

A Maritime Archaeological Exploration in Narmada Estuary, West Coast of India

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Abstract

A coastal exploration along the estuary of the river Narmada yielded the evidence of port installation in Bharuch and several early historic sites have been noticed along the downstream of the river Narmada. Interestingly, there is a temple dedicated to *Sikotara Mata* near Dahej which is worshipped by the navigators and fishermen. On the south of Narmada a protohistoric site called as Bhagatra has been investigated in detail which is situated on a small creek known as Kim. The paper discusses the findings reported during the recent maritime archaeological investigations.

Keywords: Port installation, Early historic, Protohistoric, Sikotara Mata, Maritime Archaeology

Introduction

Narmada, the largest river flows to the Arabian Sea from the west coast of India, which played an important role in the history of human evolution. The oldest human remains of the Indian subcontinent reported from the bank of Narmada (Sonakia, 1984; Sonakia and Biswas, 1997)). The estuarine region of the river also witnessed the hectic maritime activities since the mid-Holocene and continued till date. Though it has been tough to navigate in the Gulf of Khambhat to reach Bharuch but high tidal ranges have supported significantly in the era of boat dragged through wind and sea current. Narmada rises from the Maikal range and flows in a south-westerly direction. It is fed by a large number of small tributaries. The Narmada is otherwise known as Reva, Samodbhava and Mekalasuta (Law, 1967:40). The last name is important as indicating its source, namely, the modern Maikal range preserving the name of the ancient territory of Mekala. The author of the *Periplus of the Erythrean Sea* refers it as *Nammadus* (Schoff, 1912) whereas Ptolemy refers as *Namados* (McCrimdell, 1885).

In the early years of sixties an extensive exploration was undertaken by the Archaeological Survey of India around Bharuch area and marked four sites of protohistoric in nature namely

Mehgam, Telod, Bhagatra and Hasanpur (Rao, 1963) besides a few historical and medieval period sites, subsequently, further exploration in the seventies some more sites added to this list (Allchin and Joshi, 1995) and detailed excavation was undertaken at Malwan on the bank of Tapi river in district Surat. Similarly, another excavation at Nangal on the southern bank of Narmada yielded the remains of a local tradition of protohistoric period termed as black and red ware. Archaeological investigations in Bharuch town yielded the remains of protohistoric settlement at the lowest level, however, during historical period Bharuch extended many folds and was known as the centre of trade and commerce as well as a *tirthasthala*.

In the course of the present explorations along the lower Narmada region many of the sites have not been located which were reported earlier. The most striking among them is site called Telod which is mentioned as a protohistoric site on the south bank of Narmada, is not traceable. In fact, a village called Telod is situated about 50 km north of Bharuch and during the present investigation revealed that there is no such site existed in this village. Another site called as Mehgam also does not have any remains of protohistoric period. The present paper deals with archaeological finding observed during the present exploration. A brief description of each archaeological site (Figure 1) provided herewith.

Bharuch

One of the most celebrated early historic town of the western India is situated on the northern bank of the river Narmada. In the past it has been known as *Bharukaccha* (*Bhrhukaccha*)-Bharukaccha (sea-marsh), Bhrgukaccha, Bhirukaccha (Law, 1967) and Baryagaza of Ptolemy and the Periplus of the Erythraean Sea. The author of Periplus of the Erythraean Sea provides the most detailed description of the town of Baryagaza particularly approach to the port, trade and commerce (Schoff, 1912). It was known as '*Po-lu-ka-che-p'o*' at the Chinese pilgrim, Hiuen Tsang (Law, 1967:327).

The earlier archaeological explorations yielded the evidence of a protohistoric settlement and a thick deposit of early historic period which continued till medieval period (IAR, 1959-60:19). The present exploration was focused on the bank of the river. A British period abandoned port was noticed which is known as Furza Bandar (Figure 2) and is situated towards west of the fort area on the northern bank of the river Narmada. It is also known as *Juna* (old) Bharuch. The remains of jetty and bollard are visible and presently the surface of jetty and level of river bed has been merged which indicate a high siltation rate at this

particular place. The area falls under estuarine conditions which is affected by daily tidal activities and fine sediment brought along from the sea is deposited on the river bed. Due to construction of several dams on the river Narmada a complete flush out of sediment by the upstream water reduced drastically which perhaps is responsible for the silting of the downstream of the river as the area falls within the tidal zone. This jetty was in use until the construction of a bridge on the river about 130 years before.

Bharbhut

The site has been described as an early historical site in archaeology literature. There are plenty of small boats anchored along the river Narmada. There is a temple known as Bhaleswar which was under construction. There were some large sized bricks found during foundation digging, these bricks appear to be of early historic period however, no pottery was available to associate the period for these bricks. An old pond which is still in use was observed in the middle of the village where some old construction was noticed. The closer examination of this structure indicates that it may be of medieval or colonial period and some old bricks were reused in the construction.

Chawaneswari

The site is visited about 2 km south of Manar and the place is called Chawaneswari. There is a temple of a Devi locally called as Chawaneswari, on an archaeological site. The site is spread over a large area and some sherds appear to be of chalcolithic/ late Harappan period but there is well defined early historical stuff. The site is situated about half a km from the river bank. Earlier explorations yielded the remains of Harappan sherds comparable to Rangpur IIB and IIC besides an early historic settlement. During the exploration a lot of polished stones were noticed (Figure 3) from the site. The surface exploration indicates that the site was involved in the collection of varieties of stones and must have been processed and supplied to the sites of Saurashtra through sea route as it was just across the other side of the Gulf.

Bhagatra

The site is about 60 km southwest of Bharuch on the north bank of the Kim estuary. An ancient mound known as Bhagatra is on a small creek that connects the site to the western margin. The site is approachable from the village Jetpur which is just 2 km to the north of the site. Earlier explorer (Rao, 1962:190) has mentioned that the mound is about 8 ft high and about 7 ft of cultural deposit was encountered in two periods. Period I belongs to the mature Harappan and

late Harappan comparable with Rangpur IIA and B whereas period II is assignable to the medieval period. Rao (1962) also hypothesized that this may be the south most Harappan port and served as stone raw material supply point to the Harappan settlements of the Saurashtra and Kachchh region.

The site is spread over an area approximately 100 m X 60 m and the entire site is under cultivation. On the northwest side of the mound a pond has been dug and perhaps some part of the mound has been damaged. The surface collection suggests that there is protohistoric as well as medieval period settlement, thus partially confirming the earlier observation. The location indicates that this site played significant role in maritime activities as a cowry and a shell was found from the site during the exploration.

Investigation at Bhagatra

A trial trench measuring 2.5 X 5 m was opened on the margin of the site and close to a channel of Kim creek. Total cultural deposit noticed up to 2 meter deep from the surface of the trench. There is about 60 cm deposit of protohistoric settlement and remaining is of medieval period. The protohistoric pottery is very different when compare with those protohistoric settlements of Saurashtra and Kachchh. There is complete absence of typical protohistoric bowl of Saurashtra sites. Other shapes and paintings (Figure 4) are very similar to those reported from early phase of Malvan (Allchin and Joshi, 1995). A few antiquities of protohistoric period also found including a chert blade, a carnelian bead (Figure 5) and splinter wheel. The second period is identified as medieval period and majority of pottery is comprised of black ware and main shape is of carinated handi. The remains of iron slag (Figure 6) have been found from this level, indicating a manufacturing and processing centre and must have been transported through the sea route to the other sites of Saurashtra.

Pottery description of protohistoric period (Figure 7-8)

1. Large-sized jar with a collared rim. It is devoid of surface treatment. Centre core of the section is smoky. Coarse fabric and well fired.
2. Jar with an outward projected, undercut beaked rim. Surface is treated with white colour wash. Medium fabric and well fired.
3. Jar with an outward projected triangular shaped rim. The remains of surface treatment are noticeable. Coarse fabric and ill fired.
4. Jar with an outward bulging rim. Treated with red wash. Coarse fabric and well fired.
5. Jar with an outward projected beaked rim. Upper surface of rim painted with black colour horizontal lines. Surface on exterior treated with red wash. Fine fabric and well fired.

6. Jar with a high neck and out played beaded rim. Externally treated with red wash and painted with horizontal lines in chocolate colour and rim portion with black colour. Fine fabric and well fired.
7. Jar with an outward projected rim. Externally treated with red wash. Medium fabric and well fired.
8. Small-sized jar with an out played beaded rim. Externally treated with red wash. Fine fabric and well fired.
9. Small-sized jar with an out-turned featureless rim. Fine fabric and well fired.
10. Miniature vessel with and out played featureless rim. Externally and rim portion treated with dark red slip. Fine fabric and well fired.
11. Miniature vessel with slightly out turned featureless rim. Externally treated with red slip that has been peeled off at places. Smoky core in the section is present. Fine fabric and well fired.
12. Dish with a blunt carination at the shoulder. It has a featureless rim. Internally treated with red slip and rim portion is painted with black band. Medium fabric and well fired.
13. Dish with blunt carination and out turned rim. It is devoid from any surface treatment. Fine fabric and well fired.
14. Dish with a thickened rim. It devoid from any surface treatment. Fine fabric and well fired.
15. Small-sized dish with a sharpened rim. It is treated with dark red slip. Coarse fabric and ill fired.
16. Rim portion of a dish. It has a featureless rim and treated with red slip. Black painting is noticeable.
17. Medium-sized jar with an out turned rim. Externally treated with thick cream slip. Fine fabric and well fired.
18. Beaked rim of a jar/dish. Internally treated with thick colour cream slip and externally with red slip. Medium fabric and ill fired.
19. Medium sized vessel with an out turned beaked rim in black ware. It devoid from any surface treatment. Medium fabric and well fired.
20. Miniature vessel with an out-turned featureless rim in black ware. Fine fabric and well fired.
21. Small-sized vessel with an out turned featureless rim in black ware. Coarse fabric and ill fired.
22. Painted body part of a large-sized jar. Painting is confined between two horizontal bands of black colour. The painting is comprised of two large circles.
23. Body part of a vessel. The painting similarly confined between two horizontal bands of black colour. 5 vertical lines touching horizontal lines are noticeable. Coarse fabric and ill fired.
24. Body part of a vessel. Design in black colour over cream colour surface. Painting comprise of zigzag type. Fine fabric and well fired.
25. Body part of a buff ware vessel. Painting is in light colour in vertical line. Fine fabric and well fired.

Sikotara Mata Tradition

S.R. Rao (1990) referred a small shrine on the mound of Lothal dedicated to the sea goddess called as Vanuvatimata or Shikotara Mata which was later shifted to a few hundred meter away from the mound and local people still worship the goddess. There are several temples across the Gujarat coast dedicated to sea Goddess called as Shikotara Mata which are located near Navibandar, in Khambhat, near Dahej on the mouth of Narmada, and on the mouth of river Tapi. As per tradition observed along the Saurashtra coast the fishing communities known as Kharva and Koli offers prayer at the nearest Shikotara mata temple before launching the boat in the sea and also in the beginning of new fishing season after the monsoon. Thus the tradition of Shikotara mata is associated with maritime activities along the Saurashtra coast.

The origin of Shikotara Mata perhaps associated with the island of Socotara situated in western Arabian sea and presently fall under administrative control of Yaman. Interestingly archaeological information available from the island suggests a close association with Gujarat right from the beginning of the Christian era as large number of inscriptions on Brahmi, devnagari and early Gujarati scripts have been recorded in Haq cave (Strauch and Bukharin, 2004).

Discussion and Conclusion

During the present exploration which was mainly focused on to document ancient remains of the port, jetty or related to maritime activities, however, industrialization and rapid development along the coastal area has been a major concern in the recent past for the preservation of archaeological sites in this region. Many of the earlier reported sites are not traceable anymore and many of them have been reduced significantly in size. Therefore, the present exploration has been significant in view of the retracing of ancient remains along the Narmada estuary.

In the course of exploration none of the sites had remains of Harappan element thus there is serious issue the extension of Harappan domain in Narmada region. Rao (IAR-1957-58) excavated Bhagatra and proposed that a cultural sequence commencing with mature Harappan, late Harappan and medieval period. As mentioned earlier during the present investigation we did not come across any element which can indicate the influence of Harappan in the pottery of Bhagatra except some painting which could be similar even of two different groups. But none of the sherds recovered has similarity with the sites in Saurashtra

or Kachchh. Thus to propose their contemporaneousness with Harappan time is still a matter of debate. So far a single date from Malvan indicates the earliest habitation around the 15th century BC (Allchin and Joshi, 1995) and occurrence of some lustrous red ware sherds indicate a post Harappan settlement and definitely not Harappan. An investigation in the season 1969-70 some archaeological material was rescued during the digging of a foundation for some building in the college campus (IAR-1969-70). The comparative study of the remains indicate great similarity of pottery with late Harappan specially reported at Somnath IA, Rangpur, IIB and IIC and Jokha, while a complete baked brick measured 51 X 26 X 9 cm was reported. The location of Bhagatra and Mehgam indicate an active participation in maritime activity in the past. The sites are very close to the stone raw material, which were in great demand in Saurashtra and Kachchh through the entire protohistoric and historical periods.

As it is evident from the earlier explorations and excavations that during the early historic period Bharuch was very busy port and served as an international trade centre and find references in various Indian and foreign literature. Bharuch was well connected with hinterland trade system which facilitated proper supply of the goods to various coastal Indian state as well as gulf nations besides Roman world. Bharuch continued an important trade centre even during medieval period as excavation revealed the evidence of trade with Arab countries during the medieval period. The medieval period evidence has emerged during the brief investigation at Bhagatra which indicate that raw material for various products of stone was supplied even during the medieval period. The exploration also yielded the remains of a British period port along the north bank of Narmada in Bharuch and the presence of large bollards suggest that big ships used to get anchored in Narmada till recent past and this port was used as ferry point for crossing Narmada until the construction of proper bridge about 100 years before. The river has been silted up downstream due to insignificant flow of water from upstream, because of the construction of Sardar Sarovar dam, therefore presently even small boat also not able to come up to the jetty.

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References

Allchin, F.R. and J.P. Joshi 1995. *Excavations at Malvan*. Memoirs of Archaeological Survey of India, 92. New Delhi: Archaeological Survey of India.

IAR- *Indian Archaeology-A Review*, (1957-58). New Delhi: Archaeological Survey of India.

IAR- *Indian Archaeology-A Review*, (1959-60). New Delhi: Archaeological Survey of India.

IAR- *Indian Archaeology-A Review*, (1969-70). New Delhi: Archaeological Survey of India.

Law, B.C. 1967. *Historical Geography of Ancient India*. Paris: Societe Asiatique De Paris.

McCrintle, J.W. 1885. *Ancient India as described by Ptolemy*. New Delhi: Today and Tomorrow's Printers and Pub.

Rao, S.R. 1962-63. Excavation at Rangpur and other explorations in Gujarat, *Ancient India* 18-19:5-207

Rao, S.R. 1990. *Dawn and Devolution of Indus Civilization*. New Delhi: Aditya Prakashan.

Schoff, W.H. 1912. *The Periplus of the Erythraean Sea*. (Reprinted in 1974). New Delhi: Oriental Books.

Sonakia, A. 1984. The skull cap of early man and associated mammalian fauna from Narmada Valley alluvium, Hoshangabad area, Madhya Pradesh, India, *Records of the Geological Survey of India* 113:159-172.

Sonakia, A. and S. Biswas 1998. Antiquity of the Narmada *Homo erectus*, the early man of India, *Current Science* 75: 391-393.

Strauch, I., and M.D. Bukharin 2004. Indian Inscriptions from the Cave Hoq on Suqutra (Yemen), *Annali* 64: 121-138

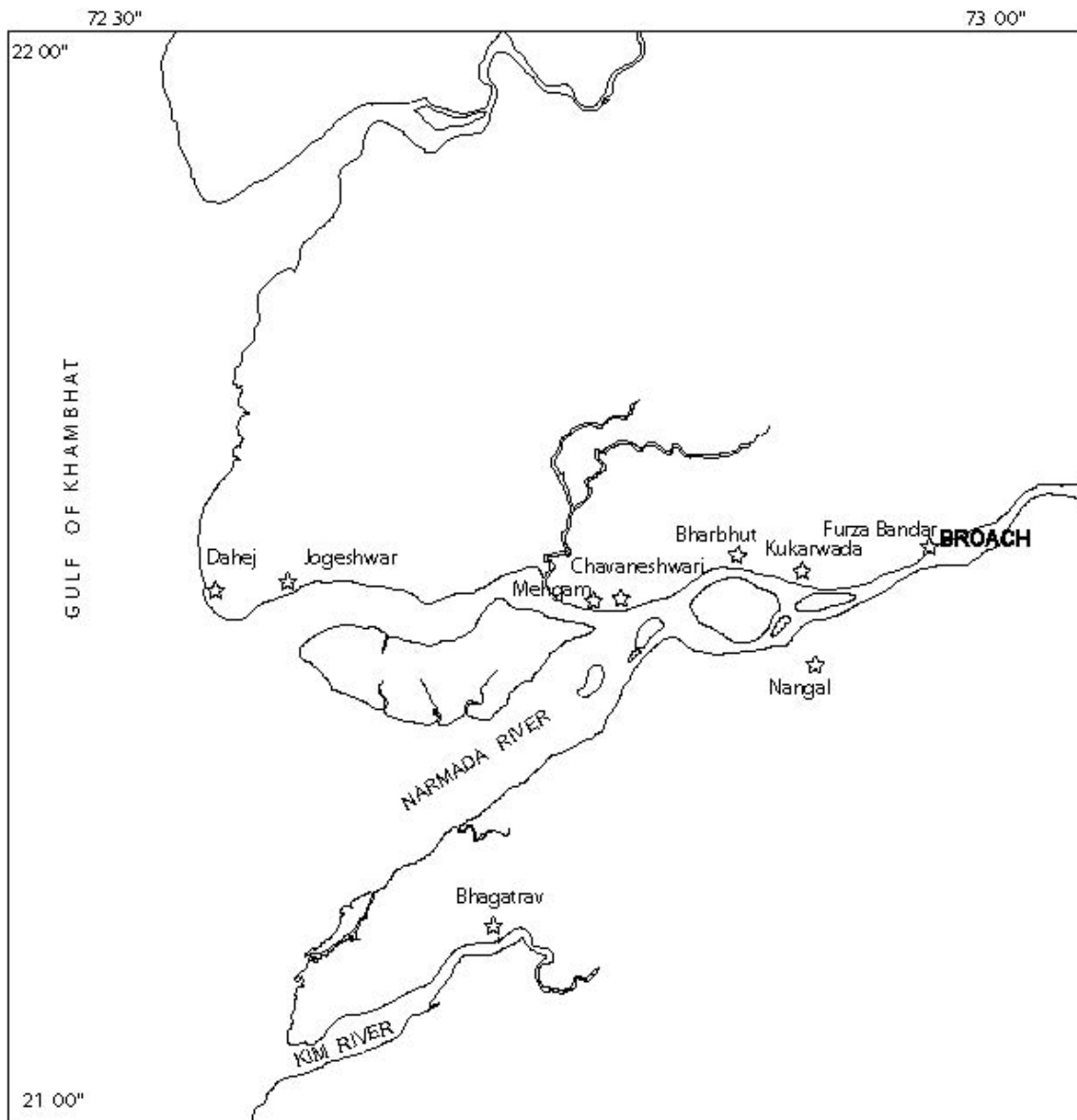


Figure 1. Location of archaeological sites in the estuary of the river Narmada



Figure 2. Bharuch: a British period abandoned port also known as Furza Bandar on the northern bank of the river Narmada



Figure 3. Chawaneswari: Polished stones found from the surface exploration.



Figure 4. Bhagatra: Protohistoric painted sherds



Figure 5. Bhagatra: A carnelian bead and a small chert blade



Figure 6. Bhagatra: remains of Iron slag from medieval level

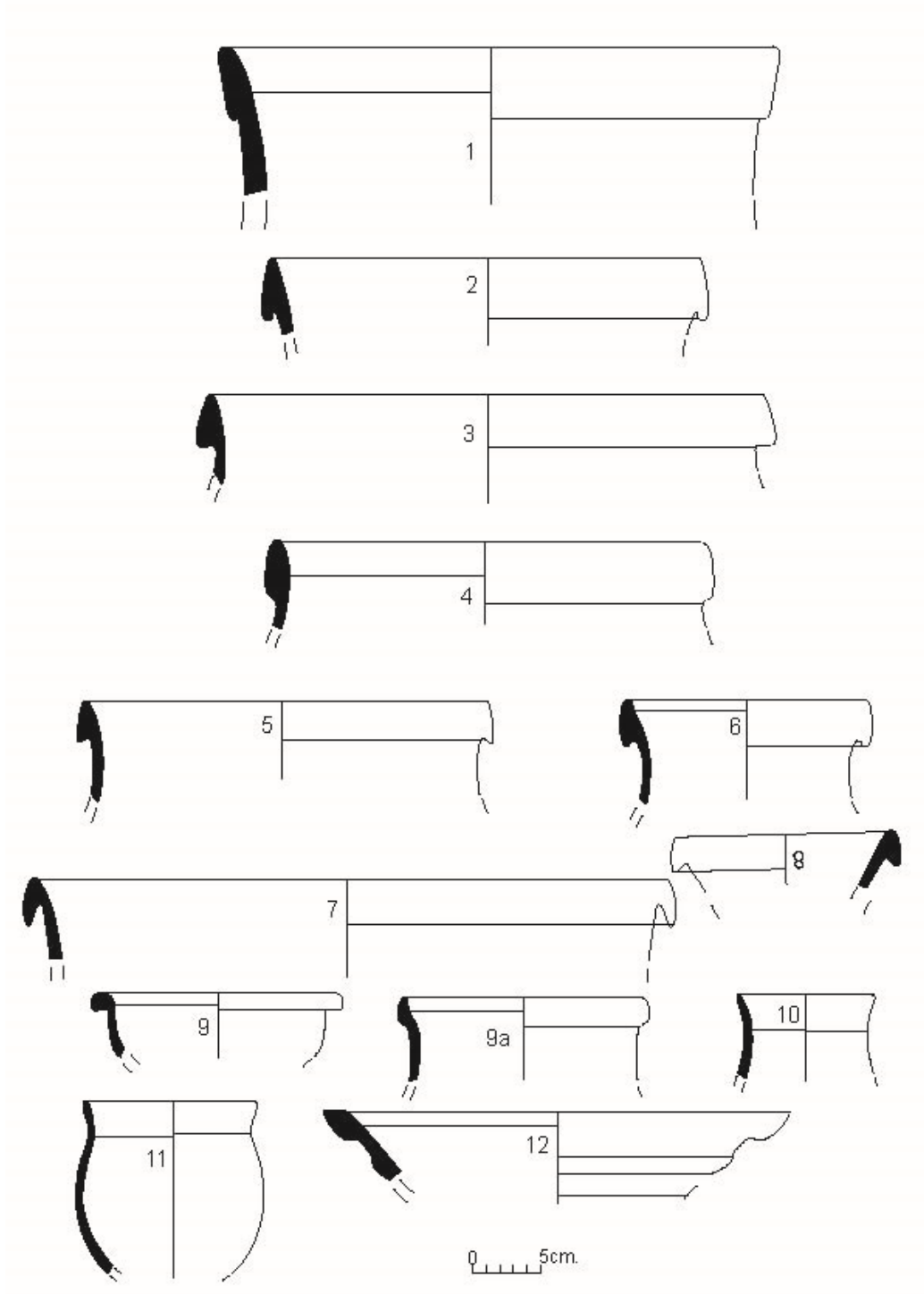


Figure 7. Bhagatra: Protohistoric pottery 1-12

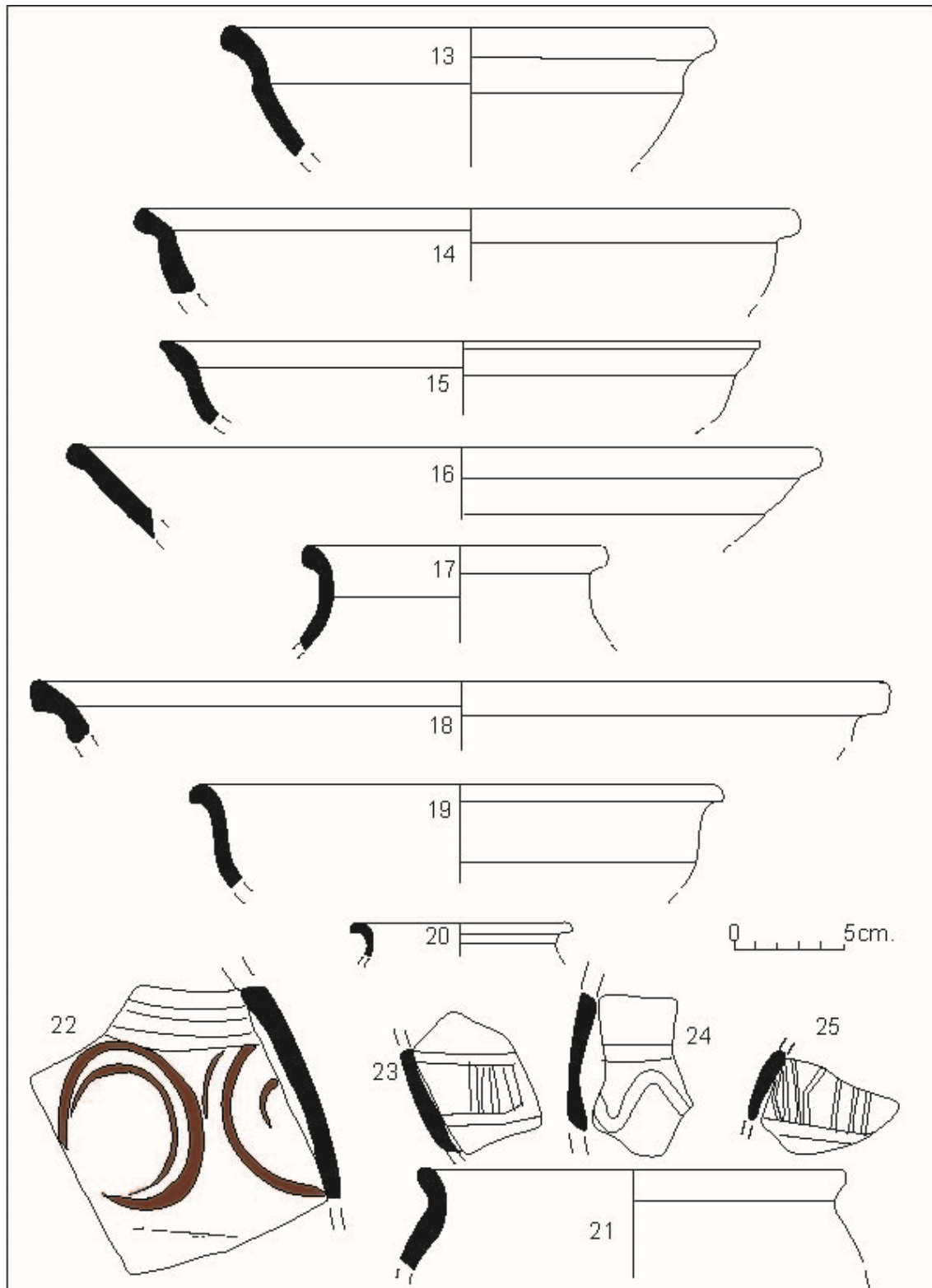


Figure 8. Bhagatra: Protohistoric pottery 13-25