

## DESIGNING ARTEFACTS FOR THE SOCIETY OF EARLY BENGAL (UP TO 1300 CE)

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### The Historiographical Context:

Several sites like Mehargarh in Pakistan, Kauśāmbī in Uttar Pradesh, Vaiśālī in Bihar, Amarāvātī in Andhra Pradesh, Ārikāmeḍu in Tamil Nadu, Paṭṭanam in Kerala, Kamrej<sup>1</sup> in Gujrat, to mention a few, drive home the fact that humans have interacted with their surrounding physical environmental conditions. This also holds good for the people of early Bengal. Our attention has been drawn to the human activities towards the patterns of their settlements as found archaeologically from different sites like Susunia Hill area, Dihar, Tamluk, Mainamati-Lalmai region, Paruldanga (Birbhum district, West Bengal), Jagjivanpur, Vikrampuretc. of early Bengal from as early as the pre-historic days onwards.<sup>2</sup> As the years have rolled on, the activities of the people of early Bengal have gradually become complex. It is a significant information about the different aspects of the lives of the people of early Bengal such as a number of castes and sub-castes, observance of and attitudes to *varṇasaṅkaras*, practice of luxuries and games, food etc.<sup>3</sup> The valuable researches by B. N. Mukherjee in the Kharoṣṭī and Kharoṣṭī-Brāhmī inscriptions of the first-to-fifth century phase make us aware of the socio-economic, political and cultural lives of the people of the Vaṅga sub-region of early Bengal.<sup>4</sup> At this point reference may be made to a few urban centres like Mahāsthāngarh, Bāngarh, Chandraketurahetc. of early Bengal<sup>5</sup> in which we find the concerned people to have directed their activities towards settlement. About the rural settlement activities also of the people of early Bengal we are enlightened by a significant and valuable epigraphic study.<sup>6</sup> In the light of the information from the copper-plate charters from different areas like Vardhamāna, Koṭīvarsa, Vikramapura, Devaparvataetc. attempts have been made in order to understand the description of the donated land, donors and donees and their castes and qualifications etc. of early Bengal in the context of the transfer of the landed properties during the fifth-thirteenth century phase.<sup>7</sup> Taking into account the archaeological materials like buildings, potteries and inscriptions from the Lalmai hilly region of Comilla (belonging to Samataṭa sub-region of early Bengal) of southeastern Bangladesh the historical implications of the Lalmai region have been brought to light.<sup>8</sup> We find the people of early Bengal to have related their activities also to overseas trade and commerce using boats and ships.<sup>9</sup> The religious life of the people of early Bengal particularly during the Pāla-Sena phase (8<sup>th</sup>-13<sup>th</sup> centuries)<sup>10</sup> has also received scholarly attention. In connection with the focus on a sub-region we are provided with another scholarly recent study on the sub-region of Samataṭa of early Bengal in which inscriptions, coins and art objects have been taken into consideration for understanding the connections of the sub-region.<sup>11</sup>

We learn from the studies mentioned above that the people have produced or manufactured innumerable objects of different types for their use in life. These include bins for storage, adzes, arrowheads, seal with emblem, hall with pillars, iron bowl, glazed tiles, clay-made tablets bearing the temple impression, iron nail, knife, terracotta plaques showing the horse-drawn chariot with riders, the musician with a dancer, stone sculptures of Tārā, Avalokiteśvara, decorated typical bricks, pottery with auspicious symbols, bronze-made image of Avalokiteśvara, typical clay-made tablets bearing the *stūpa* and *stūpikā* impressions, clay sealings with religious and administrative markers, temple structure with the sanctum, Black and Red pottery, cooking pot, frying pan, big jar, beads made of glass, stone etc., rouletted ware, knobbed ware, bronze bowls, bangles, bronze-made knobbed vessel etc. and many other things.<sup>12</sup> It appears that human beings have made their things by investing their skills or art<sup>13</sup> along with their assumptions and beliefs<sup>14</sup> for fulfilling their purposes of living physically as well as mentally through the ages. Thus they may be assumed to have attempted to find solution to their problems by creating/producing and using artefacts and thus made sense of the land and life. Therefore a brief idea about the artefact may be in order.

### **Artefact**

As said above, archaeologically and historically any object produced/made/created by humans with their skills and ‘workmanship’ may be defined as an artifact.<sup>15</sup> Therefore the artefact includes not only terracotta or metal or glass or stone objects etc. for use in daily life, but also divine images, sacred structures, and even scripts and languages in which human experiences, feelings, beliefs, and assumptions are translated or coded. So the artefacts appear to have been physical and non-physical ones. The people of early Bengal may be thought to have developed their ‘working habits’ and ‘living patterns’<sup>16</sup> around their both physical and non-physical artefacts they have resorted to. As a remote device as an interface enables the viewer to open and watch the television programme, so also the artefact serves as an interface which enables one to interact with different types of situations such as the use of land-types, agrarian and non-agrarian production, literary and non-literary creations for communication etc.

Therefore the artefact is necessarily to be made for the sake of human interaction with Nature; but at the same time the artefact is also to be made so affordable that the user can use it for bringing solution to his/her problem or purpose. Therefore it may be assumed that the issues of “interface” and “affordance”<sup>17</sup> led also the people of early Bengal to devise the courses of action to change the existing situations into the ones they had preferred.<sup>18</sup> Such intention might have led them to design<sup>19</sup> their artefacts with the objective to make the things functionally useful according to the changing situations through the ages. This is probably why we find the people of early India, particularly those of early Bengal to have given their artefacts various shapes, sizes, colours (as Black and Red Ware objects<sup>20</sup> etc.), signs, symbols (as in early Indian or Bengal coins<sup>21</sup>), decorations with human figures, faunal or floral (as early Bengal bricks with

floral marks<sup>22</sup>) etc. for facilitating the user to face their real life situations. All these object-centered activities constitute the process of designing artefacts. Then what is design?

### **Design**

Design is essentially a plan with necessity and intention following which an object is produced or made in order to make it functional for causing change or improvements towards the satisfaction of the needs of the people living in society. Naturally, in connection with the production/manufacture of designed objects people have interacted with or used technology through the ages. Seen from this angle they are understood to have followed ‘industrial design’ keeping in view the interests of the maker as well as the user of the object, ‘interaction design’ aiming to understand what can be done, and ‘experience design’ laying emphasis on the quality of the experience.<sup>23</sup> In connection with the designed things for use a few archaeological artefacts of the early Indians may be cited. Our attention has been drawn to a jetty, or artefacts such as beads made of stone, jars, iron-made objects etc. and these have been used for the fulfilment of different purposes including trade and commerce at the port of Kamrej in Gujarat or Kammoni as mentioned in the *Periplus*.<sup>24</sup> Therefore design is essentially concerned with giving forms to artefacts so that the designed ones can solve the problems humans face in life.<sup>25</sup> According to the early Indian historical experiences, it may be thought that the activities of the people of early India were directed to acquire sustenance/sustainability by ensuring production (both agrarian and non-agrarian) and communication based on different kinds of ‘relationships and interactions’<sup>26</sup>--economic, social, political and religious or cultural. In order to fulfil their different purposes of interaction related to these two issues of production and communication they have made/created their necessary artefacts such as iron objects like cutter etc., forts, beads, ornaments, sculptures, religious shrines and even literary and or epigraphic texts, to mention a few. Thus we come to Paul Rand according to whom we may say that an object is designed so as to make it valuable and meaningful to the society.<sup>27</sup> Therefore it appears that designing to which human activities are directed may also be taken into account for understanding the history of a people. So also may be the case with the history of the people of early Bengal.

### **Goal of the Essay**

The statement made so far about the artifact and design must have constituted the context in which we wish to propose the present essay.

### **Discussion**

There are several sites such as Dwarakeswar (South Bankura, West Bengal), Tarafeni (Northeast Medinipur, West Bengal), Susunia (Northwest Bankura, West Bengal), Bangarh (South Dinajpur, West Bengal), Mahasthan (Bogra, Bangladesh), Tuleshwarir Aara (Northwestern Bangladesh), Bharat Bhayna (Southwestern Bangladesh) and many others in early Bengal.<sup>28</sup> These sites are known to have yielded several artefacts. But it is not possible to

take into account all the sites for the enquiry into the present topic in early Bengal. Therefore we have concentrated on a few excavated sites for understanding the matter. We are told about the hoary past people of early Bengal (second millennium to c 500 BCE) who designed their artefacts like pots etc. with black and red colours.<sup>29</sup> We learn that colour is one of the important elements of visual design.<sup>30</sup> It may be noted at this point of applying colour on the pot that the maker might have addressed the human feeling and created the contrast for attracting the attention of the user. To substantiate the use of colour and contrast brilliant red coloured objects along with a black coloured artefact with fish-motifs from Pandu Rajar Dhibi (Birbhum district, West Bengal dated to the second millennium B. C) may be referred to.<sup>31</sup> It goes without saying that with the passage of time socio-economic, political as well as cultural complexities have grown in early India in general and Bengal in particular. Accordingly humans have faced new challenges of life such as, for example, the problems of cooking or building a stable shelter for staying or a shrine for worshipping the divine power and so on and so forth in daily life. Naturally people have resorted to designing objects in order to accommodate socio-cultural circumstances or what has been called ‘cultural context’<sup>32</sup> in which the artefacts have been used. In other words they have adopted what has been called ‘human-centered designs’<sup>33</sup> for their ‘cultural context’. In this connection we may refer to the remains of houses from Chandraketurah (24 Parganas North, West Bengal) in which tiles were used by well baking. Floors were made of *surkhi*. Wooden pillars were used understandably to provide support to the house.<sup>34</sup> Interestingly the people of Chandraketurah possibly knew how to store food items. This is supported by a square-shaped wooden structure which was made of joined planks horizontally arranged and the encloser was supported by the beams at the bottom and the logs of wood.<sup>35</sup> The people of the site also worshipped the divine power for which they had built a temple by using bricks.<sup>36</sup> In other words they designed the temple so as to ensure stability. As said above, designing also included humans’ communication for their interaction in the ‘cultural context’. We find this to have been brought about by designing a terracotta object with inscriptions in Kharoṣṭī-Brāhmī characters. The artefact according to B. N. Mukherjee refers to a person named Karaphagmā from the northwest “who has a crore of ploughmen”.<sup>37</sup> Our attention has been drawn to terracotta objects that have been designed with inscriptions confirming the use of the objects as ‘permits’ for facilitating the trading transactions.<sup>38</sup> Thus it may be assumed that some objects were so designed as to solve the problem of trading exchange by way of authenticating the medium in this way. We have been provided with another inscribed grey coloured terracotta pot which according to B. N. Mukherjee means “a vessel of a sower”.<sup>39</sup> Possibly the pot was so designed and meant exclusively for the purpose of sowing. Besides such designed objects, the people of early Bengal are known to have made their dishes and pots in different sizes and shapes.<sup>40</sup> The size and shape-variants of the artefacts were made of terracotta probably to solve the various purposes of the ordinary/common people in their domestic sphere. So the designing of the artefacts in different sizes and shapes was understandably meant for the society of the region under discussion during the early Christian era.

In connection with the use of different types of artefacts at the popular level the people of the present region may have gained experiences. We find the people of Chandrketugarh to have made their artefacts by firing at the kiln,<sup>41</sup> understandably to ensure their stability in use. The people who occupied and lived at the site of Moghalmari (South Western part of West Bengal) for a long span of time (dated to the age from the Chalcolithic to the late medieval period)<sup>42</sup> are also known to have manufactured their bowls, vessels including big cooking vessels (*hāṇḍi*), jars, basins etc. for use in material life. It appears that they have designed their artefacts of daily use in terms of sizes (big and medium), shapes, depth (shallow and deep), and colours (Black, Red, Gray and Buff). In the making of these artefacts the people used clay with mica and fired the objects<sup>43</sup> possibly for ensuring the stability and longevity of the things. The artefacts designed in this way might have been used to cater to the different purposes possibly of different categories of people of the society. Of the artefacts of different colours the percentage of the Red coloured artefacts is reported to have been the maximum.<sup>44</sup> Possibly the demand of the Red coloured artefacts in comparison with the other coloured objects was to some extent high to the consumer in the society at Moghalmari, though we do not have any direct evidence in this regard.

Resorting to various designs by humans is also proved by a good number of antiquities from the excavations at Jagjivanpur in the district of Maldah, West Bengal. The site is dated to the eighth and tenth-eleventh centuries CE.<sup>45</sup> The people are understood to have manufactured a good number of bricks by using husk, mica and clay as ingredients in order to strengthen the bricks. The bricks were fired well supposedly to make the ones strong. They also designed their bricks with various designs such as lotus petal, mat design etc., shapes like wedge, rectangular etc. apparently to attract the attention of the people to the Buddhist monastery in which the bricks were used.<sup>46</sup> The bricks are said to have size-variants such as 28 cm x 15 cm x 6 cm, 28 cm x 26 cm x 5 cm etc.<sup>47</sup> The maker might have manufactured to accommodate the purposes of using the bricks of such sizes according to the different points in the monastic construction. From the Jagjivanpur excavations it is understandable that the maker catered to the different needs of the people by designing the artefacts accordingly. Thus we find them to have produced variously designed beads in different shapes (barrel hexagonal or circular, convex circular or elliptical etc.) and colours (red, black etc.). The beads are reported to have been mostly of terracotta, though a few beads of stones like agate etc. and glass have been reported.<sup>48</sup> Mostly terracotta beads were designed in the shape of a pear<sup>49</sup> probably in accordance with the needs of the common people. If this so, then it may explain why we find the maker to have made circular lamp, crucibles, game pieces, bangles etc. by using terracotta<sup>50</sup> and these artefacts seem to have been meant for the ordinary people.

The people of early Bengal have designed their artefacts not only for satisfying their needs of material life, but also for religious or cultural communication. In this connection we may refer

to Paharpur from where we have the main temple, Buddhist monastic structure and associated details like brick-made pedestal, brick-made platform etc., sculptures designed with divine figures like Balarāma (plt. XXVII, No. 24), Govardhana lifting (plt. XXVIII, No. 19), Vāsudeva carrying Kṛṣṇa (plt. XXIX, No. 45) etc.; plaques made of terracotta designed with men and women in movement and occupation, for example, two persons paddling a boat (plt. XLIIIa).<sup>51</sup> Similarly Mainamati in southeastern part of Bangladesh is another important site which shows human workmanship through several artefacts such as the planned Salban Vihar monastic structure, the making of mostly terracotta sculptures along with bronze, stone ones. Of these the terracotta sculptures are featured with divine and semi-divine figures, animals, flowers, human figures etc.<sup>52</sup>

### Observations

The discussion so far shows that the designs have been made for the social purposes. The people of early Bengal have designed their artefacts in order to ensure the stability, workability as well as durability of the things. Moreover human beliefs, ideas and thoughts have also been specified or designed by producing visual images of divine and semi-divine figures as well as also the countryside. From the hoary past it appears that humans have established a close and inseparable relationship with things in order to sustain in life. So they have usefully designed their artefacts with their skills/capacities. In other words it may be assumed that a designed artefact is the visible expression of the creative thinking of the maker/creator for the society. Therefore designing may be considered as ‘a process, a way’<sup>53</sup> of their thinking for the society through the ages.

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