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# The Gilund Project: Excavations in Regional Context

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## 8. Indices of Interaction: Comparisons between the Ahar-Banas and Ganeshwar Jodhpura Cultural Complex

Uzma Z. Rizvi

As part of a larger publication on Gilund excavations, this chapter refocuses attention on interactions marked in the materiality of cultures beyond the Ahar-Banas Complex, specifically, in comparison with that of the Ganeshwar Jodhpura Cultural Complex (GJCC). Towards that goal, this chapter will first contextualise the GJCC and provide background for the types of artefacts unique to the GJCC corpus. Due to the relatively early stages of research in the GJCC, this chapter will focus primarily on ceramic comparisons, although some copper arrowheads are also referred to in this study.

There are some very clear limits to this project; firstly, that the ceramic corpus of both complexes is understudied and thus any result presented here is used to further interpretation, not necessarily to determine final results. This work is based on stylistic evaluations used specifically to gauge which time period might provide the best contrast for understanding contact and interaction between the GJCC and the Ahar-Banas Complex. In the resulting assessment, I argue that given the few mid-third millennium BC overlaps in ceramic style, it may prove to be a more fruitful venture to study interaction in an earlier time period between the two complexes and earlier settlements at Bagor; and in tandem with that shift, to look at the connections between the production of microliths and copper arrowheads. Additional excavations and artefact studies are needed to develop this interpretation, but studies such as that presented here help with retooling research questions and are thus useful.

### Contextualising the GJCC

Located in Northeastern Rajasthan, the GJCC is a collection of third millennium BC settlements bound together by a shared cultural language that encompass similarities in material culture, production of copper tools, and geographic proximity to copper mines (Agrawala and Kumar 1982; IAR 1972-73; 1973-74; 1979-80; 1981-82; 1983-84; 1987-88; 1988-89; Hooja and Kumar 1997; Rizvi 2007). The GJCC is east of the Harappan culture, to the north-east of Ahar-Banas Complex, north/north west to the Kayatha Culture and at a later date, west of the OCP-Copper Hoard sites (Figure 8.1). Located within the regions of the Aravalli Hill Range, primarily along the Kantli, Sabi, Sota, Dohan and Bondi rivers, the GJCC is the largest copper producing community in third millennium BC South Asia, with 385 sites documented (Rizvi 2007, 192-222). Archaeological indicators of the GJCC were documented primarily in Jaipur, Jhunjhunu, and Sikar districts of Rajasthan, India, and include Incised ware, Reserved Slip ware and copper artefacts (Figure 8.2). This part of India is known for its

farming and pastoral resources, as well as for minerals, the most important of which is copper. Khetri, the largest copper source in Rajasthan, has been exploited since antiquity, and continues today as one of the major resources for copper production in India.<sup>1</sup>

GJCC is synonymous with the Ganeshwar Culture, Jodhpura Culture, Ganeshwar-Jodhpura Copper Complex and the Ganeshwar-Jodhpura Culture (Agrawala and Kumar 1982, 130; Agrawal *et al.* 1978; Dikshit and Sinha 1982, 120; Hooja and Kumar 1997, 323-324). This study will refer to this area as the Ganeshwar Jodhpura Cultural Complex (GJCC) based upon the initial reports by R. C. Agrawala and V. J. Kumar; a complex based on the two type sites, Ganeshwar (Tehsil Neem Ka Thana; District Sikar; geo coordinates N 27° 40' 46", 75° 48' 93" E) and Jodhpura (Tehsil Kot Putli; District Jaipur; geo coordinates: N 27° 35' 51", 76° 06' 85" E). Choosing to name the cultural area as a complex simultaneously honors the terminology that Agrawala and Kumar provided and does not limit the understanding of the area as connected to one site or function.

The GJCC 2003 survey results are available in my PhD dissertation (Rizvi 2007) and have been presented at previous EASAA meetings (London 2005) and thus are not extensively discussed in this chapter except to provide context to the comparison. The survey results include GJCC settlement sites, sites covered with vitrified metal waste, sites that had visible surface evidence for furnaces and smelters, sites where copper raw material may be mined or collected, and sites where copper hoards had been reported from local newspapers.

The material culture that is characteristic of the GJCC includes ceramics, copper, microliths, and small finds. The small finds from the GJCC sites include beads, grinding stones, terracotta cakes/lumps, and various bone/shell objects such as bangles and beads. Grinding stones, saddle querns, mortars, and pestles are found at most GJCC sites (Rizvi 2007). A vast majority of the microliths at Ganeshwar demonstrate a well-articulated geometric industry (IAR 1981-82, 61-62). Raw material for the microliths includes quartz, chert, chalcedony and jasper (IAR 1981-82, 61-62; Rizvi 2007).

The ceramics from the GJCC are largely wheel-made, with few examples cited as hand made (IAR 1987-88, 101-102). The corpus is broadly divided into three

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<sup>1</sup> For colonial accounts of copper exploitation in this region, see *Imperial Gazetteer of India: Rajputana 1908*, pp. 52, 71.

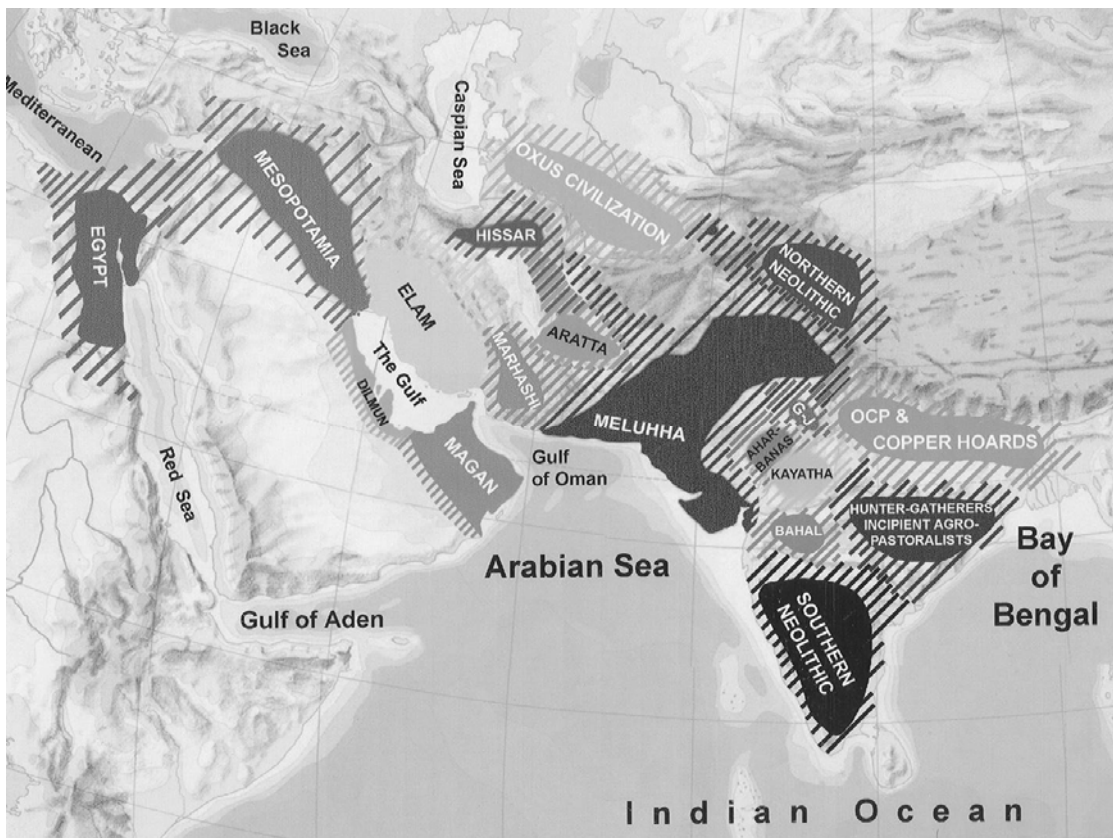


Figure 8.1 Map of Middle Asian Interaction Sphere (MAIS) (Map courtesy of G. L. Possehl)

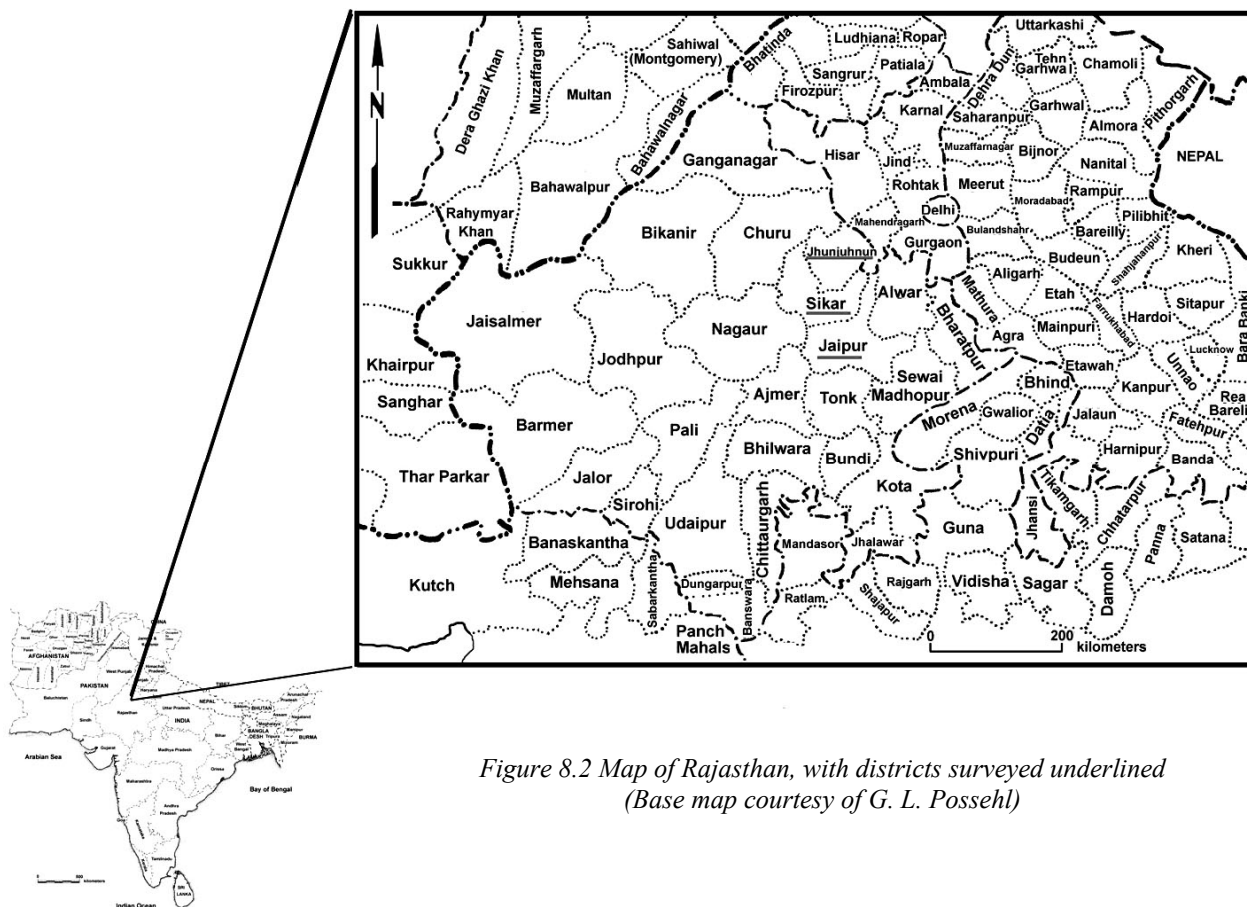


Figure 8.2 Map of Rajasthan, with districts surveyed underlined (Base map courtesy of G. L. Possehl)



Figure 8.3 GJCC ceramic assemblages Top Left: Ganeshwar surface survey 2000, medium red ware. Bottom Left: Reserved Slip Ware, Courtesy Hawa Mahal, Jaipur. Right: Incised Ware, Courtesy Hawa Mahal, Jaipur.

categories based on ware types, that is, coarse, medium and fine (Figure 8.3). The following descriptions are based on excavators' notes and reports from IAR 1987-88 and survey in 2000 and 2003.

The coarse wares from the GJCC make up a small percentage of the corpus; they are predominantly of micaceous coarse clay, inadequately fired, with a dark smoky core, and remnants of reddish brown slip and are fragile and crumble easily. Vessel forms include jars and basins. In contrast, the medium wares are well-fired and sturdy vessels, manufactured with finely levigated clay, including some sherds with mica added as a tempering agent, represented by forms including dish-on-stand, basins, troughs, lids, jars, vases and bowls decorated with incised designs. Typically, the vases have vertical handles attached between rim and shoulder. These red wares have painted decorations with brighter and evenly distributed colour, suggesting a faster and heavier wheel (IAR 1987-88, 101-102; Rizvi 2007).

The fine wares are wheel made and are lightweight, of finely levigated clay. There are three types of the fine red wares: dull red ware, fine red ware and Reserved Slip wares. Reserved Slip wares are distinct due to the specific

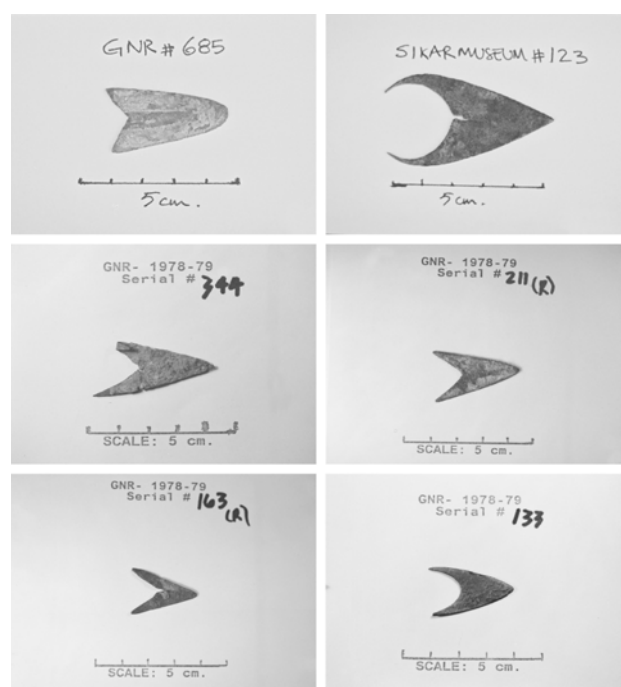


Figure 8.4 Copper arrowheads from Ganeshwar, 1978-79 excavations (Photographs taken by U. Rizvi)

decorative technique applied to the shoulder of the vessels. There are examples of this technique in various other forms from other sites in Rajasthan, such as at Early Harappan levels at Kalibangan, and Ahar-Banas sites, such as Balathal, and Ojijana, however at the GJCC there are few examples of this technique in any other form beyond the vase/jar (Rizvi 2007).

Copper artefacts from the GJCC are a hallmark of the material associated with this culture, specifically, the

forms of the copper arrowheads, celts, fishhooks and bangles. For example, the copper corpus from one season of excavation (1978-79) includes over 1000 pieces from Ganeshwar alone. Approximately 40% of the corpus consists of arrowheads, clearly marked as a special craft industry on site (Figure 8.4). Metallurgical analyses of two specimens from the site of Ganeshwar reveal objects that are manufactured with a high percentage of pure copper content, with traces of lead and arsenic alloying (Agrawala and Kumar 1982, 127-128 and see Figure 8.5).

Object	Cu	Sn	Fe	Pb	Zn	Ni	As	Ag
Celt	97.0	0.1	-	1.0	0.1	0.6	0.3	0.2
Arrowhead	96.5	0.2	0.2	0.03	0.25	0.04	1.0	0.3

Figure 8.5 Metallurgical analysis of copper materials from Ganeshwar, Rajasthan  
(Table taken from Agrawala and Kumar 1982, 127-128)

Dates (Cal.)	GJCC	Ahar-Banas	Harappan	Bagor (Site)	Kayatha (site)
3000 BC	Early	Early	Early	Period II	
2500 BC	Early	Early	Early	Period II	
2200 BC	Middle	Middle	Urban		Kayatha
2000 BC	Middle	Middle	Urban		Kayatha
1800 BC	Late	Late	Post Urban		Ahar-Banas

Figure 8.6: GJCC chronological framework in regional context

Dates (Cal.)	GJCC (Jodhpura)	Ahar-Banas	Harappan	Bagor	Kayatha	Noh
3000 BC	Incised ware, Reserved Slip ware, Copper Arrowheads and celts	Incised Ware, Reserved Slip Ware – Ahar Period IA	Copper Arrowheads from Kalibangan	Copper Arrowheads From Burial Period II		
2500 BC	Incised ware, Reserved Slip ware, Copper Arrowheads and celts	Reserved Slip ware and incised ware – Balathal	Reserved slip ware from Kalibangan	Copper Arrowheads From burial Period II		
2200 BC	Copper arrowheads and celts	(Middle)	Copper Arrowheads from Banawali		Copper Celts (Kayatha)	
2000 BC	Copper Arrowheads and celts	(Middle)	Copper Arrowheads from Banawali		Copper Celts (Kayatha)	
1800 BC	(Late)	Incised ware - Ahar IB, GLD-2	(Post Urban)		(Ahar-Banas)	
1800-900	(GJCC/B&R)				(Malwa)	
800 BC	(PGW)					(PGW)

Figure 8.7 Chronological comparisons with examples used – GJCC in regional context

The GJCC illustrates an indigenous development that sustains a larger regional economic need for copper products. The underpinnings for such regional economic organisation were resource specialised complexes, which may have come together through certain variables, such as population increase, technological know-how or a simple adaptation to a landscape, but most significantly, these variables pivoted within highly circumscribed natural resource locales. As early as 2900 BC, the GJCC emerges as a community beginning to experiment with subsistence strategies, including fishing and hunting, evidenced by fishhooks and faunal remains, as well as some early farming as suggested by paleoclimate reconstructions, burnt anaj or seeds/grains in domestic structures, reconstructed irrigation pathways and grinding stones found in early contexts (IAR 1983-84, 71-72 and 95-96; Rizvi 2007). Active interactions with surrounding cultures are indicated through copper materials excavated in these disparate contexts (Agrawala 1987; Marshall 1931; Misra 1973; Sankalia *et al.* 1969). 2300 BC marks an increase in the production of copper based on the more complex organisation of the resource specialised community complexes within the GJCC. The maintenance of some form of cultural cohesion seems to stem from the creation of an economic niche based on copper. As the GJCC moves into later phases, there seems to be a diminishing of a distinctive cultural veneer, especially towards *c.* 1800 BC (Rizvi 2007) (See Figures 8.6 and 8.7).

The GJCC defines and is defined by its interactions, particularly its proximity to the Harappan Civilisation and the Ahar-Banas Complex. By occupying the space between two major cultural forces of the time, the GJCC emerges as a resource specialised community that has connections with both. In order to interpret such a cultural entity, it is crucial to have a better sense of how these groups interacted. The geographic location of the GJCC, in between the two large cultural centres of the Harappan and Ahar-Banas, precariously affects the interpretation of the region, requiring reconstructive configurations to account for and explore the ramifications of such a position. In order to explore such an argument, this chapter will now examine the potential material connections between the GJCC and the Ahar-Banas Complex, specifically ceramic stylistic links, keeping in mind chronological frameworks. The following section will provide some very basic contextual information about the Ahar-Banas Complex.

### Brief Notes on the Ahar-Banas Complex

The Ahar-Banas culture is named after the type-site of Ahar, the River Ahar (a tributary of the Banas), and the proximity of the Banas River that flows through the region. There are over 100 sites listed as belonging to this complex, with only five excavated sites that have been instrumental in defining this cultural complex; the sites of Ahar (24° 35' N - 73° 43' E), Balathal (24° 43' N - 73° 59' E), Gilund (25° 01' N - 74° 15' E), Ojiyana (25° 53' N - 74° 21' E), and Purani Marmi (25° 08' N - 74° 27' E). These sites are located primarily in the Mewar region, along the banks of the Ahar, Banas, Berach, Gambhiri,

Kothari and Khari Rivers, and their tributaries in the districts of Udaipur, Chittorgarh, Bhilwara, Dungarpur, Ajmer, Bundi and Tonk Districts; sites with Ahar Culture levels reported at sites in Madhya Pradesh at Jawad (24 36' N - 74 52' E), Kayatha, and Dangwada (Misra 1967; IAR 1982-83; Hooja 1988). The chronology of the Ahar-Banas Complex has been established through radiocarbon dates from Balathal and Gilund in which three phases are identified. Early Ahar-Banas 3000-2500 BC, Middle Ahar-Banas 2500-2000 BC, and Late Ahar-Banas 2000-1700 BC (Shinde *et al.* 2005, 158).

The site of Ahar was first excavated by A. K. Vyas of Rajasthan State Archaeology in 1950 and then re-excavated by R. C. Agrawal to shed more light on the chronology of the site (IAR 1954-55, 14-15; IAR 1955-56, 11). Agrawal divided the site into three major periods – Prehistoric, Early Historic, and Medieval. It was not until 1960-61 that Ahar was horizontally exposed through the collaborative work of Rajasthan State Archaeology and Deccan College (Pune) under the direction of H. D. Sankalia (IAR 1961-62, 42-50; Sankalia *et al.* 1969). These excavations revealed two cultural periods within the three phases. Period I, comprised of at least fifteen structural sub-phases, was argued to be chronologically linked to a copper using 'proto historic' period, with the earliest calibrated dates for Ahar Periods Ia, Ib and Ic being *c.* 2500 BC, *c.* 2100 BC and *c.* 1900 BC respectively (Ralph *et al.* 1973). Period II was marked by the use of iron, soak pits, and terracotta sealings with Brahmi characters. The associated Period IIa levels were marked with the use of Northern Black Polished Ware (NBP) and 3rd century BC material, and IIb, associated with Kushan period ceramics and Indo Greek coins. Period IIc was associated with late medieval (18th century AD) ceramics.

Evidence from the Ahar excavations indicates local agricultural practices, including the cultivation of rice and possibly millet (Sankalia *et al.* 1969; Vishnu-Mittre 1974). Artefactual evidence that aids in an agricultural reconstruction includes the documentation of saddle querns, grinding stones and mullers. Reconstructions of the ancient agricultural landscape were further developed through excavations at Balathal.

The site of Balathal, first reported in IAR in 1962-63, was recently (1993-1999) horizontally excavated by Deccan College (Pune) in collaboration with the Institute of Rajasthan Studies, Rajasthan Vidyapeeth, under the direction of V. N. Misra (IAR 1962-63, 18; Misra 1997; Misra *et al.* 1995 and 1997). The excavations expand the base for the reconstructions of agricultural landscapes in the Mewar region, specifically the early farming phases in this area. Radiocarbon dates from the excavations date the beginnings of the Ahar-Banas Complex to *c.* 3000 BC, making this complex contemporaneous to Early Harappan farming communities (Misra 1997; Shinde 2000).

The excavations at Balathal have provided new insights into the Ahar-Banas Complex, with beginnings as early

as 3000 BC, architectural features suggesting the storage and the corralling of animals, as well as craft activities at the site. Additionally some sherds were found that indicate interaction with the Harappan Civilisation. Interconnections between sites of the Ahar-Banas Complex and other regional polities are important to note in order to contextualise the ancient landscape. The site of Gilund has demonstrated additional networks in the region, extending possibly to Central Asia.

The site of Gilund, in Rajsamand District, is by far one of the largest Ahar sites (about 17 hectares in site size), and was first reported as 'Bhagwanpura' by K. N. Puri in explorations conducted during 1957-58. B. B. Lal then excavated the site in 1959-60 (IAR 1959-60: 41-46). The site was initially chronologically categorised into three phases – the Ahar phase, Early Historic and Medieval (IAR 1959-60, 41-46). Calibrated radiocarbon dates of the site date it to 3000-1500 BC (Shinde *et al.* 2005). Excavations at the site of Gilund were co-directed by Gregory L. Possehl (University of Pennsylvania) and Vasant Shinde (Deccan College, Pune).

Excavations at Gilund have been set up to expand on the information from the Balathal excavations. The principle questions dealt with at Gilund include investigating the early village farming communities of Mewar, interregional interactions, socio-cultural aspects of the Ahar-Banas complex, local economic aspects of the Gilund site, and recontextualising the transition from Chalcolithic to Iron Age in Mewar (for more studies on Gilund, see other chapters and the forthcoming Gilund Excavation Report).

The excavations at Gilund have documented Ahar-Banas occupational levels, with five structural phases, the lower levels similar to material assemblages from Balathal, including evidence for Reserved Slip Ware. There is also some evidence of incised ceramics on the top of GLD-2 (V. Shinde and M. McCormick, pers. comm.). In terms of large-scale architecture, the excavations have documented a wall/circumvallation, parallel walls and large rectangular buildings. The area of the parallel walls is particularly interesting as this is the area where a bin with seal impressions was documented. The bin contained over 100 seal impressions made from both round and rectilinear seals (Shinde *et al.* 2005, 160). The design motifs have parallels with Chanhu Daro (Jhukar period), Pirak Periods I and II, Kot Diji, Nindowari, as well as parallels with examples of seals from the Bactria Margiana Cultural Complex (BMAC) (Shinde *et al.* 2005, 160-161). The sealings have been dated to the Middle Ahar-Banas period, suggesting very close connections and networks between the Ahar-Banas Complex and the Harappan Civilisation, as well as to sites in Central Asia (see Ameri this volume).

Excavations at the site of Ojiyana also provide some important evidence suggesting a closer connection between the Ahar-Banas and Harappan cultures. Ojiyana was first excavated in 1998 by the Jaipur circle of ASI under the direction of B. R. Meena, with additional

excavations in 2000 under the joint directorship of B. R. Meena and A. Tripathi (Tripathi 2000).

Based on ceramic assemblages and associated finds, the site has been divided into four periods. Period I occupation comprises three phases of construction, beginning with thin mud brick floors as the only evidence, the second phase with stone foundations, and the third, wattle and daub residential structures of early farmers. Black and Red ware is the most distinctive pottery type of this time period, with additional red wares, grey wares, tan wares and black slipped wares also present. Also important to note is the documentation of a Harappan type faience bead and terracotta cakes, suggesting connections between the Mature Harappan cultures and this Ahar-Banas settlement (Tripathi 2001).

### Comparison between Ahar-Banas Complex and GJCC

As demonstrated in the short section on the Ahar-Banas, many of the comparisons of the material culture have been usually directed towards the Harappan culture, not the GJCC. This section will provide a first look at how a systematic comparison between the GJCC and the Ahar-Banas might best be articulated.

K. N. Dikshit and A. N. Sinha point to resemblance in Ahar IA-IC red wares (Figure 8.8) to GJCC Red Slipped ware, citing a red ware industry at Ahar with incised decorations on the outer side (1982, 120-122). Further, they argue that typologically and stylistically, the ceramics are similar to those collected during their survey at Ganeshwar. If this comparison is correct, that would place GJCC within the range of Ahar Ia-Ic, that is, c. 2400-1400 cal. BC (Sankalia *et al.* 1969).

In comparing ceramics from the site of Balathal in his dissertation, Anupa Mishra has suggested little resemblance between the ceramics of the Ahar-Banas Culture and GJCC (2000). He argues that except for a similar incised decoration with the red wares of Phase Ia at Balathal (Figure 8.9), there is very little else which stylistically connects the two cultures.<sup>2</sup> He does however suggest that the only viable connections to be made could be illustrated through the occurrence of a similar type of Burnished Grey ware and a Reserved Slip ware at Ganeshwar.

The site of Gilund also has a few examples of incised wares from the top layers of GLD-2, in Trenches 50 and 56, as well as a Reserved Slip ware (Figure 8.10). Thus far, examples of the incised pieces from the Middle Ahar-Banas periods are not comparable to GJCC red wares, and although the Reserved Slip ware sherd is similar in technique and application, a single sherd example is difficult to justify in any argument.

<sup>2</sup> Mishra also mentions Phase Ib as heralded by the development of the Thick Red Slipped ware, with the rusticated body and incised designs. Thus, there is some question of why he chose to separate the types of incisions between Ia and Ib (2000, 328).



The incised designs from the GJCC that have been studied all demonstrate very simple designs, without any additional appliqué work, or complex arrangements of the incisions, in contrast to what the Ahar and Balathal materials indicate. Echoing Mishra's assessment, it would seem that there is not enough to go beyond the stylistic connections besides the fact that incisions exist on the corpus presented in this analysis. However, there are additional factors that can be taken into account, for example the types of vessels upon which the incisions are made.

It seems that early examples of globular pots from both Ahar and Balathal have examples of ridged shoulders and

some with incised motifs on the body. Based on material collected in the surface survey in 2003, there are examples of parallel ridges on the shoulders, and based on the curvature of the body sherds with incised designs on them, it is most likely that they are part of the middle body section of globular pots. Additionally, from the site of Khatha Dhaba (GJC 117) (Figure 8.11), an example of a sherd with incisions shaped as triangular gauging marks was collected that is similar to the marks found on Balathal IIIb Thick Red Slip ware piece D112, Figure 127. This may suggest a later interaction between the two cultures, yet as a single example, it cannot hold much weight as an argument.

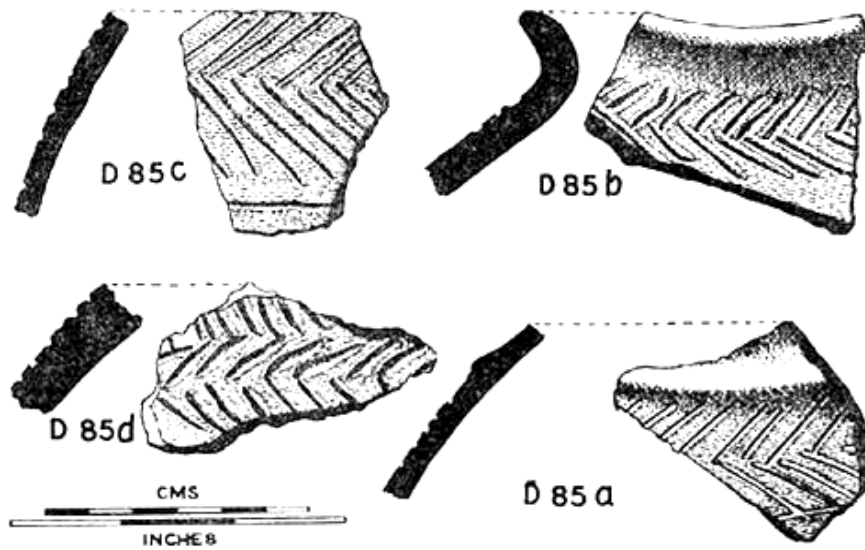


Figure 8.8 Incised ware from Ahar, Period IA (Sankalia, et al 1969: 77)

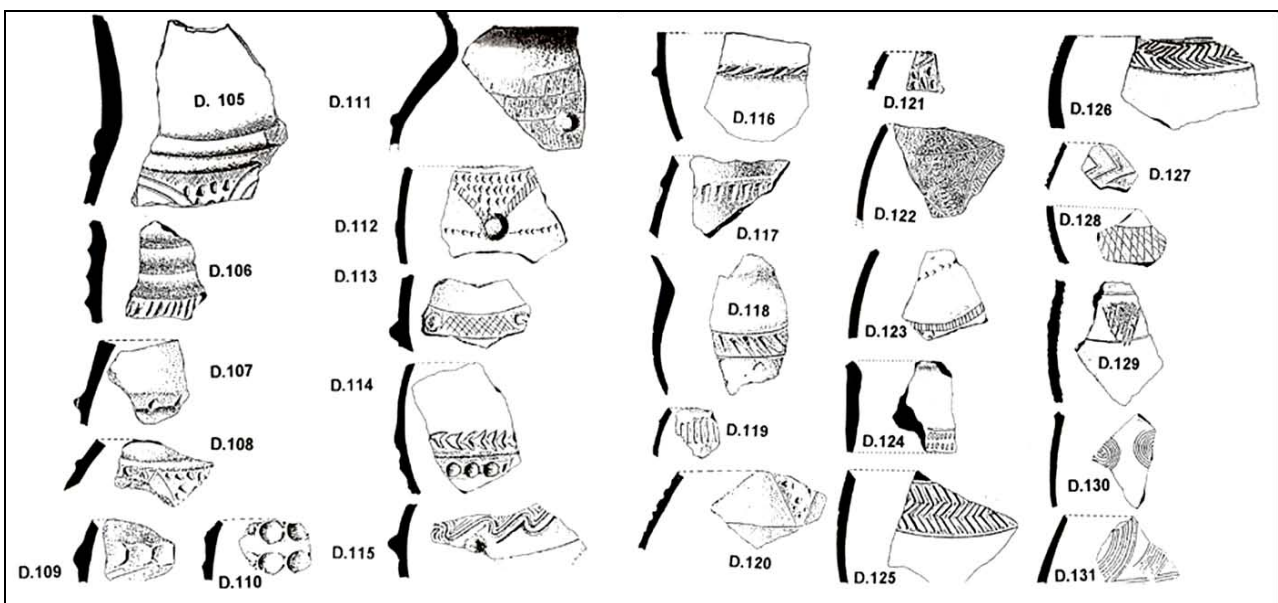


Figure 8.9 Incised ware from Balathal (Mishra 2000, figures 127 and 128)

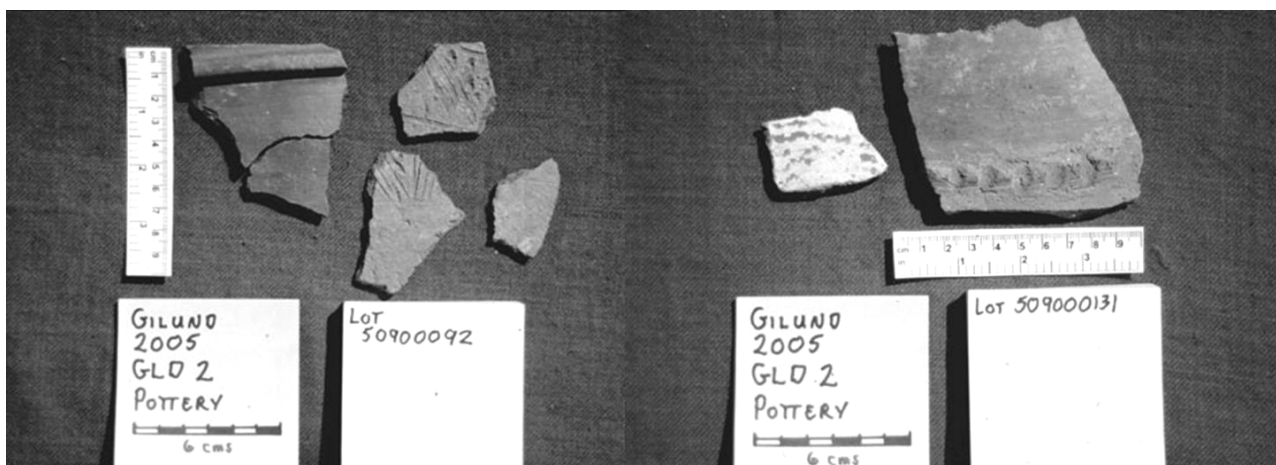


Figure 8.10 Incised ware and Reserved Slip ware from Gilund (Courtesy of M. McCormick)



Figure 8.11 Comparison of Incised ware from Balathal (Mishra 2000) and from Khatha Dhaba (GJCC Survey 2003) (Misra 1970, 222)

The existence of Reserved Slip ware at all Ahar-Banas sites (Ahar, Balathal, Gilund, and Ojiyana) and in the GJCC, albeit in smaller percentages, is both the strongest and weakest argument for ceramic comparisons. These two specific types, that is, Incised ware and Reserved Slip ware are used for comparison because they are most easily identifiable, even though Incised ware (GJCC ware) and Reserved Slip ware were documented in small percentages at sites other than the main sites of Ganeshwar and Jodhpura. This may be because both main sites were excavated and thus these types of vessels were uncovered, while a surface survey is limited in its ability to represent material that may exist under the surface.

With such limited ceramic evidence, additional comparisons with other forms of material culture prove to be more useful, and this is one of the key areas where continued work is required, in particular on the copper material from the Ahar-Banas, such as the evidence of copper working at Gilund, and whether or not it

represents primary or secondary manufacturing processes. There are roughly 40 copper pieces reported thus far from the Ahar-Banas Complex (Shinde, personal communication).

Early metallurgical studies conducted by Hegde from the site of Ahar, suggests that the copper used at the site originates from the Aravalli mines (1969, 226). This suggests a couple scenarios; firstly, Ahar had a direct source link to the Aravalli mines, and/or secondly, because GJCC was the source connection to the Aravalli mines, the two cultures were involved in processes of exchange and interaction. It is slightly unclear what sorts of networks might have been in place between the Ahar-Banas and the GJCC. This is due to the types (or lack) of archaeological information available for each of these cultural regions, in particular the GJCC. It is clear that Gilund exists at a higher level of socio-political complexity based on architecture, indications of large-scale trade (seals and sealings), and the extent of its

interaction sphere, which, based on current information, has farther reaches than the GJCC. The archaeological indicators are suggestive of a relationship, through both general ceramic similarities, and the use of copper from the Aravalli mines, but are not conclusive. Whereas there are clear links established between the Ahar-Banas, Central Asia, and Iran, there is nothing of the sort with a culture just slightly to the North. Was the GJCC a hinterland for the Ahar-Banas – only to be used for resource exploitation?

Given the current lack of clear archaeological indicators to suggest that the Ahar-Banas was actively engaged in controlling copper as a resource from the GJCC, and with the vague material correlates, the actual connections between these two cultures is slight. In light of this statement, I suggest a shift of focus from the Middle GJCC (c. 2200-1800 BC) to the Early GJCC (c. 3000-

2200 BC). Moreover, by investigating connections between Bagor, the Ahar-Banas Complex, and the GJCC, specifically looking at microlithic and copper intersections, there might be a firm foundation upon which to begin to answer some of these questions. New research from Gilund supports investigating this earlier time period, as early levels at Gilund have uncovered some incised ware that stylistically looks more akin to the GJCC Incised wares (Shinde, personal communication).

**Bringing Bagor into the Mix**

The site of Bagor (25° 21' N - 74° 23'E) is a small, 80 x 80 meters (0.64 hectares) site, excavated for one season by Deccan College (lead by V. N. Misra) and the University of Heidelberg, and then two later seasons by Deccan College (lead by V. S. Shinde), is located in the heart of the Mewar plain. The amended chronology for

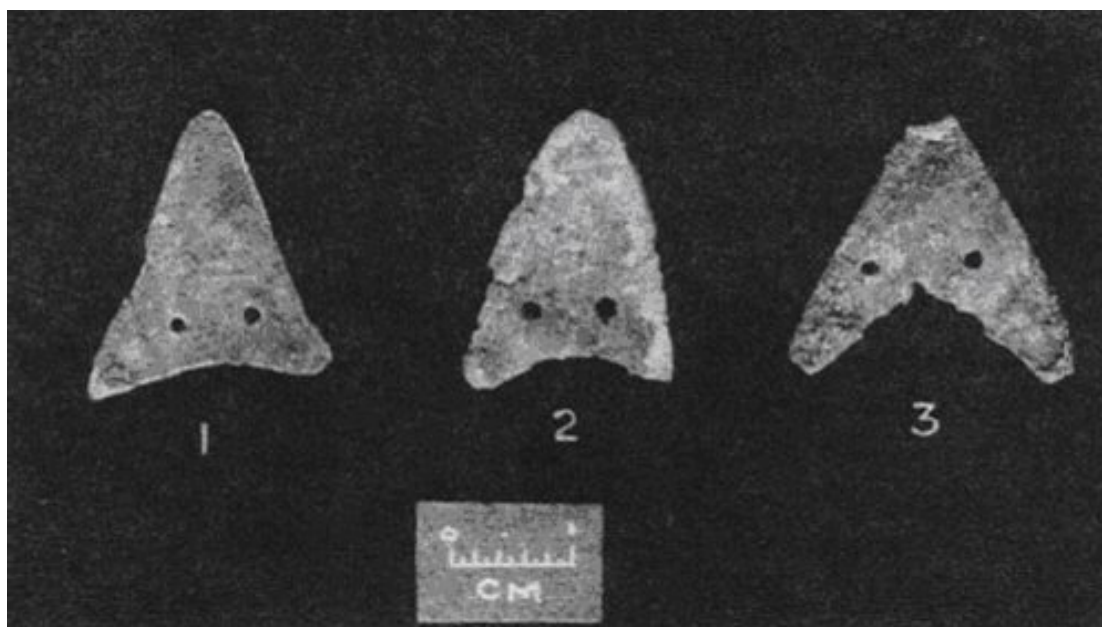


Figure 8.12 Arrowheads from Bagor burial, Phase II

Dates – BC	Ganeshwar	Bagor
> 2900	Period I (microlithic)	Period I (5500-2800) (microlithic)
2900-2500	Period II Phase I (Microliths, Incised Red Wares, Red Ware, some Cu artefacts)	Period II (Microlithic, and incised ware ceramics, burials with Cu arrowheads, and beads)
2500-2000	Period II Phase II (90% Cu Artefacts, Red Ware, Reserved Red Ware, Incised Red Ware)	Period II
2000-1800	Period II Phase II/Period III	Period II

Figure 8.13 Chronological comparison between Ganeshwar and Bagor

the site of Bagor has been presented by Possehl (1999, 481) as Phase I ca. 5500-2800 BC; Phase II ca. 2800-600 BC; and Phase III ca. 600 BC-200 AD (see also Misra 1973). It should be noted that there is evidence for microlithic sites elsewhere in Rajasthan as well, although no others have been so extensively excavated, except for some early work done at Tilwara (unpublished excavation). The microliths from Bagor form one of the largest corpus of lithic material from this time period in India. This industry was based on mass production of tools made from locally available quartz and chert as well as chert and chalcedony acquired from long-distances. Teresa Raczek's dissertation (2007 and see this volume) has investigated the lithic materials from Bagor and Gilund and presented a case for the two communities having shared skill sets in terms of lithic production – and important factor to keep in mind when developing a deeper understanding of the interactions in the region on the scale of daily practice.

A key phase to consider in this discussion is Phase II at Bagor. There are three burials associated with Phase II, all flexed, with the heads directed east, and associated with grave goods including pottery, ornaments, copper objects, and joints of meat (Misra 1973, 104). The use of copper in the burial was not accidental; the placement of the artefacts seems intentional. The copper arrowheads from the burial were compared by Misra to Mature Harappan arrowheads, in which there is a similarity in shape but the arrowheads are perforated (1970, 224). The copper arrowheads from Bagor do not find direct and easy comparisons in the GJCC corpus. Each Bagor arrowhead has two holes for tying the shaft, and a crude shape that does not compare to the complexity, and specificity of shapes of the GJCC arrowheads. However, the overall shape does indicate a rough imitation, rendition, or a precursor to the GJCC shapes. This is based on the rough shapes of the actual pieces that mimic overall shapes from GJCC, and the angle of the cut of arrowhead no. 3, which is visible by a simple visual comparison of Figures 8.4 and 8.12. It is also important to keep in mind the context of these artefacts, those from Bagor being in specifically burial context, and those from the GJCC being in settlement strata.

The ceramic comparison of Phase II potentially connects Bagor to the Ahar-Banas Complex, Kayatha, as well as the GJCC. Again, these ceramic comparisons are based on surface incisions that are problematic to determine unless handled in person. Based on the drawings and photographs of the material from the original excavations of Bagor Phase II (Misra 1973, 101, Figure 26, 1 and 10), there are similarities to Ahar Ia in the shape and form of incision (Sankalia *et al.* 1969, 77, Figure 36, D 83 C, D 85 C). Not surprisingly, there is also some resemblance of these incised wares with GJCC incised red wares. Dikshit and Sinha (1982) have discussed the similarities between the GJCC incised red wares and Ahar Ia-Ic. These stylistic ceramic comparisons align Bagor Phase II (2800-600 BC), Ahar Ia-Ic (2700-2500 BC), and Early GJCC (2900-2500 BC) to being coterminous. Even as these three ceramic comparisons line up neatly, it would be important to remember that the Bagor ceramic

assemblage is handmade, and not wheel made, as are those from Ahar and Ganeshwar (Figure 8.13). In some sense, the mimicked form of the incised ceramic is similar to the rudimentary, possibly copied copper arrowheads in burial contexts.

The connections between these earlier phases, particularly in relation to the copper, microliths, and ceramics provide a more in depth context within which reevaluating the research question will result with clear material correlates indicating interaction. Such an understanding and investigation of interaction will also provide a more nuanced interpretation of the GJCC emergence within northeastern Rajasthan in the third millennium BC.

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