Society and Economy during Early Historic Period in Maharashtra: An Archaeological Perspective

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Abstract: *The paper aims to analyze the archaeological evidence to understand the social and economic formation during the Early Historic period in Maharashtra. The analysis and discussion offered in the paper are based mainly on archaeological evidences unearthed in excavations. However, historical information were also taken into consideration for verification and understanding of archaeological evidence.*

Keywords: Early History, Megalithic, Pre-Mauryan, Satavahana, Society, Economy, Maharashtra

Introduction

History and archaeology need to grow together, instead of parallel, by sharing and utilizing sources as the primary aim of both is to write history. According to Thapar (1984: 193-194) "*The study of social history, economic history and the role of technology in Indian history, being comparatively new to the concern of both archaeologist and historians, require appropriate emphasis. Furthermore, in these fields, the evidence from archaeology can be used more directly. The historian has data on these aspects from literary sources but the data tends to be impressionistic and confined by the context. Archaeology can provide the historian with more precise data on the fundamentals of these aspects of history, resulting thereby in a better comprehension of the early forms of socio-economic institutions*". The social and economic conditions of Maharashtra during the early historic period have been reconstructed mostly based on available sources like inscriptions, coins and travelers' accounts. These sources help in knowing ruling dynasties and to some extent socio-religious and socio-economic conditions of early historic Maharashtra. Likewise, the material evidence from excavated early historic sites can be used for reconstructing the socio-economic and socio-religious conditions of Maharashtra. The present author, thus, made an effort to understand the social and economic growth in Maharashtra during the early historic period based on evidence unearthed in excavations at the early historic sites, andin doing so, historical data was equally consulted whenever required.

Archaeological Background of Early Historic Maharashtra

The environment of Maharashtra was congenial enough for establishment and growth of sedentary mode of life right from the second millennium BCE, as is evident from the presence of chalcolithic cultures (Dhavalikar 1988, Sali 1986). The chalcolithic cultures were mainly spread over western Maharashtra, but a regional variation of chalcolithic culture has been identified in eastern Maharashtra (IAR 1989-90:69; 1991-92: 68-69; 1993-94:79-84; IAR 1985-86: 58-60, 1989-90:66-69). However, the eastern part was dominantly occupied by the succeeding megalithic culture around 800 BCE or a little earlier than that (Thapar 1967, Deo 1970, 1991a, Thakuria 2014). The early historic deposit is generally found either on the chalcolithic or on the megalithic culture in the state. So far no OCP (Ocher Colour Pottery)or PGW (Painted Grey Ware) horizon has been found in Maharashtra, but there are reports of finding NBPW (Northern Black Polished Ware) shreds at a few excavated sites. These findings, however, do not correspond to NBPW chronology of Gangetic Valley, and if it does, then it needs more archaeological evidence to establish a NBPW phase in the state.

Ancient literature hardly speak about political activities of 700 -600 BCE in the state. The Puranas, Jain and Buddhist literatures, however, refer to the kingdoms of *Asmaka,Mullaka* and *Vidarbha*. Early inscriptions from Maharashtra also mention the first two. But, so far there is no tangible proof of their very existence, let alone of the details of cultural life of the people (Sankalia 1951).

The *Asmakajanapada* has been mentioned in the Buddhist and Sanskrit literatures. The *Dighanikaya* speaks of the earth being divided into seven territories, one of which was *Assay,* with its capital Potana (Kane 1917: 647). Potana is probably Paithan, and according to Dhavalikar, it may be reasonable to place its beginning around 6th century BCE (Dhavaikar 1999: 57), but excavations at the site did not yield any evidence of 6th century BCE (IAR 1965-66: 28-29). However, further extensive excavation at Paithan may push back settlement history. The excavations at Adam yielded a sealing which has been attributed to *Asmaka* because of its reading as '*Asakasa Janapadasa*' (*IAR* 1988-89: 59; Nath 1990). The sealing has been dated to 150 BCE based on paleography, and thus it does not throw any light on early existence of *Asmaka*.

Some recent researches tried to analyse the co-relationship between*Asmaka*and megalithic culture of Vidarbha (Sawant 2006, 2015). The main arguments of such co-relation are based on geographical factor and semantic relations. It is argued that the *"The meaning of 'Assa' in the Pali language is 'Horse', and 'Assaka' means 'having a horse'. Again, it is interesting to know whether originally the name of this Mahajanapada was in Pali, and then it was translated in Sanskrit as Asmaka. Or whether originally the name was in Sanskrit meaning stone (Ashma- stone) and that in course of time got translated in the Pali as 'Assaka' is also not known. Around 8th- 7th century BC onwards, the Early Iron Age of Vidarbha witnessed the emergence of the practice of building stone burials on the one hand, and the use of horses with their ornaments indicating special class of horse-users on the other (Sawant 2015:231)".* Hence, the two possibilities were suggested for the correlation of a

literally known dynasty that is *Asmaka* to an archaeologically known culture. 1) *that the dominant practice of building stone burials gave this Mahajanapada recognition as 'Asmaka' (here Sanskrit Ashma means stone) indicating prominence of Megalithic culture. 2) that the horses introduced from north India due to the migrations of Asmaka in Vidarbha, which ultimately made them different and entitled as 'Assaka' (here Pali Assa means Horse)*. There is no denial that a *Janapada* known as *Asmaka* existed for which literary evidences are available but to accept *Asmaka* as megalithic or vice versa needs more explanations. Firstly, the social and political structures of the Megalithic culture of Vidarbha need critical analysis to attribute "*Janapada*" status. The present state of knowledge on the Vidarbha megalithic culture indicates an agro-pastoral economy without any urban characteristic in the material cultures. Secondly, coins belonging to *Asmaka janapada* have been reported from different parts of Vidarbha (Patil 1991), but not from megalithic burials or settlement sites. Absence of *Asmaka* coins in excavated megalithic burials and settlement needs to be explained. Thirdly, the urban characteristics and developments seen in sites like Adam, Kaundinyapura, Pauni and Prakash from around 600 BCE in terms of brick architecture, civic constructions, craft and industrial activities are absent in Megalithic culture. If the Megalithic culture belonged to "*Janapada*" status then absence of urban characters in Megalithic sites needs to be answered.

However, there are some sites like Sopara, Prakash, Kaundinyapura, Adam, Bhawar where historical period has been assigned based on archaeological evidence to 600 BCE which has been termed as Pre-Mauryan Period. The Pre-Mauryan period was succeeded by Mauryan period at sites like Kaundinyapura, Pauni and Adam. However, it was only during the period of Satavahana that many new settlements were established and some existing settlements evolved into larger settlement. It is understood from available archaeological evidences that the whole region was occupied rapidly around 200 BCE or during the Satavahana (Ray 1988, Parasher Sen 1999, Dhavalikar 1999).

Growth of Towns and Cities: Structural Evidences

The development of towns and cities from around 700 BCE to 600 BCE was probably the results of ecological advantage, technological advancements, increase in the population growth and outcome of various features embodied in socio-economic and socio-religious factors. By this period Gangetic plain witnessed remarkable development with increasing number of settlements (Ghosh 1973, Lal 1984, Erdosy 1988,Allchin 1995, Chakrabarti 2000). Settlements with fortification, and civic and domestic architectures were common features of this period (Ghosh 1973, Allchin 1995, Chakrabarti 1995).

Evidence of fortification and emergence of civic architectures in Maharashtra have been reported since early occupation at a few excavated sites. Adam (1991-92:63-68), Kandinyapura and Puani (Nath 1998) were fortified from 700 BCE to 600 BCE onwards. Excavations at Adam (IAR 1988-89: 50-62; 1989-90: 61-65; 1991-92:63-68, Nath

1992) revealed that the settlement was fortified during the Iron Age itself and same was enlarged in the beginning of early historic period. No complete house plan could be exposed in the beginning phase of early historic period at the site. However, evidence of walls made of shale stones perhaps suggest building of houses with stone walls and mud flooring. Other structures were in the form of a fine *murrum* floor, rectangular or circular in shape, with post-holes. One of the circular floors was made of compact tile fragments and thick jar fragments. Evidence of fortification along with moat noticed at Pauni (Nath 1998). Fortification was built over the natural gravel surface using laterite and clay. Excavator assigned the fortification to Period I dated between 600 BCE to 400 BCE.

The Pre-Mauryan phase at Kaundinyapur has not revealed significant architectural remains. Evidence of architecture was found only in Mauryan layers. The evidence, however, is not impressive and only limited to a wall made of brick fragments and trap stones. In addition to this, a soakage well made of jars packed with brick fragments and potsherds occurred in the Mauryan level at Kaundinyapura (Dikshit 1968). The evidence of architecture in the Pre-Mauryan layers at Paunar is almost similar to the evidence from Kaundinyapura. Three floors made of very compact clay with lime were traced at Paunar. Plan of structure could not be reconstructed from these floors, but there were occurrence of postholes that suggest a superstructure (Deo and Dhavalikar 1968). The Phase I of Period IV at Nevasa did not yield any brick architecture (Deo 1960), but floors made of compact clay similar to Paunar was found. According to the excavator the extensive nature of floor at Nevasa with postholes suggests "*the existence of probably two or three rectangular rooms within one house* (Deo 1960:29)". Architectural remains of Period IIA at Nasik suggest houses made of mud wall and floor, and in addition to this, soakage wells made of pottery rings were reported (Sankalia and Deo 1955). No architectural evidence was found in the Pre-Mauryan period at Prakash, except two wells; one made of terracotta jars with open base and the other with terracotta rings (Thapar 1967). Absence of architectural evidence at Prakash is mainly because of limited nature of the "Cutting" method of excavation. The Pre-Satavahana period at Bhokardan also reveals floors made of compact clay and lime. The interesting features of this period at Bhokardan is a "bath room" like architecture made of stone slabs placed together, and joined with pit for draining of water (Jamkhedkar 1973). Evidence from all these sites suggests that use of bricks and tiles for construction was rare in the early phases of early history i.e. Pre-Mauryan and Mauryan periods. The early phase at these sites indicates preliminary and rudimentary stage of economic growth. Industrial activities like bricks or tiles production were in infancy. However, there was gradual development in civic activities like making soakage well using terracotta rings and jars in the beginning of early historic phase at Prakash and Bhokardan. The expansion of settlements and structural activities actually took place in the period of the Satavahana.

Pliny the Elder has recorded that there were thirty walled cities during the Satavahana period. Settlements were laid out with fortification. The houses and civic architectures

were made with plans and proper foundation. The sites like Adam, Kaundinyapura, Puani, Ter, Nagardhan and Chandankeda were fortified by mud rampart with moat surrounding it. The plan of houses and construction method witnessed development during this period. Excavation at Brahmapuri revealed the plan of a house with provision for multi-rooms with separate kitchen and corridor. Rooms were rectangular in plan and were made of baked bricks. The walls of houses were erected on well-laid foundation. Foundation was arranged by placing double rows of large pebbles laid in sticky, black brownish clay. Excavators describe the techniques used in construction of walls as "*the lowermost course of bricks slightly protruded outside, making a small ledge. On this, the second and subsequent courses were laid having the bricks laid throughout lengthwise. But care was taken to see that the joints of any two consecutive courses did not meet* (Sankalia and Dikshit 1952:32)". The roof was made of tiles fixed with nails as tiles were found on the house floor. The evidence of slits in the walls of the rooms suggests insertion of wooden door frames (Sankalia and Dikshit 1952:32). A brick pavement forming parts of two adjoining 'buildings' was unearthed which belonged to the Satavahana period at Kaundinyapura (Dikshit 1968). No definite plan of structure was found from Nasik period IIB, but large amount of debris of brick and tile fragments indicate constructions of brick walled house with tiled roof (Sankalia and Deo 1955). One of the brick structures worth mentioning at Adam is the three coursed wall structure with a door opening and several postholes. Another structure at Adam that deserves mention is the elliptical structure with stone walls encircling four circular structures. The elliptical structure had entrance towards the east (IAR: 1988-89: 50-62; 1989-90: 61-65; 1991-92:63-68). At Nevasa structures made of bricks occurred in Phase II of period IV dated to c.150 BCE to 50 BCE and period V dated 50 BCE to 200 CE (Deo 1960). Period Ib at Bhokardan revealed traces of foundations of brick walls, walls in association with floors and post holes, fallen roofs, ring wells made of bricks. House plan with brick paved floor and brick walls with provisions of kitchen and verandah were also found (Jamkhedkar 1973). Excavations at Junnar revealed structures made of rectangular shaped stones, bricks and brick fragments. According to the excavator, this feature does not belong to a house plan but belong to a long platform. In addition to this long platform, two brick walls were exposed which form part of a rectangular structure. Brick walls were constructed over the stone foundation (Shinde *et al* 2007). Though no proper house plan was recovered at Junnar, debris of brick and tile fragments near brick walls indicate construction of house with tiled roof (Jadhav 2006). Similarly no house plan was reported at Bhon but discovery of brick walls and tile fragments indicate construction of house (Deotare 2004). However, constructions of terracotta ring wells and water channel made of bricks were seen at Bhon (Deotare 2006, 2007).

A noteworthy architectural development at Bhon around 300 BCE was the massive stupa made of bricks. Total height of the Stupa from the base has been estimated to be around 7 m, consisting of *pradkashinapath* at the base followed by the *drum, anda* and *yasti.* The dome was made of bricks with a terraced drum at the base. Many postholes all around at specific distances on the outer most row of *pradkashina path* were found which has been interpreted as provisions for wooden railing (Deotare 2007). The other

site is Pauni where remains of two stupas were found (Deo and Joshi 1972). In one stupa, three phases of construction and repair were identified. The first phase indicated construction of brick stupa on lateritic horizon. The evidence of *pradakshinapath* was not found. During the second phase, stupa was elaborated with other architectural parts within two architectural phases. At first, thickness of the *anda* was increased and *pradakshina path* with wooden railing was added, and in the second phase *pradakshinapath* was further constructed, and stone railings with sculptures and gateways on cardinal directions were added. The second construction phase of the stupa can be dated to Sunga period from the style of the sculptures (Deo and Joshi 1972). The last construction phase belongs to Kshatrapa and late Satavahana. The other stupa seems to be a simple one without *pradkashina path*, gateways and sculptures. From numismatic and ceramic evidence, date of the stupa has been assigned between 200 BCE to 100 BCE (Deo and Joshi 1972). In contrast beginning of massive constructions of stupa around 300 BCE, evidence of temple construction is far rarer.

The architectural Brahmanical temple took its time till Gupta period to develop (Agrawal 1986). However, at some sites like Verapuram, Kudavelli, Sangamesvaram and Siddesvaram evidence of brick made structures that were indicative of embryonic stage of temple construction were noticed (Deglurkar 1999). Temple like structural foundation belonging to the Satavahana period was found in Maharashtra too. Excavation at Ter revealed an apsidal brick architecture that has been interpreted as temple assigned to the period of Pulumavi based on the context of finding a coin issued by Pulumavi (IAR 1968-69:). Rectangular brick architecture has been reported from Satavahana level at Mauje Mulchera that has been identified as remains of a temple (IAR: 1987-88:84, 1988-89:49). The archaeological evidence indicates that by around 300 BCE religious architectures, mainly Stupa, were built with great care as seen in Bhon and Pauni. The temple architecture however was still to develop intoit's fullest. It seems that use of bricks for construction of domestic and civic architectures were rare around 600 BCE to 300 BCE, but extensively used for construction of religious architecture like stupa around 300 BCE onwards.

Evidence of household architecture has not been found in large numbers from around 300 CE. However, plans of few houses belonging to this period are known but the evidence probably support decline of structural activity (Sali 1998). Evidence from Paunar suggests that house floor was made of well rammed clay, multi-roomed, with well-laid foundation, brick wall and tiled roof (Deo and Dhavalikar 1968). There are evidences of architecture from sites like Mulchera, Nagara, Mansar and Bhadravati that have been interpreted as temples of Vakataka period (Sali 1998, Joshi and Sharma 2000, Ismail 2008).

Leaving aside a few sites like Adam, Pauni, Bhokardan, Kaundinyapura, Brahmapuri and Nevasa, excavations at early historic sites in Maharashtra are limited in nature. Most of the time, sites were excavated with the aim to establish the cultural sequence. Hence, it is often difficult to unearth the structural plans in details. However, from the

above discussion it can be understood that well planned structural activities developed between 300 BC to 200 BCE and onwards. Prior to this, structural activities reflect a rural type of economy as seen in most of the excavated sites.

Art and Craft Industries

Archaeological evidence supports existence and practice of several types of crafts in the early historic period in Maharashtra. Crafts related evidences are found mostly from 1st -2nd century BCE onwards. Inscriptional evidences from western Indian caves also give a glimpse of existing craft industries and art activities around this time (Mirashi 1981:172, Ray 1986).

Carpentry seems to be one of the common crafts at all the excavated sites.The artifacts related to carpentry are mainly chisels, nails and clamps. At most of the sites, in the beginning of settlement, houses were made with mud floor and wooden superstructures, and tools like chisel seem to have been used for shaping and cutting wood to make the wooden superstructures. However, houses were also made of bricks and tiled roofs where wooden provision was required to support tiled roof. Furthermore, Brahmapuri has given evidence of a house with provisions for wooden door and window (Sankalia and Dikshit 1952). All these suggest that wood work or carpentry was one of the established crafts or industrial activities for house construction or other related requirements.

Metal objects made of gold, lead, iron and copper have been found, but so far no excavated site has produced evidence of manufacturing. There are findings of high quality stone moulds from Adam similar to those used by the local goldsmith. This has been taken as suggestive of gold work, like filigree work, at Adam by the excavator (Nath 1995). He further suggests craft activities at the site based on findings of finished artifacts of copper, bronze and crucibles (Nath 1995). It has been suggested that copper might have been exploited locally as ancient pits and slag dumps of copper were located at places like Pullar, Adyal, Nerla, Kitari, Garara, Tambekhani near Adam (Nath 1995). Copper was used mainly for producing household objects, ornaments and toiletry objects. Evidence for iron smelting at excavated early historic sites, so far, is rare except at Kheneri (IAR 1969-70: 22). However, it is likely that iron was smelted and melted to produce various artifacts as iron artifacts recovered from the excavated sites.

Bead making, especially stone bead making, was probably one of the most popular crafts of this period. Evidence of finished and unfinished beads along with debitage were found from numbers of excavated sites like Pauni, Bhokardan, Kaundinyapura, Adam, Mahurjhari etc. Beads were made at the sites using semiprecious stones like carnelian, different varieties of agate and chalcedony. These materials are locally available in the Deccan Trap (Iyer 1941, Brown 1936). However, non-local materials like lapis lazuli were also brought to the bead manufacturing centers like Bhokardan, Nevasa and Brahmapuri. The decorated terracotta beads were mostly made by using

moulds. Such moulds were found from Brahmapuri and Bhokardan. Moulds were also used to produce pendants imitating bullae. Recovery of mould for making bullae from Adam suggests local production of such artifacts (Nath 1995).

Beads and bangles of shells, finished and unfinished, were commonly found from several excavated sites. The unfinished shell objects indeed indicate existence of shell industry during the period. Sites like Pauni (Deo and Dhavalikar 1968), Nevasa (Sankalia *et al* 1960) and Junnar (Jadhav 2006, Shinde *et. al.* 2007) have given evidence of shell working industry belonging to early historic period.

Manufacture of ivory objects and ivory carving seems to be one of the crafts with high specialization. Ivory objects like combs, kohl-sticks, hairpins etc. were reported from sites like Ter, Bhokardan, Adam, Pauni etc. Besides these, beautifully carved ivory figurines were discovered from Bhokardan and Ter. Ivory figurine found from Pompeii shows similarity with those from Ter (Mehendale 1993) which further gives the impression that products of ivory craft were one of the items of international trade.

Terracotta and Kaolin art seem to be equally important during the early historic period in Maharashtra. Terracotta figurines from Paithan, Ter, Bhokardan, Nasik and Prakash suggest specialized art activity. It was a highly specialized technique which produced terracotta in round like free standing sculpture during the Satavahana period (Deshpande 1999). Terracotta figurines found from Ter, Bhokardan, Paithan, Nevasa, Brahmapuri and Prakash were either made of single mould or double mould.

Periplus mentions trade of cotton and cloth from Ter (Schoff 1912, Warmington 1928). This itself is suggestive of spinning and weaving industry in Maharashtra during the period. Archaeological evidence of spinning and weaving has come in the form of spindle-whorls from sites like Adam, Nevasa (Sankalia *et al* 1960) and Ter (Chapekar 1969). Findings of shear made of iron from Adam further suggest weaving and spinning crafts during the early historic period at Adam (Nath 1995).

From around 300 BCE, bricks and tiles were used for building houses and religious monuments like stupas, as seen at sites like Bhon, Pauni, Paunar, Kaundinyapura, Nevasa etc. Therefore, bricks and tiles were produced locally, and evidence from Bhon strongly suggests manufacturing of bricks at the site level itself (Deotare 2007).

Material Culture

All excavated early historic sites have produced variety of materials made of iron, copper, lead, stone, beads of semiprecious stones, ivory, terracotta, glass, etc. The materials can be categorized as weaponry, agricultural and hunting tools, craft related tools, household objects, ornaments, terracotta objects, miscellaneous and pottery.

The weaponry category of artifacts, made of iron, includes varieties of arrowheads, swords, dagger, spearheads. Brahmapuri, Paunar, Nasik, Prakash, Bhokardan, Nevasa and Ter yielded arrowheads with varieties of shapes. The most common is leaf shaped

arrowhead and reported from Brahmapuri, Nasik, Bhokardan and Nevasa. Leaf shaped tang and elongated leaf shaped were found at Prakash, Paunar, Ter and Brahmapuri. Nasik, Brahmapuri and Ter yielded triangular shaped arrowhead. There are some other varieties like leaf shaped from Brahmapuri, socketed from Paunar, horn shaped projection and blades with diamond shaped section from Nasik, bud and barbed shaped from Bhokardan, heart and *ardha chndra* from Ter. Spearheads were reported from Nevasa, Prakash, Paunar and Ter. The main shapes are socketed and tang varieties. They were found from Nevasa, Prakash, Nasik, Paunar and Ter. Ter also yielded triangular or elongated leaf shaped spearhead. The only example of caltrop was found from Period IIA at Nasik. The specimen has perfectly tapering and sharp pointed spikes. Choppers were reported from Nasik and Bhokardan. The choppers are more or less straight backed knives with triangular cross section and tang. Such choppers were reported from Nasik and Bhokardan. Two harpoons were reported from Brahmapuri. One has a single barb on top and the other is leaf shaped with point bent with tang end. Knife blades were found from Ter, Nasik, Paunar, Brahmapuri, Nevasa, and Bhokardan. The most common tool is blade with a rectangular tang.

Agricultural tools are far less in number and only major find is sickle made of iron. Sickle with curved body and tang seems to be common type. Sickles of this type were reported from Bhokardan, Brahmapuri, Paunar, Pauni, Nevasa and Ter. Besides this type, Nevasa yielded horizontally broad blades and short broad blade sickles.

Iron axes with shaft hole were found from Prakash. Iron axe with socket and a transverse break at the socket, and a pick axe with rounded socket were reported from Nasik. Fishhooks made of iron wire have been reported from Bhokardan. Fishhook made of copper has also been reported from Ter.

Craft related tools include chisels, adzes, clumps, nails, drill etc. Chisels were found from Pauni, Paunar, Nevasa, Nasik, Kaundinyapura and Bhokardan. The most common type is rectangular section with broad and convex working edge. Bhokardan yielded chisels of two types. One has a square head with conical, splayed and beveled edge, and the other is without head. Chisels that have squarish section pointed end were reported from Paunar and Kaundinyapura. Only one example of adze was reported from Nevasa. Adze is flat sided and has a tang to the body. Drill with rounded body and sharp tapering point was found from Nasik. Nevasa reported a drill of a strap wound spirally to the edge (Margabandhu 1985). Nails and clamps were found from almost all the sites. All these tools could be related with carpentry, house construction, woodwork or wood carving and stone cutting.

A large number of household artifacts made of iron, copper as well as stone were reported from the early historic phases. Objects like dishes, small pot, lamp, rattle etc. made of iron were reported from Ter, Pauni, Nasik, Nevasa and Bhokardan. Nevasa yielded frying shovels and rimless bowl. Household artifacts made of copper are not much in variety. Copper artifacts like small pots and dishes were found from Nasik,

Nevasa, Bhokardan, Ter and Paunar. Objects like lid of pot and pots, dishes and bowls made of stone were reported from Pauni and Ter. Querns and mullers were found from almost all the excavated sites from Maharashtra. Four legged querns were recovered from Nevasa, Nasik, Brahmapuri, Pain and Bhokardan, and rotary querns from Brahmapuri and Paunar. Cylindrical and oval mullers were reported from all the excavated sites in Maharashtra.

Ornaments were made of copper, iron, lead, glass, gold, semiprecious stones and terracotta. Different varieties and shapes of beads made of semiprecious stones were common finds from all the sites. Bhokardan, Brahmapuri, Nevasa, Kaundinyapura, Pauni yielded beads made of lapis lazuli. Glass beads of monochrome and bi-chrome including eye beads and composite glass beads were found from most of the sites. Beads made of gold and copper were found from Kaundinyapura and Brahmapuri. Shell ornaments like bangles and beads were found from sites like Kaundinyapura, Bhokardan, Nevasa, Pauni, Brahmapuri, Paunar etc. Terracotta beads mostly of areca nut shape were found in large number. Bhon produced nicely moulded terracotta beads. Ivory was also used to make beads and was reported from sites like Bhokardan.

Besides these, there were ornaments, mainly bullae, which were imitations of Roman coins. Bullae made of terracotta were found from Adam and Nevasa. There are many other artifacts, including figurines and artifacts made of ivory, terracotta and kaolin, that were found from all the sites. However, Ter, Bhokardan and Paithan deserve special mention on ivory figurine and artifacts. Besides these, coins made of potin, lead, copper and silver issued by local and regional rulers, with a few Roman coins were reported from Nevasa, Adam, Nasik, Bhokardan, Paunar, and Kaundinyapura.

Evidence of Trade and Commerce

Trade and commerce during the early historic period flourished mainly under Satavahana rule. Trade activity was not only seen within the country but also extended beyond the border. A number of ports on the West coast facilitated internal and external trade.

Archaeological evidence is too scanty to understand the condition of trade in Maharashtra in Pre-Satavahana period. However, appointment of *yavana* official in Konkan by Asoka might be a suggestion of existence of *yavana* colony in the Konkan (Dhavalikar 1986,Ray 1988, 1995). It is not unlikely that there was, to some extent, sea borne trade through Sopara to the Mauryan Empire. It will be logical to think that Sopara and some of the other costal sites, that existed prior to Satavahana, as some kind of local trading centers, and later these developed as ports for long distance sea borne trade as far as Rome. Hebalkar argues that "*The rise of ports was not an incidence occurred in a short span of times. It was a gradual process in which were involved the sailing communities, adventurers, traders, merchants, caravan leaders, bankers, artisans and many others* (Hebalkar 2001:155)". Moreover, establishment of a trade centre, such as a port, requires prior knowledge of geography or potentiality of the area to carry out business.

In such conditions, the pre-existing settlements are easier to develop as full-fledged business centres. Furthermore, Asokan edicts are found in mineral- rich areas of Southern Deccan, and important port towns in the Western and Eastern Deccan. According to Thapar, this probably indicates the interest of exploitation of resources for trade than annexation and control of power (Thapar 1987:13). The Asokan Edict found from Sopar may suggest the same idea i.e. potentiality of the place for exploitation of resources for trade. This situation probably existed with other port settlements along the coast, and thus recent explorations and excavations in western coast have provided dates for ancient ports going back to 300 BCE (Gogte 2007).

There are enoughinscriptional and literary evidences regarding trade under the Satavahana in Maharashtra. The *Periplus of EeythraeanSea* mentions existing ports and nature of trade carried out by the Satavahana with the Roman world (Schoff 1912, Huntingford 1980). *Periplus* mentions a number of ports in the Konkan coast like Barugaza (Broach), Kalliena (Kalyan), Souppara (Sopara), Semulla (Chaul), Mandagora, Palaepatmai, Meliziegara and Buzantion. Some of these ports have been identified (Indarji 1882, Gogte 2003, 2004, Schoff 1912, Huntingford 1980, Hebalkar 2001) and a few have been subjected to archaeological investigations and excavations (Indarji 1882, Gogte 2007). Excavations at Chaul have produced evidence of well-established Satavahana settlement and antiquities of Roman origin. It further suggests that trade activity from Chaul was not only with Rome, but also with West Asia as well as East Asia. West Asian and Chinese pottery have been found from Chaul. Glass beads made in Chaul traveled as far as Africa (Gogte 2007).

Ports were connected with inland sites like Nasik, Nevasa, Karhad, Ter, Paithan, Bhokardan, Adam, Brahmapuri, Junnar through land routes (Motichandra 1977). One of the routes passing through Naneghat probably played a vital role in connecting inland sites with ports (Gokhale 1991a, Gokhale 2008). Periplus further mentions about distance between ports and inland sites. It mentions that the journey from Bharukacha to Paithan takes around 20 days. Paithan was one of important settlement that provided large number of semi-precious stones to Broachfrom where those were shipped to Rome. Tagara (Ter) provided cotton and cloth. This is also supported through large number of spindle whorls found from the site.

Interestingly, most of the trade routes passed through Buddhist monastic establishments (Motichandra 1977, Ray 1986, 1989, 1999). The inscriptional evidence suggests that some of the Buddhist caves were donated by people from well-established trade centres. The Kanheri and Pitalkhora inscriptions refer to donors from Paithan, Nasik and Sopara (Gokhale 1991b). Deo argues that the rise of Indo-Roman trade brought prosperity and larger number of merchants and caravans involved in trade and achieved wealth (Deo 1975, 1991b). The flexibility in Buddhist philosophy against the rigid *varna* system of Brahmanism probably provided a scope for accepting donations from all classes of people by the Buddhist monasteries. The commoners directly or indirectly engaged in the trade network probably inclined towards

Buddhist faith for its flexibility. Hence, Buddhist monasteries probably came up along major trade routes to provide necessary support in the form of spiritualism and security. It is not unlikely that insecurity arose in certain areas while moving with valuable trade items. Buddhism was the only institutionalized religion of that time with established monasteries in major parts of the country. Therefore, Buddhist monasteries were found along the trade routes not only established by kings but also by traders and by influential personalities of the period. These Buddhist monasteries probably provided secure shelter especially during night for the merchants who moved with valuables. The existence of trade routes and trade centers along the Buddhist monastic establishments were actually mutual and reciprocal for the both the organizations.

Periplus mentions a list of items imported by the Romans from India including different kinds of spices, among which pepper was main, exotic wood, cotton and cloth including muslin and linen cloth, ivory and objects made of ivory, different kinds of semi-precious stones, glass, pearls, beryl, opal, aromatic and medicinal substances. The Deccan trap provided semi-precious stones for export to Rome as well as to other manufacturing centers within India. There are sites like Adam, Bhokardan, Mahurjhari and Ter from where beads of locally available semi-precious stones were manufactured. There are items made of ivory found from Ter and Bhokardan. Ter has given some of the finest ivories known so far and some of which were possibly exported as proved by the finds of exquisitely carved female figure at Pompeii (During Caspers 1981, Cimino 1994a). The black cotton soil is suitable for cotton cultivation. *Periplus* mentions supplies of cotton to Barugaza. Pliny also quoted Theoprastes (century 300 B.C) regarding cotton trade, and this indeed reveals a long tradition of cotton cultivation and trade in India. It is likely that Satavahana settlements took the advantage of black cotton soil to produce good quality cotton for trade. In addition to these, industries might have been set up for production of cloth also. There are findings of spindle whorls from Adam, Nasik and Nevasa that suggest weaving. In addition, the Naneghat inscription mentions donation of cloth (Mirashi 1981: 16, Part II). The donation perhaps was possible because of the local handloom industry.

Provisions required during sailing, like food grains, were collected from different parts of India and also exported to Rome (Cimino 1994b). *Periplus* mentions that wheat was traded for the 'on board sailors' that sailed ship to Rome. Charred wheat grains recovered from excavations at Bhokardan, Nevasa and Ter (Kajale 1974) provide evidence of wheat cultivation.

Excavations at Chaul yielded evidence of glass and glass bead making. Glass beads made in India, known as Indo-Pacific beads, travelled to faraway places (Francis 2002). Such glass beads are termed as trade beads because of their peculiar manufacturing technique confined to Indo-Pacific areas (Francis 2002).There are glass beads found from most of the excavated Satavahana sites in Maharashtra. However, there are not many sites that have extensive manufacturing evidence of glass beads during Early

Historic period in Maharashtra except Chaul. Beads manufactured at Chaul were transported to Asian as well as Africa countries (Gogte 2007).

There is no doubt that various Indian products were exported to Rome. At the same time Roman products have also been found from excavated sites in India (Macdowwall 1996). Roman amphorae fragments were found from excavated sites at Chaul, Nevasa, Bhokardan, Junnar, Paunar and Ter. Roman amphorae were probably one of the luxurious and popular items in India. The amphorae were used to carry Italian wine and olive oil produced in Roman sites to Indian markets (Grace 1979, Slane 1991). Another variety of Roman pottery known as *terra sigillata* has been reported from excavations at Ter and Adam (Nath 1995). The fine quality of bubble free Roman glass and glass objects were reported from Nasik, Nevasa, Kolhapur Ter and Adam. There are other artifacts, like mirror, mirror handles, bullae and bronze statues of Greek gods of Roman origin that were reported from sites like Brahmapuri (Khandalavala 1960) and Adam.

Such kind of elaborate external trade would not have been possible without a regional trade network. It can be presumed that goods exported to the West were not products of just one site. There were settlements and production centers with distinctive and specialized occupational groups. Contemporary inscriptions and literary sources mention a number of craft activities that can be corroborated by archaeological findings from excavated sites. *Milindapanha*, dated to the second century BCE lists about seventy-five occupations. *Mahavastu*,dated to 100 CE, tells about nearly 100 occupations. Satavahana inscriptions found in the caves of Naneghat, Junnar, Nasik and Khaneri mention production of items and traders who traded in corn, perfumes, flower, goldsmith, stone masons, hydraulic machines, oilmen, pottery, cloth, bamboo made items etc (Gokhale 2008, Burgess *et al* 1976, Ray 1986, Mirshi 1981). It is highly likely that each early historic settlement had specialized craftsmen and artisans. Raw materials were transported from the sources to the settlements that had specialized craftsmen and artisan. For example, lapis lazuli is only available in Afghanistan and finding of lapis lazuli at Bhokardan therefore indicates an exchange network for raw material or finished products with north-west frontier region. Similarly, finding of shell manufacturing evidence in inland sites at Nevasa and Junnar indicate network for resource with coastal settlement. The ivory objects from Adam, Ter and Bhokardan further indicate inter-sites distribution of the products.

Though maritime trade with Rome collapsed towards the end of the Satavahana period, but trade within regional margins continued during the Vakataka period. The material culture from the excavated Vakataka sites suggests a kind of uniformity and commonality which is probably because of inter linked trade centers or production centers within the country (Sali 1998). It is remarkable that during the Vakataka period, donation to the Buddhist monasteries were far less than during Satavahana, except donation of caves at Ajanta by one of the ministers (Spink 1992). On the other hand, a number of donations in the form village to Brahmana, and the construction of temples

have been mentioned in inscriptions (Mirashi 1963). Temple constructions were patronized by Vakataka kings and queens unlike Buddhist caves, which were donated by the traders or wealthy persons during Satavahana period. This may also explain the decrease in the number of wealthy traders or persons who could afford sizeable amount of expenses for religious constructions. Donations to the monastic establishment were in peak when the trade was in full force with the Roman world which provided lucrative profit to traders. Pliny lamented the drain of Roman treasures to India to pay for Indian products. Absence of such lucrative business during the Vakataka period probably restricted traders or people to invest larger amount of money for public purpose and on impressive secular architecture. On the other hand donation of land to religious bodies does not need cash investment. Moreover, excavated sites of the Vakataka period do not show prosperity in material culture as seen in the Satavahana period. Also to add, the urban characteristic seen in Satavahana sites are absent in Vakataka sites. All these perhaps suggest the rural nature of Vakataka settlements and decline of urban character. However, economy of Vakatakas was maintained by a strong administrative system as is known from inscriptional evidences (Mahajan 1992).

Subsistence Pattern

The subsistence of the early historic people of Maharashtra was based on agriculture, animal husbandry, hunting and fishing. Charred grains of wheat, rice, millets and varieties of cereals were found from excavated sites from Satavahana period. Charred remains of wheat were found from early Historic levels at Nevasa (Snakalia *et al* 1960), Ter (Kajale 1974, 1975), and Bhokardan (Kajale 1973). Evidence of rice was reported from Bhokardan (Kajale 1973), Kaundinyapura (Mittre 1968) and Ter (Kajale 1974, 1975). Paunar has given evidence of rice impression on pottery. Charred millets have been recovered from Paunar (Mittre and Gupta 1968) and Nevasa. Varieties of legumes have been recovered from the sites of Nevasa, Bhokardan, Ter, Kaundinyapura and Brahmapuri. This evidence suggest that subsistence was based on agriculture, and towns and cities obtained agricultural products from villages though small scale farming activities were carried out perhaps in towns and cities too.

Hunting and fishing were also practiced during the early historic period for subsistence. Bones recovered from excavated early historic sites provide evidence of various domestic animals. Among many, cattle and sheep-goat were domesticated commonly, and almost all the excavated sites yielded bones of domesticated cattle and sheep-goat. At Bhokardan bones of domestic fowl, domestic goat, cattle, sheep, domestic pig, buffalo etc. were reported in large number. Apart from these, bones of fish, swamp deer and elephant were also found from Bhokardan. Wild pigs, sheep and goats were slaughtered for food as evidence of 'charring and cut marks on the remains of such species' at Nevasa, Nasik, Paunar and Kaundinyapura were found. Bird bones from Bhokardan also indicate exploitation of birds as supplement for food requirement. It seems that some animals were domesticated like cattle and buffalo to

engage in agriculture and transportation. Some animals like sheep, goat and pig were domesticated for food besides hunting of wild animals for food.

Religion

Archaeological evidence pertaining to religious conditions of Maharashtra during the period under discussion is somewhat clear only from the Mauryan period. No concrete or direct archaeological evidence is available prior to the Mauryan period that can be treated as special characteristic feature for existing religion.

Suttanipata mentions a Brahmana from *Asmaka* who asked one of his disciples to visit Buddha and to get some of the questions answered by him (Gokhale 1976). This clearly indicates that prior to Buddha or contemporary to Buddha, Brahmanical institution was well established on the bank of Godavari covering the modern Maharashtra. However, the excavated sites in Maharashtra which has cultural sequence going back to 600 BCE like Prakash, Kaundinyapura and Adam have not produced any material evidence to reveal the nature of religion prior to Buddhism in the region. It is noteworthy that parts of Maharashtra were occupied by Proto-historic cultures till about 800 BCE. Religious belief and behavior of the proto-historic cultures is not yet clear, but there is reason to argue for the existence of worship of some kind of divinities from the discovery of terracotta female figurines as well as a few male figurines found from chalcolithic sites (Dhavalikar 1988).

Chalcolithic terracotta female figurine may have religious significance as some of them were found from Inamgaon in context indicating religious nature. Dhavalikar augmented from ethnographical analogy that sometimes figurines are made for special purpose and discarded at the end of the ceremony, and hence has short time utility (Dhavalikar 1988). Objects made for short time utility in archaeological context may not be retrieved always as they have tendency to get destroyed easily. Hence, retrieval of archaeological record of existing religious faith in the region prior to Buddhism is difficult. It could be likely that the local chalcolithic faith merged with the emerging Brahmanism much earlier than the penetration of Buddhism into Maharashtra, and evidence for it is yet to be discovered archaeologically.

Inscriptional and archaeological evidences support well established Brahminical faith in the domain of Satavahana. The Naneghat inscription of Naganika mentioned different Vedic sacrifices performed and donations given to priests (Mirashi 1981: 130-142, Part II: 5-16). The number of sacrifices and quantities of donations suggest elaborate and massive ceremonies. Such kind of Vedic ceremonies might have been celebrated in the presence of a large number of priests and followers. The Malhara plate which belongs to the later phase of Satavahana mentions six generations of a Brahmana family in Vidarbha (Mirashi 1981: Inscription no 64). In the Nasik inscription of Pulumavi, he mentions that his father Gautamiputra Satakarni resembled Rama, Kesava, Arjuna and many other gods and was a great a Hero. Such kind of comparison was not possible if those characters were not well familiar with and well accepted by

the people. The inscription of king Rishabhadatta in Nasik cave records the gift of 7000 Karshapanas to Gods and Brahmanas (Mirashi 1981: 98, Part II). Gift for Brahmana was in from of Dakshina, but gift to gods was probably given to temple or to the temple authorities. This may suggest that temples for God existed during the Satavahana period and probably are yet to be discovered in excavations. However, apsidal brick structure unearthed at Ter has been interpreted as temple and assigned to time of Pulumavi. Dating of the apsidal structure is mainly based on the finding of a coin of Pulumavi inside the structure (IAR 1968-69). Dating of structural features based on coins may not be precise, because movable wealth like coins circulates for generations. Hence, structure may be pre or postdate a coin issued by a particular king. At Mauje Mulchera from the late Satavahana layers a rectangular brick structure was unearthed and based on the structural form excavator has interpreted it as a temple (1987-88:84, 1988-89:49). These structures indeed do not confirm existence of temple during the Satavahana period as identification of structure as temple is totally based on architectural forms rather than finding of any religious object. Though structural and sculptural evidences are rare during the Satavahana period, inscriptions belonging to the Satavahana are clear about the existence and nature of Brahminical faith.

On the other hand, Vakataka were followers of Brahmanism. The inscriptions and land grants issued by the Vakataka kings speak about building of temples and donation of village to Brahman (Mirashi 1963, Bakker 2002). Excavations conducted at Mandhal (IAR: 1976-77:36, 1976-77: 39-40), Mulcjera (IAR: 1987-88:84, 1988-89:49), Nagara (IAR 1981-82: 49), Ramtek (Jamkhedkar 1992), Bhadravti (Ismail 2008a) and Mansar unearthed structural remains of temple belonging to the Vakataka period. Besides temples, Brahmanical sculptures were also recovered in excavation from Mandhal and Bhadravti. This evidence corroborates the inscriptional evidence and suggests the established nature of Brahminical religion during the Vakataka period.

From literary, epigraphic and archaeological evidence, it is known that Buddhism was patronized in Maharashtra by 300 BCE, if not earlier (Gokhale 1976). Dipavamsa and Mahavamsa stated that at the third Buddhist council, held during the time of Asoka, it was decided to send monks to certain countries to spread Buddhism. Among these, Dharmarakshita to Aparant, which is North Konkan and Mahadharmakshita to Maharashtra, were sent for spreading Dhamma (Gokhale 1976). Discovery of Asokan edicts at Sopara also suggest his administrative and religious activities in Konkan (Indraji 1882). The Deotek inscription in Vidarbha also provides clue of existence of Asoka's 'Dhama' policy though not Buddhism directly. The inscription, according to Mirashi, belongs to Asokan period. Mirashi pointed out that the inscription was issued by one of the Dharma-mahamatras appointed by Asoka. The inscription proclaims an order of the *Svami* that, whoever captured or killed any animals, would receive punishment. Mirshi has argued that this *Svami* is none other than Asoka himself (Mirashi 1968). Discovery of stupa remains from Pauni and Bhon datable to 300 BCE and also the Sopara stupa, if we believe Gorakshkar's argument (Gorakshkar 1986), suggest that Buddhism was established in Maharashtra by about 300 BCE.

During the period of Satavahana and Kshatrapa, Buddhism got liberal patronage. Most of the caves in Sahyadri range were excavated for Buddhist monks during the Satavahana. Interestingly, caves were not only donated by kings but Mahabhojas and Maharatis also donated caves for Buddhist monks. Inscriptions at Kuda, Mahad, Bhaja, Bedsa and Karle mention donations by *mahabhojas* and *maharatis* (reff). Apart from caves, brick stupas were also built during the period at Bhon and Pauni. Buddhism during the Satavahana period reached the common people and was embraced by many (Gokhale 1976). Buddhist faith was probably appealing to the common people in such a way, that those who remained in household wore pendants of semiprecious stones and terracotta bearing *trirantna* motif to show their affiliation to the religion. There are findings of *triratna* beads from several excavated early historic sites like Bhon, Nevasa and Bhokardan.

Buddhism continued to get royal patronage even after the Satavahana rule under the Vakataka rule. It has been often referred that the founder of the Vakataka family Grihapati Vakataka was a follower of Buddhism (Mirashi 1963). However, his successors followed Brahmancial faith (Bakker 2002). Despite this, Buddhism got equal importance during their rule. One of the ministers named Varahadeva of king Harishena excavated caves for Buddhist monks at Ajanta and Gulwada. Cave XVI at Ajanta was excavated by Varahadeva (Spink 1992).There are two more caves at Ajanta, Cave XVII and Cave XIX, that were excavated during the time of Vakatakas (Pathy 1992).

The earliest evidence of Jainism in Maharashtra is in the form of a story of Kalakacharya who visited Paithan during the period of king Salivahara who was ruling at Paithan (Deo 1954). Some scholars identify the king with Simukha (Rao 1960) or Hala (Sharma 1940). Hala also built a Jain temple (Rao 1960). The cave at Pala indicates that by 100 BCE Jainism was prevalent in Maharashtra, but it does not appear to have been very popular as there are hardly any remains available till the appearance of the Dharashiva caves in the beginning of the 600 CE (Shah 2008). However, there is literary evidence which refer to Jainisim in "Maharattha" with the capital at "Vachhagumma" or Vastugulma (Jamkhedkar 1965, Shah 2008).

Conclusion

The early historic cultural sequence in Maharashtra starts from Pre-Mauryan period. The period mainly succeeds chalcolithic culture but in Vidarbha it found overlying the megalithic culture. The period begins with use of iron and building of brick structures in limited nature. The archaeological evidence and cultural materials recovered from this period indicate transition in economy and social conditions from rural level to urban in nature. It made further progress, as reflected in archaeological record, from around 300 BCE onwards. Society evolved with mixed economic groups, professional crafts, trade, urban nature of structural activities, and, of course, religion. Structural activities were increased including religious establishments like construction of stupa, and perhaps temple in rudimentary shape. The varieties of craft related artifacts

indicate emergence of occupational groups based on crafts and industrial activities. Trade, both internal and external, flourished due to established networks of resource acquisition, production and their distribution. A complex society emerged with various occupational groups, trader groups and elite classes, and such complex society was managed through centralized authority and power, and thus monarchy was recognized and extended to a larger part of Maharashtra. Inscriptional evidence also suggests strong monarchial system from around 300 BCE onwards. Decline in economy was noticed towards 200 CE to 300 CE, this is perhaps due to decline in trade and trade networks. Material culture too suggest economic decline from this time onwards. Moreover, society was further segmented based on economic stratifications and religious doctrines.

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