CHAPTER - II

REVIEW OF THE PROTO - HISTORIC CULTURES

Since at least the times of the Indus culture, we recognise cultural continuities though decoded written or literary evidence begins much later. Even the early Vedic Aryans have not been identified with any protohistoric archaeological culture. From our point of view a complete continuous sequence of development from earliest times to the beginning of the mature Indus stage is provided by the site of Mehrgarh in the Bolan Valley in Kachhi district of Baluchistan in Pakistan (Allchin, 1982).

The first period of this site may be regarded as Neolithic. In Period I-A, no pottery is found. Period I-B yielded very coarse chat - tempered ware and a series of mud brick structure and occupational debris have been noticed along with wheat and barley. Period I-II yielded fine burnished Red Ware and the burnt brick structure with two groups of graves in which the bodies are lying on their sides in a contracted position. Grave goods included beads, one of which was of copper. The evidence of cotton comes for the first time in this sub-continent from this period. Period I-III, comes with the occurrence of painted pottery. This is definitely wheel-thrown, with very simple geometric patterns in the Kile Gul Mohammad-II style.

In the beginning of the fourth millennium BC, Mehrgarh becomes a mass production centre for wheel-turned pottery. Thus Period I-IV can be considered a phase of technological innovation, within which there was a diversification of agriculture (Jarrige, 1982). At about 3500 BC, Period I-V (main occupation), at Mehrgarh begins. Domestic buildings with small, low doors and open spaces have been exposed. There are beautiful examples of polychrome pottery with geometric decorations in red, white and black.

Period I-VI extends from 3200 BC to 2500 BC. During this time Mehrgarh is a part of a large interaction zone extending over most of the Indo-Iranian borderlands. The mass production of pottery and terracotta figurines was one of the main activities at the site. Some of the finest specimens of the Faiz Mohammad style Black-on-Grey ware have been found. The human figurines, with diversity in hair dressing and a variety of ornaments, and painted in yellow, reflect the existence of
a rather sophisticated society. Just prior to 2500 BC, the site is integrated into the Early Harappan, in Period -VII (Mughal, 1970).

Archaeological studies in different parts of India have brought into light several proto-historical cultural complexes, viz. Harappan, OCP, Black & Red ware (Banas), Painted Grey Ware, Kayatha, Jorwe, Malwa, Savalda, Wardha, Eastern and Southern Chalcolithic cultures, etc. These cultures have been classified on the basis of potteries and other associated material finds (Agarwal and Ghosh, 1973).

The story of mankind after the invention of writing has been designated ‘History’ to differentiate it from that of pre-literate societies classed under ‘Pre History’. Indian history properly speaking begins about 600 BC, when archaeological evidence keys in well with the literary. There is a great deal of difficulty in designating the Indus Valley civilization and the Vedic culture within the framework of the above-mentioned two definitions; hence, all the archaeological cultures from Harappan culture down to N.B.P.W. period have been put within the subdivision of ‘Proto-History’.

A brief account of the characteristics, extent and along with the chronological horizons of these cultures, is summarised below.

1. HARAPPAN CULTURE

The settlements of Harappan culture were found on a large geographical space comprising modern-day Punjab and Gujarat and parts of Rajasthan, Himachal Pradesh, Haryana and Jammu & Kashmir states of India.

The remains left by the people in this area before the emergence of Mature Harappan Urban Civilization showed that antecedents of Harappan culture were found in villages containing huts or houses made of sun dried/baked mud bricks, and protected by ramparts made of the same material. These people also left evidence suggestive of primitive agricultural activities, animal rearing and seasonal trade (Badam and Sathe, 1994). The pottery is pinkish, thin and not so well-baked. The designs are both geometrical and naturalistic, vessels with rusticated lower parts, basins with designs obtusely incised or finely combed on the interior, and vases with cord impressions on the exterior, are important features of Early Harappan stage.

The village culture of the Harappan antecedents gradually evolved and progressed technologically emerging into an Urban Harappan civilization. With the advancement
of agriculturist, potters, metallurgists and craftsmen, the economy indicates that the communities of the region had a government over them, built cities of systematic and planned lay out, with fortifications, well regulated drainage systems, used kiln burnt bricks with standard dimensions in the ratio of 1:2:4 and pictographic mode of writing from right to left (Piggott, 1950). Among typical objects are seals bearing inscriptions besides figurines of animal gods, such as the elephant, rhino, unicorn, bull, etc., and one presumed to be Pashupati, an aspect of Shiva (Singh, 1994). Terracotta figurines are preserved specially one of bearded priest displaying a shawl worn under the right arm. Semi-precious stones included carnelian, agate, steatite, etc. Weights made of agate cubes, chertblades, terracotta cakes, sturdy wheel-turned pottery with distinctive shapes, designs and paintings were other special features. The usual ceramic shapes were dishes and bowls on stand, cylindrical vases, perforated jars, beakers, pointed bottom goblets and lamps with handles. Motifs included circles, leaf patterns, chess-board patterns. The paintings usually covered the entire body from the rim to the base. The evidence also suggests a highly developed internal and external trade with commercial activities based on surplus agricultural production (Ratnagar, 1986).

With the passage of time this culture showed signs of degeneration reflected in deficiencies of administration and decline of internal discipline (Mackay, 1938). Change in the courses of rivers like the Sutlej and Yamuna, drying of the Ghaggar-Saraswati, growth of aridity and salinity, external invasion and decline of trade and commerce are other factors to which is ascribed the decline of the Harappan civilization. Now cities like Harappa, Mohenjodaro and Kalibangan experienced gradual decline in urban planning and construction. Houses made of old dilapidated bricks and shoddy construction encroached upon roads and streets. Flimsy partitions sub-divided the courtyards of the houses. At the same time the late levels showed a distinct reduction in the number of sculptures, figurines, beads, bangles and inlay work. The people of this age used a pottery which was different from those of the Harappans. Their culture is known as Cemetery H. culture. Some of the important features associated with the Harappan civilization: writing, uniform weights, Harappan pottery and architectural style had also disappeared by now. In the region of Gujarat the Harappan Civilization transformed itself into late/post Harappan cultures with some continuity, but loss of writing (Dikshit, 1977).
About the dates of these Indian cultures Marshall (1931) suggested that the Indus-(Harappan) civilization was of the 3rd Millennium BC. Wheeler (1947) on his re-excavations at Harappa suggested its dates to be 2500 -1700 BC. Agarwai, (1973) shortened this period to 2300-1750 BC. Dales (1973) proposed a 2900-1900 BC time bracket for this culture. Ramachandran (1985) proposed the brackets of 3200 BC to 2100 BC jointly for the Early and Mature phases. Possehl (1994) however, used the calibrated 14C dates and suggested 2500 BC as the beginning of urban phase, and 2650 BC as beginning of the formative phase of this civilization. On that basis the early Harappan was bracketed between 3300 BC to 2700 BC.

2. OCP-COPPER HOARD CULTURE

The Ochre Coloured Pottery (OCP) culture, first indentified by Lal (1951) in Bisauli and Rajpur Parasu (U. P.) people using primitive types of copper implements (found in 'copper hounds') and an ill-fired and thick Ochre-Washed Pottery. Besides the Gangetic Valley, this pottery has been reported from as far places as Jorwe and Nasik (Sankalia and Deo, 1955). Among the OCP types were, later on, found many wares made of well levigated clay, wheel made, slipped and often painted with black colour, sturdily and well-fired. The types included jars, vases, with flanged rims and elongated beaks, bowls, basins, lids with and without knobs, dish-on-stand and handled ones were common shapes. Motifs included bull, floral scroll, curved comb designs, geometric designs, triangles, spirals, circles, semi-circles, loops, bands and parallel lines (Agarwal, 1982; Gaur, 1983).

Other characteristic finds included arrow heads, beads, pendants, bangles of copper, terracotta beads, figurines, bull horns and semi-precious stones like carnelian, soap-stone and arrow heads of bone, etc.

A large number of OCP sites have so far been excavated in eastern Rajasthan, Haryana, Western and Eastern Uttar Pradesh; such as Jodhpura (District Jaipur), Siswal (District Hissar), Mitathal (District Bhiwani), Bara (District Rup-Nagar), Ambkheri (District Saharanpur), Bargaon (District Saharanpur), Hastinapur (District Meerut), Ahichchhatra (District Bareilly), Baheria (District Shahjahanpur), Kaseri (District Meerut), Attranji-Khera (District Etah), Lal-Qila (District Bulandshahr), Rajpur-parasu (District Bijnor), Bahadrabad (District Saharanpur), and Kosambi (District, Allahabad).
A number of primitive types of copper implements of proto-historic significance were discovered in caches from the surface soil, or in possessions of individuals and temples from various parts of India, mainly Uttar Pradesh, Bihar and Madhya Pradesh. The artifacts include rings, harpoons (Fig.1), flat and shouldered celts (Fig.2), anthropomorphs (Fig.3), bar-celts (Fig.4) and trunnion axes, socketed axes, double axe, antennae swords, hooked swords, spear heads, etc. (Fig.5). Most of these implements were chance discoveries without any associated artifacts from sites like Bithur, Hardoi, Manpuri, Dhaka, Rajpur Parsu, Indilapur, Bahadrabad, Sartholi, Seorajpur, Bisauli, Fatehgarh, Kiratpur, Saipai, Navadatoli, Gungeria, etc.

Heine (1936) considered these copper hoards as representing the remains of the Aryan migration into India. Piggott (1950) and Sharma (1960), however related these, more to Harappan refugees. The trunnion axes were in typology and make similar to those of Transcaucasia; likewise the axe-adze to the Danubian ones, and antennae swords to Koban examples.

Lal (1968) showed that the trunnion axes, Fort Monroe Sword, socketed axe, and axe-adze were absent in the copper hoards found in the Doab region of Gangetic Valley, while harpoon, barcelt and anthropomorphs were confined to the Doab region only. Lal’s list included flat and shouldered celts, barcelts, double axes, antennae swords, harpoons, hooked swords, and anthropomorphs. Two double-edge axes from Bhagrapir (Orissa) were up to 40 cm wide with edges only 1-3 mm thick, could not be applicable as axes, except for catching fish in water. Amita Roy (personal conversation with Dr. D.P. Agarwal), reported five such double-edge axes from Kangsavati Valley in Bengal. Flat-shouldered axes were reported from all over India and abroad. The hook sword appeared to be a distinctive type with median ridge and hook chiselled out from the tang. The Harappan examples used a hole instead of hook for shafting. Navadatoli specimens do not have barb, and the median ridge is quite diffused compared to Copper Hoard examples. The hook sword was accompanied by anthropomorphs and antennae sword. The hoard at Sarthavli, Bahadrabad, and Fatehgarh had anthropomorphs with harpoons.

There are two varieties of the harpoons, one cut from a thick sheet and other cast in a double mould and appeared to be an instrument of fish hunting in great river waters or of game as shown in a rock shelter in Mirzapur.

Antennae swords 42-75 cm in length had antennae bifurcations at the hilt end,
are reported from Doab zone. At Kallur in Andhra Pradesh these had very short antennae. From Mehsana (Gujarat) four such swords were reported with the antennae beaten and flattened for mounting. From Chandoli was found a dagger instead of a sword. From Daimabad also four massive objects all solid cast, and weighting over 60 kg came in light (Fig.6).

At Bisauli harpoons and anthropomorphs were found together; at Bithur antennae swords and harpoons were associated, while at Fatehgarh an antennae sword and anthropomorphs were found together. Sarthauli, Bahadrabad and Nioro were other sites from where these implements have been reported. From Midnapore (Hardoi) some flat celts had bull figurine engraved near the butt ends.

The barcelt, 60 cm, is thought to have been used as crowbar for digging copper ores; these were reported from copper rich area of Bihar. One such celt is also reported from T. Narsipur (A.P.).

Copper implements from southern and eastern sites of Bihar and Bengal include shouldered and flat axes and rings. The bar celt type of this group is missing in the Doab. One sample of this group is from Gungeria in the Balaghat district of Madhya Pradesh (Gupta, 1970).

That the Bahadrabad, Nasirpur, Bisauli copper hoards were really associated with OCP ceramic complex was established by the excavations at Saipai. In Rajasthan, Haryana and Western U.P., the Harappan influence is distinct. A Doab-type harpoon was reported from Mitathal (Haryana). From Khurdi in Rajasthan, celts of Hoard type were found with copper pans of Harappan types (Fig.7).

As to alloying, Lal (1951) reported the Doab copper hoard to be free of tin, yet, Smith (1905) reported high grade bronze in examples of it from the British Museum. Arsenic also was present in the Doab as well as in the Harappan implements. That the mid-doab, though free of ore sites, should have had a distinctive and advanced typology, is puzzling.

So far Heine (1936) and Allchin (1968) have associated the Copper Hoards with the Indie Aryans, while Piggott (1950) thought them to be the work of Harappan refugees; and Lal (1972) considered the authors to be the aboriginal tribes of India.

To determine the chronological horizon of this culture a dozen sherds from four sites, Atranjikhera, Lal Qila, Jhinjhana and Nasirpur were examined and dated
between 2600 and 1200 B.C. (Ghosh, 1965). Different dates so far available from these sites are given below:

**THERMOLUMINISCENCE DATES**

<table>
<thead>
<tr>
<th>Site</th>
<th>Sample</th>
<th>T.L. Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atranjikhera</td>
<td>111 - b.4</td>
<td>1610 BC</td>
</tr>
<tr>
<td>Atranjikhera</td>
<td>- b.5</td>
<td>1170 BC</td>
</tr>
<tr>
<td>Atranjikhera</td>
<td>111 - c.1</td>
<td>2280 BC</td>
</tr>
<tr>
<td>Atranjikhera</td>
<td>111 - c.2</td>
<td>1250 BC</td>
</tr>
<tr>
<td>Atranjikhera</td>
<td>- c.3</td>
<td>2130 BC</td>
</tr>
<tr>
<td>Lal Qilla</td>
<td>112 - a.1</td>
<td>1730 BC</td>
</tr>
<tr>
<td>Lal Qilla</td>
<td>112 - a.2</td>
<td>2030 BC</td>
</tr>
<tr>
<td>Lal Qilla</td>
<td>- a.3</td>
<td>1990 BC</td>
</tr>
<tr>
<td>Jhinjhana</td>
<td>113 - b.1</td>
<td>1570 BC</td>
</tr>
<tr>
<td>Jhinjhana</td>
<td>113 - b.2</td>
<td>2650 BC</td>
</tr>
<tr>
<td>Nasirpur</td>
<td>114 - a.1</td>
<td>1500 BC</td>
</tr>
<tr>
<td>Nasirpur</td>
<td>114 - a.2</td>
<td>1180 BC</td>
</tr>
</tbody>
</table>

The occurrence of a fragment of an anthropomorphic figure at Lothal is suggestive of a date around 1900 BC (Lal, 1962; Gupta, 1965). Finally, two 14C dates are available from Jodhpura. PRL at Ahmadabad produced a date between 2500 and 2200 BC for Copper OCP levels at Jodhpura, and Agrawal and Kusumgar (1979) named this culture as Jodhpura culture of the Pre-Harappan period. The beginning of OCP at Jodhpura may be pushed to 2700-2800 BC (Agarwal, 1982).

Thus, this culture was widespread in an area ranging from west Berjwal and Orissa in the east to Gujarat and Haryana in the west and from Andhra Pradesh in the south to Uttar Pradesh in the north. In all, the largest hoards come from Madhya Pradesh.

3. **KAYATHA CULTURE**

Kayatha, situated on the bank of the Kalisind, an affluent of the Chambal, gives the culture its name. Before the discovery of this site, it was thought that Malwa
Culture was the earliest chalcolithic culture in central India. Wakankar, (1967) discovered this culture, which has been established to be earlier than both the Ahar and the Malwa cultures.

The most distinctive feature of this culture is its pottery in three fabrics (Ansari, and Dhavalikar, 1975). The most predominant is a thick, sturdy brown slipped ware painted in violet or deep red. The designs are generally linear, painted on the rim of bowls, basins, and globular vessels.

Jars with concave necks are the main shapes, though storage jars are also found. The pots are made of a fine, pinkish well-levigated clay. The deep bowl with a beaded rim and the globular jar are also common.

Another important ceramic of the Kayatha culture is the Buff Painted Red Ware. The pots were given a buff wash and geometric designs like loops, festoons, latticed diamonds, and oblique lines were done with a red pigment put over it. The main shapes of this ware are concave necked jars, basins, and lotas.

The last ware of this culture is the Combed Ware. It is a red ware, generally without a slip; and the main shapes are bowls and basins.

The Kayatha people were quite well off in copper. They had also developed microlithic blade industry comprising lunates, pen knives, parallel-sided blades, etc., made of chalcedony. Necklaces of semi-precious stones like carnelian, agate, and steatite were also in vogue.

The Kayatha culture is known from forty other sites in the Chambal Valley, though the only one excavated is Kayatha (District Ujjain). This culture is dated between c.2000 and 1800 BC as indicated by the 14C dates (Agrawal, 1982).

4. AHar Culture:

This culture was first recognised by Agarwal, R.C. in 1950 in the Valleys of Banas and Chambal towards the east of the Aravallis. Initially named White Painted Black-and-Red Ware, it was later on called Ahar Culture (A.I.R., 1953). The main types of pottery in this culture included bowls with in-curved or straight sides, dish on stand, a globular jar with high neck etc. The main feature was the painting executed in cream white pigment on the outer, inner, or both sides. The motifs included dashes, wavy lines, concentric arches, etc. The rimless bowls with straight or convex sides and shallow base have been related to the early phases of this culture.
Besides, there is pottery in black, blotchy gray, tan black and red fabrics. Yet another feature is a stone-ware-like fabric of compact, extremely well levigated clay and well-fired, so that it gives a metallic sound when struck. The slipped ware is tan, orange or chocolate in shades. It has fine burnished or polished surface at times. The most popular type shades is Red ware followed by the Black Ware, some times painted with white pigment. A few pieces of buff ware are also reported. Some pots were of Lusturous Red Ware. Malwa and Jorwe Ware’s type (I.A.R., 1961-62).

Blades of chert or chalcedony are found, while microliths are rare. Terracotta objects include humped bulls, biconcave beads besides globular and nut-shaped, which are marked by incised decorations. Semi-precious stones found are carnelian, agate, chalcedony, quartz, etc. Copper objects include rings, bangles, and axes.

Some iron objects were also reported from the upper chalcolithic levels on this site (Sahi, 1979). This culture prevailed in parts of Rajasthan and extended to Gujarat (Sankalia, 1969).

This culture is also named after the River Banas on whose banks its sites were mainly found. Though more than fifty sites of this culture are known in the valleys of the rivers Banas and Berach in south-east Rajasthan, excavations have been conducted only at Ahar (District Gilund) and Balathal (District Udaipur).

Sankalia, on the basis of a comparative study of the pottery types, places the beginning of Period-I at Ahar at circa 2000 BC. Mandal (1972) concluded that Ahar Culture begin around 2100 BC. At Kayatha, Period-II is characterised by the Ahar Culture which, according to 14C dating, falls between 1800-1600 BC, (Agrawal and Kausumgar, 1979). However, taking into consideration the 14C dates at Kayatha, it can be said that the period of ascendancy of Ahar culture was between 1800 and 1600 BC.

5. PROBLEM OF THE BLACK AND RED WARE

Black-and-Red Ware is a pottery characterised by black and red colours distributed unevenly over its surface; the black covering the inner part and rim portion of the outside, whereas the red is confined to the remaining surface outside. This pottery was widely distributed all over India and has been correlated by some archaeologists to races like Dravidians, Aryans, Yadvas, Bhils, etc., (Agarwal, 1966). Others have held that it had a cultural personality of its own.
At Chirand (Bihar) and Piklihal (Andhra) Black-and-Red Ware was found with Neolithic finds. In Gujarat it was found from Harappan sites like Lothal, Surkotada, Rojdi, Rangpur and Desalpur. In Bengal it was reported from Mahisdal, Pandu Raja Dhibi, etc. The Banas sites of Ahar, Gilund, and Chosla, as well as the Malwa sites of Maheshwar, Nagda, Eran, Kayatha and Navadatoli, the Deccan sites of Inamgaon and Chandoli, and Chalcolithic sites of Karnataka, have also yielded this pottery. In northern India this pottery precedes PGW and follows the OCP, at Aranjikhera and Jakhera in Uttar Pradesh, and Noh in Rajasthan. It is also reported in the pre-Northern Black Polished ware levels of Sohgaura, Prahladpur, and Rajghat and from Megalithic sites of south India. The distribution thus, of this ware covers almost the whole of India and its ethnic equations are still far from settled (Agrawal, 1982).

6. MALWA CULTURE

The pre-historic Malwa culture in the Malwa plateau and further south was defined by Sankalia, Rao and Deo, (1958) on the basis of a black painted red ware. The slip varied from yellowish brown to dark red. The surface of pots is generally matt and worn out. The material used in clay included grass, sand and lime particles; the core in large vessels was blackish. The pottery was wheel-turned. Designs are in black or reddish black and shining. The thickness of the paint is uneven. The common types are dishes on pedestal, and bowls on pedestal with a flat base and goblates. Basins had outgoing or ingoing sides. There were narrow necked vessels with flaring rims, corrugated bulbous body and low hollow pedestals. There were also small or medium sized storage jars with fairly broad mouths, and pots of lota shape (Dhavalikar, Sankalia and Ansari, 1988).

Painted Designs included geometric, stylized animal, floral, or natural scenes (like sun-rise). The animal motifs are black buck, peacock, panther, ox, dog, pig, crocodile, goat, deer, tiger, fox, tortoise and insects. Stylised human motifs are few on cream slipped wares. Designs are confined to the neck and upper parts of the vessels, but rarely painted on the entire pot (Sankalia, 1974).

Other wares in small quantum were (1) black-and-red ware with paintings in white, (2) white or cream-slipped ware, (3) grayish black ware, (4) incised coarse red and black ware, (5) tan ware, (6) Jorwe ware, etc. (Allchin and Joshi, 1970).
Microliths are few and accompanied by copper artifacts such as axes, arrow heads, chisels, swords, daggers, nails, fish hooks, pokers, rings and beads. Bone, ivory and stone beads, pendants, earstuds, bangles and ear-rings were few in number. Terracotta objects and sling balls of stone are common. The culture was found in the Malwa region and southwards beyond the Tapti. In the north it extends upto Sonegaon. Such pottery has also been reported from Kosambi (Mishra, 1969).

The Malwa culture was mainly located in Madhya Pradesh in the valleys of the Narmada and the Chambal and its tributaries. The people of this culture did not cross the barrier of the Vindhyas in the north but moved southwards into the valleys of Tapti, Pravara and Godavari (Wakankar, 1982). The main excavated sites of this culture are Maheshwar, Navadatoli (District, West-Nimar), Eran (District Sagar), Nagda (District Ujjain), Bhima-Prakash (District Dhule), Daimabad (District Ahmed Nagar), Inamgaon (District Pune), Savalda (District Dhule) and Tripur (District Jabalpur). The main shapes of the pottery include convex /concave sided bowls, vessels with flaring rims, long tabular spouts, (four of which are said to be peculiar to Prakash alone), plain high necked water jars and basins (Sankalia, 1974).

Archaeologists fix different dates for this culture. The 14C dates assign a date bracket to c. 1700-1400 BC (Agarwal, 1982).

7. JORWE CULTURE

This culture was named by Sankalia (1950) after the excavation at Jorwe. The predominant pottery of this culture was the painted black on red and slipped and painted in black-ware. The designs on Jorwe-ware included loops, intersecting semi-circles, latticed parallelograms, with tendency towards geometric patterns. Animal and human forms, and plant and floral designs, were conspicuous by their absence. Other finds were thread material of cotton, silk and flax (used in copper bead neckless), grounded axes and chisels, querns of fine grained basalt, hammer stones, stone balls, semi-precious stones, like agate, jasper, carnelian, terracotta, shell, steatite, faience, besides bangles and rings of copper. The grains and seeds of date and ber were another features of Jorwe culture. The decline of this culture was gradually followed by an exodus on account of famine (Sankalia and Deo, 1955).

This culture was wide spread in the Deccan from the valleys of Purna (Vidarbha),
to the Tapti Valley (Khandesh) and Navdatoli to the north, further south, it is found in the valleys of the Krishna and Bhima. At Brahmagiri it is found in the earliest levels of Neolithic-Chalcolithic culture.

The Pravara-Godavari valleys are the cradle of this culture. An average Jorwe settlement has an area of 2-3 hectares, whereas a large one can extend to about 20 hectares. The main excavated sites are Inamgaon and Jorwe (District Ahmad Nagar), Prabas patan (District Junagarh), Jokha (District Surat), Bahal (District Jalgaon), Nevasa (District Ahmad Nagar), Nasik (District Nasik), Chandoli (District Pune), Bahupura (District Dhule), and Songaon (District Pune) the largest amount of evidence about the life of Jorwe people comes from Inamgaon.

On the basis of 14C dates, Agarwal (1971) believes that the Jorwe culture may have extended from 1500 to 700 BC. Mandal (1972) almost on the same evidence, is in favour of placing this culture between 1600 and 1200 BC. According to Dhavalikar (1973) the culture can be placed between 1500 BC - 700 BC. However, Sankalia (1974) has rightly suggested a time bracket between 1400 BC to 1000 BC for the Jorwe culture.

7. EASTERN CHALCOLITHIC CULTURE

This culture extended from Bengal, westwards towards central Gangetic plain. (Sharma, 1973; Mandal, 1972). The character of this culture in its lowest strata is neolithic, followed by chalcolithic (Verma, 1969). Due to the occurrence of white painted Black and Red ware it is considered to be genetically related with the Banas culture.

Verma has distinguished two zones of this culture: (1) the western part of Bihar and (2) eastern part of Bengal. The associated pottery of this culture was lustrous red ware, with channel spouts found in plenty in Bengal and absent in Bihar. Mishra (1970) found the use of black-and-red ware technique, and familiarity of the people with potters' wheel, a unifying feature of the diverse sites of this culture.

The ceramic complex included Black-and-Red ware with red ware and black slipped ware. The fabric varies from coarse to medium quality. The pots were coated with a thick slip (Verma, 1970-71). The main types in black-and-red ware are jars, vases, bowls, dishes and basins. A special feature is horizontally splayed out rims and angular necks. The forms in Black Slipped ware are confined to bowls and
dishes. Dish-on-stand is also reported (Surajbhan, 1975). Red ware also included vases, basins, bowls, and troughs. Perforated pots, lid-cum-dish in coarse fabric, cream slipped painted bowl, and lota in steel-grey were also reported. Cream painting, on red and black surface, was in strokes and lines.

Other characteristics of this culture included bone arrow heads, stylus and pins. Only meagre use of copper is attested. A copper bangle was reported from a single site. Terracotta figurines included a headless flatish bird with punctured decorations.

Bihar and Bengal form two separate regions within the eastern chalcolithic culture zone. The important excavated sites of this culture are Taradih (District Gaya), Pandu Rajar Dhibi (District Burdwan), Chirand (District, Saran), Mahishdal (District, Birbhum), Hatikara (District, Bholpur) and Sonepur (District, Gaya).

8. SOUTHERN CHALCOLITHIC CULTURE

Wheeler (1947) identified the culture at Brahmagiri, followed by Sankalia and Rao (1958), and Allchin (1963) from other sites. Characteristic features of this culture had been ground stone-axe industry and rudimentary flakes or blade industry.

Pottery was hand made gray or buff brown with a few pots showing black or red burnished slip often with purple painted decorations. A few bands of ochre were applied after firing the pot. Another feature of this ware was applied-ring-feet and hollow pedestals. Red and Black Slipped ware totally disappeared in second phase of this culture. The new developments had perforated vessels, metal objects of bronze and copper.

In the third phase copper bronze tools increased in number. Gray and Buff ware became common with new wheel-thrown unburnished ware with black or purple paint, like that of Jorwe ware.

Then there was black-and-red ware occasionally painted in white, particularly bowls and dishes.

A large number of Chalcolithic sites have been excavated in south India, e.g., Kodekal (Gulbarga), Utnur (Mahbubnagar), Nagarjunakonda (Guntur), Palavoy (Anantapur) in Andhra Pradesh; Tekkalakota (Bellary), Maski (Raichur), Piklihal (Raichur), Terdal (Bijapur), Sangankallu (Bellary), Kupgal (Bellary), Hallur (Darwar), Brahmagiri (Chotraduraga), Himmige (Mysore), T. Narsipur (Mysore), in Karnataka, and Puiyamalli (Arcot) in Tamil Nadu.
The evidence of Brahmagiri (Wheeler, 1948) for the first time placed the Chalcolithic culture of the peninsular India in a stratigraphical sequence. The evidence of Sanganakallu stands next to Brahmagiri in providing evidence of the Southern Chalcolithic culture in a stratigraphical context (Rao, 1948). The Piklihal evidence further confirms the stratification of the southern chalcolithic complex (Allchin, 1960). On the basis of $^{14}C$ dates available so far from the excavated sites of southern India, it may be concluded that southern chalcolithic culture flourished between c. 2500-1000 BC.

9. PAINTED GREY WARE CULTURE

Painted Grey ware culture is identified as an Iron Age culture which bridges the gap between the proto-historical and historical archaeology of northern India. Lal (1954-55) has identified this culture with Mahabharat. Sharma (1974) believed that the author of this culture were the later Vadic people.

Painted grey ware has thin fabric, fired to a uniform grey and painted in black. Motifs included swastika, short spirals, sigmas and parallel linear strokes. Main types were straight sided bowls, dishes, lotas, etc. The reported sites are Noh, Jodhpura, Sadargarh in Rajasthan, Khalaur, Bateshwar, Ahichchatra, Hastinapur, Allahpur Kaseri, Atranjikhera, Jokhera, Mathura in Uttar Pradesh. At Saravasti in eastern U.P., PGW sherds were found in early NBP levels (Tripathi, 1976). In a similar context it was also found at Vaishali (Bihar). PGW is considered a deluxe ware while main industry was that of Red ware, whereas grey, black slipped and red are the associated wares. In the eastern Gangetic plain, only the associated wares are found with iron while the deluxe PGW is absent. Such sites are Kosambi, Prahadpur, Rajghat, Sohgaura, Sonepur, Chirand, Khairadih and Narhan. Similarly in the north west at Manda only associated Red and Grey Wares are found, and not PGW.

Lal (1954-55), on the basis of excavation at Hastinapur, for the first time provided a chronological horizon to the P.G.W. culture. In his opinion the P.G. Ware culture could be dated from 1100 to c. 800 BC at Hastinapur. Later on, a number of P.G. ware sites were excavated. Different dates for P.G. ware culture have now been fixed by different scholars. Wheeler (1959) put this culture at about 1000 or 800 BC. Agarwal (1968) proposed the chronology for the P.G. ware culture ranging from c. 800 to 400 BC on the basis of $^{14}C$ dates at Atranjikhera. Gaur (1968) believed that the dating of Lal for the beginning of PGW culture was justified.
Tripathi, (1988) after her careful analysis of 14C dates placed the PGW with in 700-400 BC.

10. NARHAN CULTURE

The Narhan culture was named after the site of Narhan situated on the bank of river Ghaghara in district Gorakhpur. The Narhan culture is characterised by the white painted black - and- red ware as the principal ceramic.

The types of the pottery of this culture consists of bowls, dishes - on - stand and slipped basins. In the black slipped ware the important typological addition is the Lota.

In order to see the extent of this culture extensive surface explorations were carried out on both the banks of the Kuwana, a tributary of the Ghaghara in Gorakhpur and Basti districts of Uttar Pradesh (Singh, et. al, 1990-91) and as many as seventeen sites of Narhan culture were located. Of these Imlidih has been excavated.

On the basis of available records, Singh, et. al (1991-92) has fixed the time-bracket for Narhan culture between 1300 - 900 BC.

11. SAVALDA CULTURE

The Savalda culture of the Deccan, was named after the type-site Savalda, situated on the left bank of the river Tapti, in Dhule district of Maharashtra, where it was first identified in the year 1958 (Sali, 1968). The main characteristic features of this ware are that it is, on the whole of medium-to-coarse fabric, made on a slow wheel by paring technique as is indicated by marks of removal of excessive clay from the inside and treated on the outside with a slip which is usually thick and shows crackles. But the most important feature which distinguishes it from the other painted wares is that of the painted motifs of arms and weapons including the antennae ended arrow, notched arrow-head, double barbed fish-hooks, unilaterally barbed tool resembling a saw and harpoon (Sali, 1968). The types met with were high-necked jars with squat body and blunt carination, dish, platter, dish-on-stand, trough or basin, bowl, ring-stand, beaker, vase with splayed out rim, modern handi-type vase and lid with knob.

The Savalda culture is also distinguished for its pit-dwellings, human burials, and bone tools with near total absence of copper and blade industry.
Almost all the known sites of the Savalda culture e.g. Daimabad, Kaothe, etc. are located in the Tapti basin, and hence it is believed that its origin took place in this valley (Vasant, 1990). Chronologically, the culture has been placed between c. 2200-2000 BC at Daimabad, where the Savalda culture overlies the Late Harappan occupation. However, the single radiocarbon determination available from Kaothe excavation, i.e. 1920 ± 90 BC provides a time-bracket of c. 2000-1800 BC to this culture. But it was likely that the beginning of the culture went back to the last quarter of the third millennium BC at least in the Tapti basin.