geometrical motifs, was distributed in Balochistan to the west of the Indus plain, especially in the Quetta region in central Balochistan. Kot Diji pottery, which is characterised by the black-coloured banded paintings on the short neck, was distributed in the Bannu, Punjab and Sindh regions. And Soti-Siswal pottery, which is characterised by different shapes and paintings in comparison with Kot Diji pottery, was distributed in the northern Rajasthan and Haryana regions. As Fig. 3 shows, although the pottery types are loosely related, they were basically distributed independently in each specific region. On the other hand, it is clear that the distribution of seals from the Early Harappan period operated over a wider area than regions united by a specific pottery type (area circled by a broad line in Fig. 3).

This study concludes that it is likely that, before the Indus seal was invented, in the northern area where seals typified by the same motifs were used, there was a functioning system that controlled the flow of merchants, goods, and information, a cultural exchange that operated over a wider area than regions united by a specific pottery type.

**CONCLUSION**

In summary, this paper examined the form and significance of seals belonging to the Early Harappan period. The focus was limited to the Ghaggar Basin, and especially to Kunal.

Through the analysis of this paper, it has become evident that the Early Harappan seals consist of stamp-type seals and button-type seals typified by common motifs such as geometric designs or concentric circles, and that among these, steatite seals are concentrated specifically in the northern area, namely the Gomal, Punjab, and Haryana regions including the Ghaggar Basin. Three sealings with the impression(s) of a square stamp-type seal are also reported from this area. Furthermore, in order to consider the significance of these seals, their distribution patterns are compared with that of specific pottery types.
As mentioned above, the present study concludes that, before the invention of the Indus seal, in the northern area (including the Ghaggar Basin), seals typified by similar motifs were used, probably within a functioning trade network which resulted in a cultural exchange that operated over a much wider area than regions united by a specific pottery type.

Although the data for this analysis is very limited, and there are some examples which should be carefully considered on account of their chronological position, the conclusions reached here do indicate the typology and significance of Early Harappan period seals.\(^\text{36}\)

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**NOTES**


2. Acharya.

3. Though the final report of the excavations at Kunal have not been published yet, a preliminary report by Acharya is already published. In the report, a C14 dating has assigned a date of 2577 BCE to the period IC, but there is no mention of whether the C14 date belongs to Phase IC(i) or IC(ii). However, from the style of the pottery excavated at Kunal, it is possible to place the IC(i) phase in the Early Harappan period or transitional phase from the Early
Harappan period to the Mature Harappan period. As far as the context of the fired steatite seals excavated from Kunal is concerned, there is only one description in the report that tells us the seals were excavated from the IC(i) phase.

4. Although this seal is reported as being made of shell (Acharya, p. 14), it is more likely that the raw material is jasper by the observations made in the course of the present study.

5. Acharya.

6. Sant et al., Pl. 20).


8. Parpola et al., p. 211, H-1533-1537.


10. One seal made of bone (Parpola et al., p. 207, H-1521) is reported from the period 1 (c. 3300-2800 BCE). But the seal is excluded from this study because of breakage, and lack of detailed information. Although a broken example (ibid., p. 211, H-1537) is also excavated from the period 3C, the excavators understand that this seal can actually be placed in the Period II based on the typology of its motif (Kenoyer and Meadow).

11. Parpola et al., p. 211, H-1533.


13. The accurate number of the seals cannot be counted based on the photographs in the excavation reports (Durrani, ’Excavation in the Gomal Valley: Rehman Dheri Report No. 2’), because the seals displayed in the reports comprise many broken pieces or individual pieces from the same seal, making it difficult to identify individual seals. Furthermore, concerning the raw material of the seals, it is also difficult to classify them based on the descriptions in the reports, because it is possible that the excavators confused the seals made of fired steatite with the seals made of shell etc.


15. Ibid., pp. 202-205, 207.


17. Ibid., p. 414, Trq2-4; I interpreted the examples (Fig. 3-9, 10 and 12; ibid., p. 414, Trq3, 4) as the stamp-type seal based on the photographs, because the seals have no perforations on the surface.

18. Ibid., p. 414, Trq1.


21. Ibid., 400, Lwn-1.

22. Ibid., p. 407, Ns-1.

23. Ibid., p. 402, Mr-5.

24. Ibid., pp. 402-405, Mr-8-15; An example (ibid., p. 402, Mr-6, 7) is not included in the analytical data of this study because this seal could not be classified as button-type seal from its shape. According to the motifs and shapes of the seals discovered from Mehrgarh, it can be said that they are similar to the seals discovered from Mundigak in Afghanistan (J. M. Casal, Fouilles De Mundigak (Paris: Librairie C. Klincksieck, 1961) and Shahr-i Sokhta in Iran (C. C. Lamberg-Karlovsky, and M. Tosi, ‘Shahr-i Sokta and Tepe Yahya: Tracks on the Earliest History of the Iranian Plateau’, East and West, 23 (1973), pp. 21-58) rather than the seals discovered from the sites in the Indus region. Furthermore, based on the manufacturing technique, there are some examples which have motifs created by the ‘drilling technique’, not by engraving (or carving). The drilling technique is basically recognised in the seals excavated from Mundigak and Shahr-i Sokhta. This technique has not been confirmed in the sites mentioned above (i.e. Fig. 3-3 to 9) so far. It is necessary to discuss this issue in future studies.

25. Shah and Parpola, p. 405, Mr-16, 17.


27. One indefinite-shaped button-type seal typified by a group of concentric circles is reported from the site of Sarai Khola (M. A. Halim, ’Excavation at Sarai Khola’, Pakistan Archaeology, 8 (1972), pp. 1-112) and two button-type seals
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(one is round-shaped and the other is indefinite-shaped) typified by geometrical motifs are reported from Damb Sadaat (W. A. Fairservis Jr., ‘Excavation in the Quetta Valley, West Pakistan’, *Anthropological Papers of American Museum of Natural History*, 45.2 (1956), pp. 162-402). These seals should also be taken into consideration, but unfortunately, precise data is not yet sufficiently available. And some similar evidences should also be taken into future studies.  

28. This metal compartment seal type belongs to a completely different tradition of Central Asia and Sistan. It is necessary to discuss this issue in future studies.  

29. The site of Mehrgarh is not included in the northern area in this study, because the Mehrgarh seals have some different features, such as the aspects mentioned in note 6 and in the selection of raw material (i.e. terracotta, not fired steatite), in comparison with the seals from the northern area.  

30. Uesugi.  


32. Ibid.  


34. Acharya; In the course of this study, it was possible to check that all the beads were from a hoard now at the Department of Archaeology and Museums, Haryana. As is indicated by the report (Acharya), the beads had been stored in a ceramic pot or jar.  


36. Some views and subjects for further analysis are outlined and described here. The stamp-type and button-type seals as typified by common motifs such as geometric designs or concentric circles continued into the Mature Harappan period, too (Joshi and Parpola; Parpola, Pande and Koskikallio; Shah and Parpola etc.). At the site of Baror, six indefinite-shaped button-type seals made of fired steatite (Fig. 3-1 and 2; Sant et al., Pl. 20) are discovered from Period II which belongs to the Early Harappan period and some square/indefinite-shaped stamp type seals typified by common motifs such as geometric designs or concentric circles, are reported along with the Harappan seals in the Period III, which belong to the Mature Harappan period (Sant et al., Pl. 21,22). On the other hand, the majority of the seals reported from Period II of Harappa and Period IC(i) of Kunal (that belong to the transition period from the Early Harappan period to the Mature Harappan period, c. 2700-2600 BCE), comprise of the square stamp-type seal having a boss on the reverse side. Furthermore, it is interesting that the raw material of the seals essentially consist of fired steatite because of the emergence of the square stamp-type seals having a boss on the reverse side, made of fired steatite, yielding some important clues for discussing the origin of Indus seals. A further investigation of typological or chronological changes of seals in the period from the Early Harappan period to the Mature Harappan period must be carried out after the accumulation of reliable data with proper context. When discussing the origins of the Indus seal, a comparison of the manufacturing techniques of the square stamp-type seals of the Early Harappan period with that of Indus seals may yield important clues for the analysis. This issue will be explored thoroughly using SEM (Scanning Electron Microscope) and 3D analyses and will be discussed in another of my papers.  

37. Konasukawa.