RESEARCH PAPER

The Archaeology of Childhood: Revisiting Mohenjodaro Terracotta

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Introduction
For long, archaeologists have interpreted excavated data from an adult male perspective. The literature locating this and the concomitant rise of gendered archaeology thrives (Conkey and Spector 1984, Conkey and Gero 1991, Conkey 2005). However, in addition to androcentric biases in archaeology, there is also a tendency to overlook the evidence related with children who are omnipresent in all cultures. As this is true in the Indian context also, in this paper we shall suggest that terracotta objects provide an invaluable category of archaeological material for considering the archaeology of childhood (Pratap, 2010). However, in dealing with this complex problem it would be useful to remember (Latour, 1991: 12) that "Nietzsche said that the big problems are like cold baths: you have to get out as fast as you got in."

A central concern of Indian archaeologists studying terracotta is to be able to offer reliable hypotheses regarding their function. Were they meant for worship, funerary practice, play or decoration? Large numbers of terracotta finds, particularly from river valley sites, certainly raises the question of their purpose in the social life of people.

Ever since the very first excavations of Mohenjodaro in the 1920s, the question regarding the function or purpose with which terracotta was made has dogged archaeologists. This paper proposes to discuss Harappan terracotta from the site of Mohenjodaro with the explicit purpose of establishing that they were primarily meant for use by children and were therefore toys. To demonstrate the validity of such a hypothesis, we shall be extensively referring to the excavation reports of Harappa by M.S. Vats, between 1920–21 and 1933–34, and Mohenjodaro by Marshall, between 1922 and 1927, and E.J.H. Mackay between 1927 and 1931. We shall also cite extensively from their observations about this class of material and their supposed function considering side by side, some recent didactic work by archaeologists, pertaining to archaeology of childhood and consider its feasibility in the Indian context.

The idea of the archaeology of childhood has already previously been advanced by those such as Derevenski (1994, 2000), Hirschfeld (2002), Kamp (2001), and Schwartzman (2006). Lillehammer (1989, 2000) has also suggested the lack of consideration that children have received in archaeological interpretations despite ample evidence of children in the material record of the past. More recently, in a comprehensive review of this subject Baxter (2005, and 2008, 159) has suggested the need for developing theoretical and methodological developments which draw attention to new ways of looking at the archaeological record for identifying cultural construction of childhood (Arden 2006, Arden and Hudson, 2006, Lillehammer 2010). Baxter has also underlined the ways and means of grasping the lived experiences of children in the past, using burials, iconography, artefacts, and space, as categories of evidence which may be considered for the archaeology of childhood.

However, before we embark on examining Harappan terracotta from such a perspective, it is important to note briefly from Baxter (2005, 161) that “it is the specific cultural constructions of childhood in contemporary western cultures that have been identified as being particularly detrimental to the archaeology of childhood” because “childhood is a (sic) natural and universal experience.” This may be seen as sufficient defense for the quest for archaeology of childhood, in the Indian context. This is for the simple reason that in Indian Archaeology, for a long, we have reconstructed only the amorphous society or culture, without fine-tuning our analysis to locate the agency of such systems, as gender (Atre, 1987, Bhardwaj, 2004, Ray, 2004) or subaltern (Pratap, 2010) or in this case children.

Even if the world over such efforts at narrowing-down the agency of the human cultural system are afoot (Hodder, 1999) the current theoretical archaeology literature in India shows that we are still blissfully unaware of such developments in regard to identifying material for locating children in the archaeological record (Chakrabarti, 1995, Paddayya 1990). However, as we shall demonstrate in the Harappan context, whether or not the necessary theory for identifying or interpreting childhood is at hand, the data pertaining to such a theory may certainly be – as ceramics, burials, iconography or terracotta objects.

The Background
Terracotta no doubt have long held sway over Indian archaeology, as such material is ubiquitous in excavations as far east as Chirand in the Ganga Valley and as south as Piklihal in Karnataka (Verma, 2007, Allchin, F.R. 1960, Piklihal Excavations). In India, terracotta studies have focused on its execution, workmanship, aesthetics, chronological,
and economic criteria governing terracotta production. F.R. Allchin was one among a few archaeologists who took a view that the Pithlhal terracotta could have been toys or children’s playthings (Allchin, 1960).

There is another direction to terracotta studies basing themselves on ethnoarchaeology (Jayaswal and Krishna, 1984, Sengupta, 2007). In trying to develop ethnographic parallels for interpreting past social behaviour connected with terracotta, from analogous modern ones, workers have focused on the uses of terracotta in the present. However, even in this line of study the focus, presumably from an art historical direction, has been on seeing terracotta basically as means of venerating gods and goddesses. Similarly, Sengupta (2007), considers the narrative properties of complex terracotta from Bengal, but fails to suggest for whom exactly such narratives were intended.

Ethnoarchaeologists like Jayaswal and Krishna (1984) have made micro, on-ground studies of contemporary potters of West Uttar Pradesh and Eastern Bihar, their techniques, and the forms they produce, for developing ethnographic parallels to study the terracotta from archaeological contexts. However, their approach is coloured, as they contend that the primary purpose of terracotta is a ritual purpose (such as at Deepawali, Chath and for propagation of various folk gods and goddesses). Ethnoarchaeologists of the Bengal school like Sengupta (2007) limit themselves to a particularly adult-centric interpretation, as his attempt is purely descriptive. By attaching value to religion and narrative or folklore value to terracotta, both these approaches then seem to overlook how the past may have been very different from the present (Lowenthal, 1999). Thus, it is that archaeologists currently studying pre and protohistoric terracotta (Neolithic, Chalcolithic and Harappan) are faced with the problem of assigning significance to these objects.

**Hypotheses regarding function of Terracotta**

Hirschfeld (2002) has argued that since anthropology has been based on the premise that culture is learned and not genetically inherited, this makes studies of children and childhood among the most natural areas of interest for all archaeologists (Baxter, 2008). We may posit further that the terracotta of a particular area, if indeed they are children’s playthings, should give us a view of constructions of childhood of that area. We encounter interpretative hiatuses with regard to Mohenjodaro terracotta because we have not pondered their function in the light of the social significance of these objects, but have projected on to them only preconceived notions suggesting their functional value primarily as votive objects. Terracotta as a social good, object that people in the past interacted heavily with, and perhaps even traded and exchanged, is not mere function, but also value. For even if they are votive objects or children’s playthings, or a bit of both, they are significant in such a regard. Baxter (2005) propositions in this regard ought to be juxtaposed with Indian interpretations of terracotta (uniformly read as ritual objects for adult use for such important things as religion). In our Indian interpretations it is implicit that children had no role at all either in the manufacture techniques (clay modelling, selection of forms, firing etc. associated with terracotta) or its eventual end-use. For example Jayaswal and Krishna (1984) as Sengupta (2007) in their all encompassing and excellent ethnographic surveys of terracotta manufacture/use, selection of forms, distribution etc. have completely missed out on the role of children in this process both as producers or end users.

It is commonly known to most Eastern Indians that in the contemporary context Gharondas (small clay-models of houses) and other terracotta produced for festivals such as Diwali (festival of lights) along with some animal forms – tigers, horses, elephants and birds – are all meant for the use of children. In Eastern India (particularly western U.P. and Bihar) there remains a contemporary tradition of Cheeni Ki Mithai (sweets made of pure sugar) usually made at Deepawali (or Diwali), in which human and animal forms made of pure sugar (closely resembling terracotta artefacts) are mass produced for the consumption of rural and urban children. Large elephants carrying Diyas (small earthenware lamps) on their backs and Gharondas of clay are also produced in great quantities for play. Similarly, at Jhulan (jannashtami), a clay Sri Krishna and his Gopis are produced that are seated in clay-swing and children performpuraswiththem. We shall not here mention the many other forms of terracotta – gods and goddesses, lamps, flower-vases, Bankura Horses, Kuthia Chukus (clay models of cups and pots) which are mass-produced for celebrations.

Surely, these are processes of socializing children and one further example from ethnography may be taken.

During fieldwork amongst the Juanga shifting cultivators of Keonjhar Hills, Orissa, I have observed and documented (Mohanty, 1985) a teenage Juanga girl clay modelling a Juanga dwelling complete with house-walls, an entrance, a clay hearth, and a platform for pots. In may be said, on the strength of this ethnographic observation, that in rural India children and women interact heavily with clay, mud, earth, cow-dung, wood, fibre, plant, seeds, animals, and poultry birds, in a variety of ways. To propose a close relationship between terracotta and children, may therefore not be too far-fetched, and in our view, this is where the social significance of most of Harappan terracotta may also lie. Thus the hypothesis that Harappan terracotta are largely related with children and their activities may be addressed to the corpus of Harappan terracotta, based on M.S. Vats, John Marshall and E. J. H. Mackay’s excavations of Mohenjodaro and the terracotta recovered from there.

The author has used the term social significance of the terracotta purposely. So far archaeologists in India and abroad, under the influence of the new archaeology, have concerned themselves with interpreting archaeological artifacts only for their economic and therefore functional significance. Prehistoric Social systems were seen primarily as subsistence systems and therefore all artifacts had primarily a subsistence use or functional value. However under the impact of the post-processual archaeology of the 1980s, and later (see, Hodder 1999), the emphasis in archaeological analysis has since also shifted to the symbolic and social value of artifacts. (Appadurai, A. 1986, Miller, D. 1985).
Revisiting M.S. Vats, John Marshall and E.J.H. Mackay’s Theories

The sites of Mohenjodaro and Harappa were excavated from the 1920s to the 1940s, in which a large number of Indus terracotta objects were unearthed and recorded systematically. More importantly each of these excavators have left us their detailed views about these terracotta. In each of their reports terracotta find a significant place. They have been photographed and reproduced as plates and each terracotta is defined and described in great detail almost to a fault. On the interpretive side it is worth noting that M.S. Vats and John Marshall have seen them less as toys, and this they have, since Vats felt that they definitely had a divine purpose as votive or ex-voto offerings, it is actually Mackay (who writes the last and final of the reports on Mohenjo-Daro, in the 1940s) who invested the greatest amount of labour, in recording the features and contexts of each terracotta find in some detail. Mackay commented most comprehensively on the nature, role, and function of terracotta in Harappan society. It may be said that minor variations in their opinion apart, all three excavators were of the view that these terracotta were, after-all, children’s playthings. The Tables 1–3 given below culled from the terracotta and their traits suggest that to be the case. Equally, the subject and the visual appeal (Figures 1–3), suggested in the samples, described by the three excavators, suggests the toy-like character of these objects.

Some of the qualitative statements that Vats, Marshall, and Mackay made particularly regarding the human figurines from Mohenjodaro make interesting reading. Mackay (1938, 258) notes the following in a section entitled "Mutilation":

"The fact that so many of these images are in a very mutilated condition seems to call for explanation. They are found both in streets and in dwelling-houses; and they do not appear to have been votive offerings, except perhaps those of a coarser make, for if so, we should expect to find quantities together, thrown out of shrines to make room for others. . . Nor do I think they were made for special occasions, as are certain images at the present day, for the reason that the latter serve whole groups of people and are, in consequence, few in number. . . I would instance the clay figures of Mariyamma that are made in times of pestilence and are thrown away outside the houses when finished with."

Thus, we may deduce that Mackay rejected completely the notion of the religious use of these objects. However, the partly broken or coarsely made, or unfinished figures (missing arms, legs and other body parts, never did seem to suggest to Mackay that these could have been prepared by child apprentices (see Crown below). Thus grappling further with the damaged state of these figurines, Mackay observed (1938, 259): "My impression is that the better made female figurines and perhaps some of the male figures too were broken by accident, when they were thrown away."

In Mackay’s (1938, 259) analysis of the Harappan terracotta, the ‘child hypothesis’ finds iteration again, when in speaking of the colouring of these artefacts, both human and animal ones, he suggests: "it is true that many model animals also . . . were coloured red, even those which are so badly made that it is unlikely that they were regarded as cult objects, and which are more probably merely toys made by children."

Harappan period human figurines, particularly the ones with pannier-shaped headaddresses have attracted many interpretations from the 1920s until now. A number of archaeologists regard strange head-dresses and ‘peculiar faces’ ipso facto as representing the presence of foreigners! Vats, Marshall and Mackay too have their imaginary ‘foreigners’ in the Indus Valley, prompted by peculiar faces and strange head-dresses depicted in the terracotta! Mackay hypothesizes (1938, 260):

“. . . in some of them, black, soot-like stains still remain and in the exceptionally well-preserved figure a re-examination of previously found specimens has revealed similar stains in the pannier of the headdress. I am now inclined to think that these stains were produced by these pannier-like receptacles being sometimes used as tiny-lamps, especially, as there are traces of black on the edges off the headdress, as if they had been smoked by a flame. Lamps are of course commonly burnt before images in India and elsewhere, but I do not know of such a practice as using part of the image itself as a lamp . . .”

However, it is appropriate to also note what the two other excavators of Mohenjodaro and Harappa have observed about the function of terracotta. In chronological order of the excavations we take M. S. Vats first (1940, 293) who excavated Harappa in 1920–21 and 1933–34. Vats, in a very brief chapter about the human and animal figurines from Harappa observes the following:

“The human figurines may be divided into three classes: a) those that are funerary in character; b) ex-voto offerings, almost exclusively of the great Mother Goddess, and, c) toys for children, though it must be admitted that no hard and fast line can be drawn between the three classes. Many of the post-cremation urns of which I have examined more than two hundred and thirty at Harappa, and of which a large number has been found at Moheno-jo-Daro also, contained both human and animal figurines, and in such cases the funerary nature of the figurines is hardly open to doubt. All the pottery figures are well burnt and are usually of a dull-red or flesh colour. The technique regarding their eyes, nose, mouth and ears, which are identical at Harappa and Moheno-jo-Daro, have already been fully examined by Dr. Mackay and does not call for further discussion.”

Sir John Marshall (1931, 39) who excavated Mohenjodaro between the years 1922 and 1927, observes the following about the terracotta in a section entitled Toys and Games:
Table 1: Types of animal terracotta (from, lower level SD and DK Area) and their frequencies at Mohenjodaro.
Source: Based on E. J. H. Mackay. 1931. Excavations at Mohenjodaro.

<table>
<thead>
<tr>
<th>Artefact</th>
<th>Raw Material</th>
<th>Subject of Figure</th>
<th>Type and subtype</th>
<th>Frequency</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>terracotta</td>
<td>animal</td>
<td>Uncertain species</td>
<td>11</td>
<td>toy</td>
</tr>
<tr>
<td>2.</td>
<td>terracotta</td>
<td>animal</td>
<td>Monkey</td>
<td>11</td>
<td>toy</td>
</tr>
<tr>
<td>3.</td>
<td>terracotta</td>
<td>animal</td>
<td>Goat (and Kid)</td>
<td>3 + 1</td>
<td>toy</td>
</tr>
<tr>
<td>4.</td>
<td>terracotta</td>
<td>animal</td>
<td>Ram</td>
<td>1</td>
<td>toy</td>
</tr>
<tr>
<td>5.</td>
<td>terracotta</td>
<td>animal</td>
<td>Buffalo</td>
<td>6</td>
<td>toy</td>
</tr>
<tr>
<td>6.</td>
<td>terracotta</td>
<td>animal</td>
<td>Turtle</td>
<td>4</td>
<td>toy</td>
</tr>
<tr>
<td>7.</td>
<td>terracotta</td>
<td>animal</td>
<td>Antelope (Indian Gazelle, Blackbuck)</td>
<td>3</td>
<td>toy</td>
</tr>
<tr>
<td>8.</td>
<td>terracotta</td>
<td>animal</td>
<td>Bull</td>
<td>1</td>
<td>toy</td>
</tr>
<tr>
<td>9.</td>
<td>terracotta</td>
<td>animal</td>
<td>Humped Bull</td>
<td>1</td>
<td>toy</td>
</tr>
<tr>
<td>10.</td>
<td>terracotta</td>
<td>animal</td>
<td>Dog</td>
<td>7</td>
<td>toy</td>
</tr>
<tr>
<td>11.</td>
<td>terracotta</td>
<td>animal</td>
<td>Elephant</td>
<td>1</td>
<td>toy</td>
</tr>
<tr>
<td>12.</td>
<td>terracotta</td>
<td>animal</td>
<td>Rhinoceros</td>
<td>6</td>
<td>toy</td>
</tr>
<tr>
<td>13.</td>
<td>terracotta</td>
<td>animal</td>
<td>Wild Boar</td>
<td>1</td>
<td>toy</td>
</tr>
<tr>
<td>14.</td>
<td>terracotta</td>
<td>animal</td>
<td>Sheep</td>
<td>7</td>
<td>toy</td>
</tr>
<tr>
<td>15.</td>
<td>terracotta</td>
<td>animal</td>
<td>Pig</td>
<td>1</td>
<td>toy</td>
</tr>
<tr>
<td>16.</td>
<td>terracotta</td>
<td>animal</td>
<td>Horse</td>
<td>2</td>
<td>toy</td>
</tr>
<tr>
<td>17.</td>
<td>terracotta</td>
<td>animal</td>
<td>Ordinary Oxen</td>
<td>11</td>
<td>toy</td>
</tr>
<tr>
<td>18.</td>
<td>terracotta</td>
<td>animal</td>
<td>Humped Oxen</td>
<td>7</td>
<td>toy</td>
</tr>
<tr>
<td>19.</td>
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<td>Deer</td>
<td>1</td>
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</tr>
<tr>
<td>20.</td>
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<td>Ibex</td>
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</tr>
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<td>Hare</td>
<td>5</td>
<td>toy</td>
</tr>
<tr>
<td>22.</td>
<td>terracotta</td>
<td>animal</td>
<td>Dove</td>
<td>6</td>
<td>toy</td>
</tr>
<tr>
<td>23.</td>
<td>terracotta</td>
<td>animal</td>
<td>Domestic Fowl</td>
<td>1</td>
<td>toy</td>
</tr>
<tr>
<td>24.</td>
<td>terracotta</td>
<td>animal</td>
<td>Peacock</td>
<td>2</td>
<td>toy</td>
</tr>
<tr>
<td>25.</td>
<td>terracotta</td>
<td>animal</td>
<td>Bunting</td>
<td>1</td>
<td>toy</td>
</tr>
<tr>
<td>26.</td>
<td>terracotta</td>
<td>animal</td>
<td>Duck</td>
<td>1</td>
<td>toy</td>
</tr>
<tr>
<td>27.</td>
<td>terracotta</td>
<td>animal</td>
<td>Goose</td>
<td>3 (Total number of animal figures 106)</td>
<td>toy</td>
</tr>
</tbody>
</table>

"For toys the children had rattles, whistles and clay models of men and women, animals, birds, carts, and household articles. . . some of the animals had movable heads. . . birds might be mounted on wheels and oxen might be yoked to toy-carts."

Further (Marshall 1931, 43):

"Animal figurines in the round are for the most part children's playthings, with no more claims to be regarded as works of art than such playthings usually have."

Confirming the Child Hypothesis

It would be relevant to note here that Crown (2001) has carried out psychological studies to identify children in pre-modern, pre-industrial societies as producers of material culture. She has carried out studies of cognitive development of children in such societies to identify children as apprentice crafts-persons in prehistory and has tested this assumption by studying painted designs on ceramics from a variety of cultural traditions in the American southwest including Hohokam, Mimbres, and Salado cultures. She notes that the ability to conceive, plan and execute painted designs on ceramics is an indicator of levels of psychological development (Crown 1999), and that certain types of errors can be directly related to stages of cognitive development rather than to lack of experience or expertise. One of these 'errors', reflected perhaps as broken or incomplete body-parts in the Harappan terracotta assemblages also, usually relates with symmetry in artefact execution which suggested that two age groups of children, those between the ages of 9 and 12, and another between the ages of 4 and 6, were responsible
Medium | Workmanship | Type of depictions
--- | --- | ---
Clay | Carefully made | Terracotta figurines
Clay | Handmade and sun-dried | Terracotta figurines
Clay | Kiln-Fired | Terracotta
Clay | Roughly modelled | Animal amulets
Clay | Hollow models | Animals on stand
Clay | Only head | Hollow mask of Bull
Clay | hollow masks | --
Copper and bronze | casting | Antelope, Bull, Dog
Stone | chipping | Ram, Bull
Shell | grinding | Bull
Faience or vitreous paste | modelling | --

Table 2: Types of media used for animal figurines at Mohenjodaro. Source: Based on Mackay, 1931. Excavations at Mohenjo Daro.

Table 3: Types of Human Figurines at Mohenjodaro. Source E. J. H. Mackay, 1931. Excavations at Mohenjo Daro.

for creating some of the painted designs on ceramics (cited in Baxter 2008). Similarly, measurements of children’s abilities as craft producers has been carried out by Bagwell (2002) vis-à-vis ceramic vessels, (Kamp 2001b) vis-à-vis fingerprint measurements left in clay figurines and miniature vessels; and by Findlay (1997) vis-à-vis lithics. Greenfield (2000) has also explored how children learn to weave textiles in the Maya community in Zincatan in Highland Chiapas. The sum of all these studies as Baxter (2008) has suggested, is that those children learn to be craft producers as part of a community, and because of the socialization thereby received. Can we eke out some of these psychosocial and manufacture related parameters out of Mohenjodaro terracotta.

M.S. Vats, John Marshall, and E.J.H. Mackay’s observations on workmanship of Harappan terracotta

Speaking of the workmanship of the Harappan terracotta (both human and animal) Mackay (1938, 263) observes: “the eyes of the figurines are represented by little flat pellets of clay which are generally slightly oval in shape, but sometimes, very elongated like an almond. . . Even in the better made figurines of Mohenjo-jo-daro the pupil of the eye is rarely incised.”

For those familiar with terracotta and observing its workmanship (symmetry, aesthetics resolution, and theme) the difference between products of a child crafts-person’s efforts and those of an adult should be obvious – those manufactured by adults should bear finer artisan-ship and detail. In contrast, the elementary character of the workmanship of Harappan terracotta is most notice-able. This, in our view, may be ascribed to children, even if these were made with assistance. We may then well ask the question: with what purpose? Further, this was done in order to induct them into the intricacies of clay model-ling and shaping in order to prepare them for the very complex task of producing ceramics.

Harappan ceramics are among the most wonderful and finely crafted examples of ceramics anywhere in the world. They are small and large sized, painted and unpainted, handmade and wheel-thrown, slipped and unslipped, and,
finally, covered with intricate designs, pitting, striations and all types of stylistics that could not be learnt without proper apprenticeship – one dare say, childhood onward! Mackay has already noted, that the terracotta from Mohenjodaro was not made for votive or religious purposes. In such a circumstance, our view that their nature, numbers, variety and workmanship suggest that they were largely produced for children for their play and learning purposes.
Conclusion
A few concluding comments and observations to close our examination of the Mohenjodaro terracotta in the light of contemporary theory. Such theory as attends the interpretation of artefacts like terracotta which has been suggested as moving in a social sphere, with a ‘life’ of their own seem invariably connected with children. In this respect, such classes of artefacts inform us about the process of socialization accorded to children at Mohenjodaro and Harappa through the medium of terracotta. These functioned as playthings and an inadvertent medium through which apprenticeship to work with clay and pottery could thus be given for when they would be older. Thus far, the archaeological interpretation of Harappan terracotta has been subsumed under categories such as art, religious cults, such as Mother Goddess, but never plainly have they been seen, as the excavators of Mohenjodaro Vats, Marshall and Mackay clearly saw, as children’s playthings. Our suggestion here is that the child hypothesis may provide us an adequate theory with which to examine terracotta occurring in river valley sites of India neolithic onward.

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Competing Interests
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