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Trade, urbanism, and agricultural expansion: Buddhist monastic institutions and the state in the Early Historic western Deccan

Kathleen D. Morrison

Abstract

The western Deccan is well-known for its spectacular rock-cut Buddhist architecture and its extensive Buddhist monastic complexes. Many of these structures were cut during the Satavahana period, the first large-scale state polity in western India. In order to understand how Buddhist monastic institutions were integrated into the social, political, and economic organization of this period, it is necessary to begin to consider how production and distribution of produce and craft goods were structured and how both Buddhist monastic institutions and political authorities were involved in these patterns. Specifically, I examine the hypothesized link between Buddhism, trade, and state formation and suggest that no simple causal relationship can be discerned.

Keywords

Early states; South Asia; Buddhism; exchange; agriculture; settlement patterns; trade; urbanism.

The gift of Badha the ploughman's wife

(Burgess 1881: 83, translation of an inscription from Cave 6 at Bhaja)

In South Asia, the term Early Historic refers to a long time period from approximately 500 BC to AD 500. During this time, South Asia saw the re-emergence of cities and of complex polities, a dramatic and lasting transformation that took place at different times and perhaps in different ways throughout the subcontinent. In this essay, I focus on only one region, the Western Deccan (Fig.1), an area often viewed as a 'secondary' locus of state formation relative to the Gangetic plain. Although excellent scholarship on the western Deccan exists, this area has not received the same intensity of archaeological and historical analysis as has the Gangetic plain. Widespread attention has been given, however, to arthistorical, architectural, and chronological aspects of the spectacular rock-cut Buddhist 'caves' of the western Deccan. I intend here to begin to bridge the dual focus that has, on the one hand, seen the western Deccan as notable for its impressive art and architecture, but has minimized attention to its economic organization, preferring instead to view the latter as a mere import or byproduct from the more 'advanced' Gangetic region.

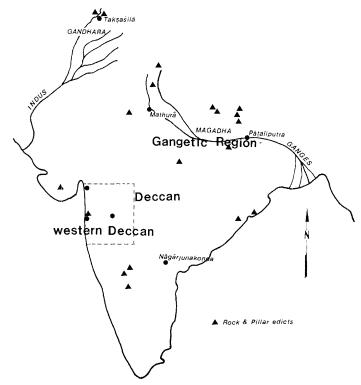


Figure 1 South Asia, showing areas mentioned in text. The term 'peninsular India' refers to the Deccan region and all areas further south.

Background: urbanism in South Asia

Cities have had a long history in South Asia, appearing initially in the third millennium BC and then apparently disappearing only to be revived nearly a thousand years later on the Gangetic plain (Fig. 2). This so-called 'second urbanization' (cf. Ghosh 1973; Erdosy 1988) of the Gangetic plain preceded the appearance of cities and complex political organization further south in the Peninsula. Deccan cities and polities are demonstrably later than those associated with the Gangetic second urbanization and, far from representing wholly independent developments, Deccan sites contain indisputable evidence of contact with the states, empires, and religious institutions of the north. Areas south of the Gangetic plain, then, have often been perceived in archaeological and historical scholarship on South Asia as developmental backwaters (cf. Parasher-Sen 1993: 66).

In the case of the western Deccan, it may be that imperfect archaeological understanding of later prehistoric periods, particularly the Iron Age, or Megalithic period, has made the transition to the Early Historic seem artificially abrupt. Two considerations suggest that this is indeed the case. First, as I discuss below, the western Deccan was already home to sedentary agriculturalists with well-developed structures of economic specialization and

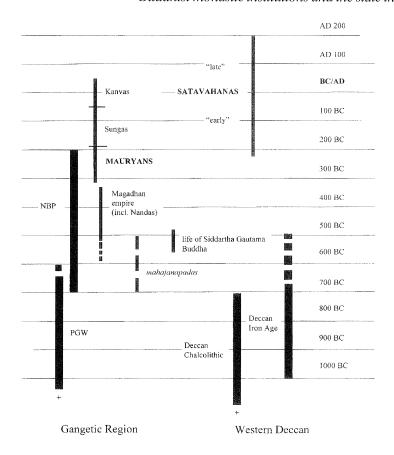


Figure 2 Chronological chart indicating dynasties and named periods. Dashed sections indicate areas of uncertainty or disagreement. Archaeological wares or periods are indicated by wider bars and historically reconstructed dynasties personages narrow bars. PGW = painted greyware; NBP = northern blackpolished ware, the diagnostic ceramics of Early Historic Period.

social differentiation before the advent of the Mauryan empire (321–185 BC), and areas within the western Deccan have been identified as belonging to pre-Mauryan polities (Schwartzberg 1992: 15 and below).

Second, and more importantly, I suggest that the organization of the latter part of the Early Historic period in the western Deccan, specifically its focus on trade, is not necessarily an accurate indication that trade was a 'prime mover' behind the origin of cities and states in the Deccan, as some have suggested (Kosambi 1989; Pannikar 1956; see discussion by Thapar 1984). Here rock-cut architecture enters the picture, since it has also been widely held that institutional Buddhism played a key role in this trade expansion. Buddhist institutions were, in fact, important components of early Deccan polities and economies (cf. Parasher-Sen 1993; Ray 1986), but that role appears to have been more complex than previously appreciated.

Research into the beginnings of urbanism and state polity in the Deccan has sometimes conflated an understanding of the operation of Deccan polities, such as the Satavahana polity, with an account of how such polities came to exist. This conflation leads us to see in the later economic and political structure of a polity 'reasons' for its development. In fact, there is abundant evidence for long-distance exchange during the latter part of the Satavahana period (c. 220 BC–200 AD). In the early Satavahana period, however, there is a much more equivocal material record of long-distance exchange. Unfortunately, little

more temporal resolution than this is possible. A great deal more remains to be learned about the actual structure of exchange networks and the role or roles of Buddhist institutions; these certainly changed through time, pointing to the need for improved chronological control. Chronological problems become exacerbated, however, when historical documents from later time periods are used to infer conditions in earlier time periods – a habit particularly problematic when considering periods of rapid change.

The Early Historic period and the Gangetic Plain

Initial dates for the Early Historic period vary widely, but there exists broad agreement that by 600 or 500 BC (cf. Ghosh 1973: 2–13; Roy 1986: 9–10) an inventory of co-occurring material objects and structural similarities was found throughout the Gangetic region. Allchin and Allchin (1982: 321) outline these features: the increasingly common use of iron; the appearance of cast copper and punch-marked silver coins; the use of baked brick; and the appearance of cities and of massive defensive features around many cities. This period is noted for the appearance of a distinctive ceramic type, the Northern Black Polished Ware (NBP or NBPW) along with the continued presence of the Painted Grey Ware (PGW). A voluminous literature addresses the chronology and distribution of these ceramics (e.g. Banerjee 1965; Roy 1986), and it is sufficient to note here merely that these wares, particularly the NBP, are associated primarily with Gangetic sites, although scattered sherds have been found more widely distributed. This period also saw the institutionalization of several 'heterodox' religious movements, most notably Buddhism.

Small polities known as *mahajanapadas* clustered on the Gangetic plain between about the eighth to sixth centuries BC (see Fig.1 in Chakrabarti, this volume). One of these, Avanti, was located to the north of the Narmada River and included, in addition to its largest city, Ujjain (Ujjeni), the settlement Mahismati, identified with the site of Maheshwar (Sankalia, Subbarao and Deo 1953: 16). One of the larger *mahajanapadas*, Magadha, appears to have expanded at the expense of the others between the sixth and fourth centuries BC and has been identified by some as an empire (cf. Thapar 1966, 1984).

The Mauryan empire (Thapar 1966) was the first major territorially expansive polity in South Asia. The geographical extent of Mauryan claims to supremacy is impressive, including all of northern India and the Deccan (cf. Schwartzberg 1992). However, it is not clear that the extravagant territorial claims of the empire, particularly under its most famous ruler, Asoka, a convert to Buddhism, were matched by close imperial control (Parasher-Sen 1993; Thapar 1992). These territorial claims are indicated in part by inscriptions or edicts (cf. Thapar 1966) carved into either natural rock or impressive sculpted columns (Fig.1).

Textual data and archaeology

The Early Historic period marks the advent, on a large scale, of written documents (see Ray 1986; Sarao 1990) and thus of problems of archaeological/historical integration. These documents include Buddhist texts as well as others such as the *Arthasastra*, proscriptions on statecraft attributed to Kautilya, a minister in Asoka's court (Kangle 1960–5;

Shamasastry 1961), and the *Periplus of the Erythraean Sea* (Huntingford 1980), said to be the account of a Greek trader from the first century AD. Although the *Arthasastra* purports to describe conditions in the Early Historic period, in fact it was compiled much later (Kosambi 1989: 142; cf. Trautman 1971). Although texts provide powerful and valuable sources of information about the past, they cannot be considered unproblematic narratives. It may be that the sudden appearance of a corpus of texts makes the transition between this period and those preceding it seem more abrupt that it might otherwise, since the Early Historic appears richly textured and fully developed in contrast to more sketchily understood pre-textual situation.

More to the point, Early Historic texts are overwhelmingly connected with the Gangetic region and many have only peripheral relevance for the western Deccan (cf. Ray 1986: 111; Parasher-Sen 1993: 70). Thus, archaeologists seeking to examine the political and economic transformation of Deccan society in the first few centuries BC can take only scant comfort from written documents. Contemporary rock-cut inscriptions from the Deccan constitute the chief exception to the problems presented by northern-focused texts or by later works such as the *Periplus*. While the interpretation of inscriptional data is not without ambiguity, they at least date to the time and place under consideration.

The Western Deccan before the Mauryans

The settlement history of the western Deccan prior to the advent of Mauryan expansion is one in which sedentary village farming communities comprised but one of many different subsistence strategies which also included hunting, gathering, herding, and trading. In the Chalcolithic, differentiation in the size and degree of elaboration of settlements, evidence from burial practices, and architecture have been interpreted as evidence for social differentiation on a scale Dhavalikar (1988a) terms a 'chiefdom'. Within the Deccan, the movement of a variety of raw material and finished products, including beads and shell objects, is well-documented. According to Dhavalikar (1988b: 71), many Chalcolithic sites were abandoned by c. 1000 BC, possibly a result of increasing aridity. What is remarkable, however, is that many Chalcolithic settlements (e.g. Prakash, Nevasa, Nasik) are also locales of later Satavahana cities, notwithstanding evidence of abandonment.

Only certain regions were abandoned in the Chalcolithic; in contrast to the Tapti and Godavari valleys, for example, the Bhima valley continued to be occupied (Dhavalikar 1989: 96). At Maheshwar/Navdatoli, on the Narmada river, there is a continuous occupational sequence between the Chalcolithic, Iron Age, and Early Historic (Sankalia, Subbarao, and Deo 1953: 16, and see above). The Deccan Chalcolithic ends around 700 BC (Dhavalikar and Ansari 1988: 134), overlapping in time with the Iron Age or Megalithic. Megalithic sites, which include settlements as well as megaliths, are widespread in the Deccan (Gururaja Rao 1972). No abrupt change in economy or settlement marks the transition between the Deccan Chalcolithic and Iron Age. Iron begins to appear in Deccan settlements around this time (although iron itself has been found in earlier contexts further south), and some ceramic types change. The end of the Iron Age overlaps with the Early Historic, and it is thus in the context of small- and medium-scale

iron-using agriculturalists that the process of urbanization in the Deccan must be understood.

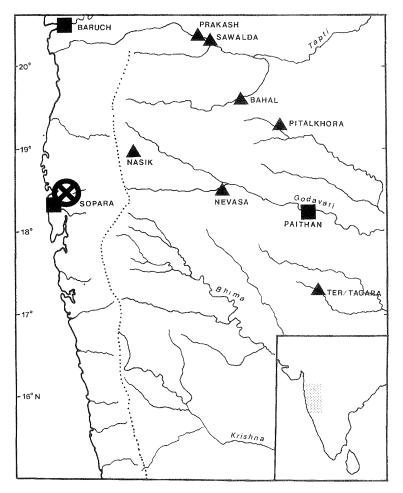
The Western Deccan between c. 600/500 BC and 300/200 BC

This period is not well-understood and can even be characterized as either later Iron Age or Early Historic, depending on the chronological scheme adopted. Changes in settlement organization are reflected by the new or newly-expanded, perhaps urban settlements at Baruch (Barukaccha; Fig. 3) and Sopara (Suparaka, the site of an Asokan edict; Sicar 1975: 33). Other large settlements include Pratisthana (Paithan), later to become a Satavahana capital. Stupas at Navdatoli, Pauni, and Kasrawad (Ray 1986: 52), all located in north-easterly portions of the Deccan, indicate the presence of Buddhism. Further, a few sherds of NBP are found in some Deccan settlements (Fig. 3). However, dates for the NBP cover a broad range (600-100 BC, Ghosh 1989: 133; 700-200 BC, Srivasta, cited in Chakrabarti, this issue), and the precise implications of NBP occurrence are difficult to assess. The probability, however, that a single set of cultural characteristics could unfailingly be associated with such a long-lived pottery type is probably not worth consideration. Although it is difficult to come to any clear conclusions regarding this period, the presence of substantial urban settlements, both within the Avanti polity (later part of the Magadhan empire) and further south, suggests that parts of the western Deccan were incorporated into state polities of varied size while other parts probably lay outside state authority. How and why towns or cities such as Sopara and Baruch were formed, and who the residents of these settlements were, is not clear; but in the absence of major population movements, for which there is little evidence, it must be assumed that local Deccan inhabitants were beginning to reorganize (or be reorganized) into larger and perhaps more functionally specialized settlements. Subsistence data are sparse, but Kajale (1994: 46–7) suggests – on the basis of work at Adam, a settlement in the western part of the central Deccan - efforts at agricultural intensification and attempts to domesticate local crops suitable for monsoon cultivation (see discussion below). Thus, even before the advent of the Mauryans, the western Deccan showed precocious signs of urbanization and agricultural intensification that need not have had a north Indian genesis.

The precise impact of the Mauryan polity in the western Deccan is difficult to gauge. Ray (1986: 52) notes that the Megalithic period continued right up until the (post-Mauryan) Satavahana period in some areas, suggesting that the changes observed did not entail major disruptions. Certainly it is clear that people moved between the Deccan and the Gangetic plain, and inscriptions indicated that donors to Buddhist monasteries often came from distant towns. Chronological problems make it difficult to outline the tempo of settlement expansion and growth precisely and to evaluate whether or not settlement shifts preceded, were coincident with, or followed Mauryan 'incursions' into the area.

The Satavahana period

Post-Mauryan politics in the Deccan are complex, but the next major polity to emerge in the area, this time locally based, was the Satavahana polity (Nilakanta Sastri 1975; Thapar



The western Figure 3 Deccan. Sites with NBP ceramics are indicated with triangles. The scarp of the Western Ghats is indicated by a dotted line. Settlements that appear to pre-date the vahana period are indicated by squares. The Asokan inscription at Sopara (Suparaka) is indicated by a circle with a cross.

1966). The Satavahanas probably emerged out of a pre-existing group of small polities, although they are the earliest clearly identifiable named polity in the area (cf. Parasher-Sen 1993). The Satavahanas had imperial ambitions and eventually expanded their regime to cover a huge area that included parts of the eastern Deccan (Thapar 1966: 99). I limit my attention here to the 'core area' of the Satavahanas (after Schwartzberg 1992), centered around their capital of Pratisthana (Paithan) in the upper Godavari Valley.

The early Satavahana period was one in which – although, as noted above, several large towns or small cities as well as farming villages already existed – there was a significant expansion of cities and presumably also of urban demands for produce and raw materials into new areas (Ghosh 1989: 132). In spite of the rather low esteem in which Megalithic societies seem to be held by archaeologists, the urban expansion and growth of the Satavahana period did not in fact represent a total change in settlement or productive organization. Although the political and economic shifts of the Satavahana period were real and significant, they did not represent a complete break with the past – and thus

perhaps need not be accounted for entirely in terms of exogenous 'influences'. New developments include larger settlements that can for the first time be considered unambiguously urban, as well as evidence for institutionalized religion and overt state power.

Buddhism and the Satavahana polity

The relationship between Buddhism and the Satavahana state was close, although the specific details are again far from clear. Outside its Gangetic homeland, the spread of Buddhism was associated with the extension of state power and state sponsorship (Heitzman 1984: 131). As noted, pre-Satavahana stupas do occur in the Deccan, but, during the Satavahana period, the number of Buddhist structures (following the definition of Heitzman 1984) increased dramatically. One of the most important Buddhist architectural forms was the rock-cut 'cave', a form that persisted in the western Deccan until the twelfth century AD (Nagaraju 1981; Dehejia 1972). These structures are not natural caves but features hewn out of sheer rock faces. Over 800 Buddhist rock-cut caves from the western Deccan are known, ranging from isolated structures to large and elaborate complexes. The most common forms are viharas, or monasteries for monks, and chaityas, areas of worship. Architectural styles became increasingly elaborate throughout the more than thousand years of rock-cutting (Fergusson and Burgess 1880; Dehejia 1972), and many very large complexes began quite modestly. The well-known site of Ajanta, for example, almost entirely post-dates the Satavahana period (see Plate 1 in Chakrabarti, this volume); only five caves date to the 'Hinayana Phase' (prior to the fifth century AD, after Kail 1975: 18-23). Monastic complexes also incorporate a great deal of diversity in scale and elaboration, both of individual structures and of complexes. Figure 4 shows a chaitya hall and two viharas from Nasik. This worship hall was constructed in several phases, that, according to Dehejia (1972: 159), commenced around 70-50 BC and ended around 25 BC. Nagaraju (1981: 271–4), on the other hand, identified three phases of construction: the first at 120 BC when the cave took its basic form; the second c. 70 BC when the stupa was added; and the third c. AD 120 when sculptural details were added. The monasteries depicted include cave XIX, dating to c. 90-70 BC and cave XV, dating to the 'Mahayana Period' or after the fifth century AD (Dehejia 1972: 159).

Although the Satavahana rulers were themselves not Buddhists (Thapar 1966), they nevertheless provided significant support to newly emergent Buddhist monastic institutions. There is a close association between the tempo of cave-cutting and the political fortunes of the Satavahanas. Ray (1986: 87) notes two major periods of monastery construction, the first between c. 100 and 20 BC and the second between about AD 50 and the third century AD. The seventy-year lull in construction coincides with a period in which Satavahana political fortunes were waning. The eastward expansion of the Satavahanas was accompanied by a concomitant expansion of Buddhist sites (Heitzman 1984: 131), so the association between political consolidation and Buddhism seems clear. However, royal patronage of Buddhist institutions was dwarfed by the quantity, if not the scale of gifts given by others, including non-élites. In the inscriptional record, royal donors are greatly outnumbered by merchants, craftspeople, farmers, and others, many of them women (Dehejia 1992; Willis 1992). Thus, the role of Buddhist institutions cannot be

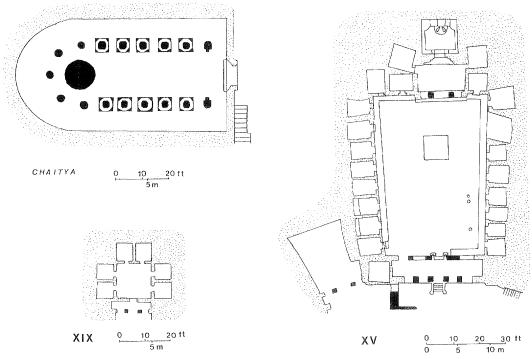


Figure 4 Plan view of a *chaitya* (worship hall) and Caves XIX and XV (*viharas*) from Nasik. For site location, see Figure 5 (after Fergusson and Burgess 1969).

solely linked to the political structure of the Satavahanas but must also be related to the economic (and religious) restructuring of this period.

Agricultural expansion

In addition to the growing number of rock-cut monastic sites, the first few centuries BC also saw an increase in the number, size, and diversity of settlements, and the expansion and intensification of agriculture. Although the fact of agricultural expansion has often been noted, there has been little attempt to examine the dynamics of this process. In the upland areas leeward of the Western Ghat mountains, rainfall decreases rapidly along a transect from west to east. However, lower rainfall is offset by the occurrence of fertile black soils, most particularly the famous *regur*, or black cotton soil of the Deccan (Spate 1954: 84). Deep pockets of redeposited *regur* are found on valley floors, and expanses of alluvial soils occur around the headwaters of the major river systems.

Early Historic agricultural economy appears to have been highly sophisticated and diversified. Wheat and barley have a long history of cultivation in this region, and barley (*Hordeum vulgare*) was found at Navdatoli, Nevasa, and Ter, with wheat (*Triticum*) recovered from these same sites as well as from Bhokardan (Chowdhury 1986: 6; Vishnu-Mittre 1977). Millets are also well-represented with *Eleusine corocana* recovered from Bhokardan and Nevasa, *Pennisetum typhoideum* from Nevasa and Ter, and *Sorghum* from Nevasa and Paunar.

Significantly, rice (*Oryza*) was recovered from Navdatoli, Bhokardan, Paunar, Pauni, Ter, and Kohlapur. Although rice had been present in the region as early as c. 1300 BC (Chowdhury 1986: 6), the number of sites containing rice increases in the Early Historic period. Kajale (1994), in particular, notes the large quantity of rice recovered from the Satavahana level at Adam. This pattern is difficult to relate to actual patterns of production or consumption, particularly given the paucity of well-studied archaeobotanical assemblages (see Kajale 1994; Vishnu-Mittre 1977) and, equally problematic, the lack of temporal differentiation within the long Early Historic period. Nevertheless, this combination of cultigens suggests first of all the possibility of multicropping (wheat and barley in the winter, rice and millets in the summer); and second of all, it points to the need, particularly in Ghat rainshadow, to control water for agricultural production. Although inconclusive, the data are suggestive of a shift toward more diverse agricultural repertoires and toward more intensive production in the areas around large settlements.

On the west coast, growing conditions are significantly different. Although high rainfall allows very productive wet rice cultivation in favored locales, the amount of cultivable land is limited and coastal soils are dominated by lateritic soils (Spate 1954: 84) of limited fertility. The coast was, however, well suited for the production of certain plantation crops, most notably coconuts (Kosambi 1989: 189). Coconuts have tremendous commercial potential, and inscriptions found in inland monastic sites refer to gifts of coconut groves. In one inscription from the monastery at Nasik, a grove containing 32,000 trees was donated (Senart 1905–6: 78–80). These large groves must have been located on the western coastal strip; the connection between coastal coconut estates and inland monastic establishments points to a degree of interdependence between the two areas.

What the role of the state in agricultural expansion was, if any, is not clear. As in later periods, however, the state was not the sole or even the primary actor in the construction and operation of irrigation facilities. Individual merchants are recorded as financing the construction of reservoirs (Ray 1986: 93), although rulers are also noted as builders of reservoirs and diggers of wells. Newly established Deccan cities would have dramatically transformed the demand context of agriculture as would changing patterns of trade. Agricultural products are themselves implicated in trade (e.g. cotton textiles), and any balanced view of Satavahana economy must include consideration both of exchange and of production.

Craft production and exchange

Historical and archaeological data attest to a high degree of craft specialization and an active network of exchange within the greater Deccan. The city of Ter, for example, was a center for the production of terracotta figurines (Chapekar 1969) and for textiles, with vats for dyeing cloth found in excavations (Ray 1986: 69). Ter also contains a brick chaitya (Chapekar 1969: 5). At Bhokardan, archaeological data indicate large-scale production of beads, with unfinished beads, soapstone moulds, and polishers complementing the recovery of nearly 2,000 finished beads of a variety of semi-precious stones, shell, and ivory. Bhokardan also contained a terracotta coin mould (Deo and

Gupte 1974: 73; Lahiri 1992: 334). Many other Early Historic sites have evidence for the production of beads, iron, terracottas, textiles, and ceramics (e.g. Lahiri 1992; Deo and Gupte 1974; Dikshit 1968; Margabandhu 1985). Objects produced in one settlement often found their way into others. Thus, there appear to have been well developed structures of craft specialization and exchange within the western Deccan.

The distribution of raw materials used in production is summarized by Lahiri (1992: 341), who notes that the western Deccan was almost completely self-sufficient in raw materials, identifying only two lapis lazuli beads at Nevasa as Central Asian products, and a Mauryan silver coin from Pauni and a silver punch-marked coin at Nevasa as Gangetic imports. If a few sherds of NBP ware are added to this, the picture that emerges is hardly one of domination by the Gangetic region over the Deccan. In an exhaustive analysis of raw material sources and the locations of manufacturing sites, Lahiri (1992) points to the importance of the Vindhyan region as a source of raw materials for Gangetic sites and downplays the role of the western Deccan as a source for Gangetic products. Thus, the political (incorporation into the Mauryan empire) and religious (spread of Buddhism) links that seem so clearly to connect the earlier cities and states of the Gangetic plain and the later cities and states of the western Deccan are not reflected in the material record of exchange as it is currently understood.

The Satavahana role in both production and intraregional exchange appears to have been limited. A large literature (e.g. Ray 1986; Thapar 1966, 1984) exists on the many different guilds of traders and producers who seem to have regulated at least some aspects of production and distribution without significant state assistance, and this point need not be elaborated here.

As extensive as the literature on intraregional exchange in the Deccan is, it is overshadowed by the even larger corpus of research on long-distance trade (e.g. Begley and DePuma 1991; Ray 1994; Wheeler 1954; Sarao 1990; Ray 1986; Huntingford 1980; Deo 1991; and see Bajpai 1989). That such trade existed and was well-established by the first century AD is beyond dispute. The premier textual source for economic history in the first century AD is the *Periplus*, which describes a thriving commercial nexus all along the west coast and in the major west Deccan cities. The beginnings of this exchange are, however, not well understood. Equally unknown is the role of the Satavahana polity in promoting, directing, or participating in this trade. By the time of the *Periplus*, individual rulers are seen as attempting to capture the trade by directing ships to ports they controlled (cf. Ray 1986: 61). In this sense it seems more reasonable to consider not a unitary Satavahana polity but competing and cooperating groups of political élites. That state functionaries were involved in and perhaps attempted to direct trade, both local and long distance, seems likely. That they fully succeeded, given our understanding of later time periods, seems unlikely.

Buddhist institutions

The spectacular rock-cut caves of the Deccan have been a focus of study for well over a hundred years (Fergusson and Burgess 1969; Burgess 1883). Architectural and arthistorical interest in Deccan Buddhist sites has not always been matched by a

corresponding interest in the articulation between monasteries and other groups and individuals in society, however. In many precolonial South Asian polities, religious institutions filled significant political and economic roles in addition to their more evident functions as ritual and scholarly centers. Hindu temples in Medieval South India, for example, were important foci for scholarship of many forms, including agricultural practice and scheduling. More than this, however, temple complexes were major political and economic players, in part due to their multiple roles as landowners, employers, consumers, recipients of gifts, and mediators of political legitimation (Appadurai 1978; Breckenridge 1984; Morrison 1995).

Buddhist site locations: trade and provisioning

The most direct association between Buddhism and trade stems from the support given to Buddhist institutions by traders and craft specialists, although a wide range of people, including agriculturalists, also made donations (Dehejia 1992). Buddhist philosophy has also been seen as more favourable to urban living and to long-distance trade than Brahminical philosophy, in that Buddhists do not face the same caste-based interdining and food taboos as Brahminical Hindus (Liu 1988: 6). This philosophical distinction may be cast as a social one: Buddhist precepts were, in principle, more inclusive, drawing people with diverse caste origins into a single system (Thaper 1984). Thus Buddhism may have provided, among other things, an attractive ideology and a means of legitimacy for groups in society without access to existing positions of (or routes to) power and prestige.

What was the connection between monastic institutions and systems of exchange, or of production for exchange? Heitzman (1984) has suggested a symbolic role for Buddhist institutions in that donation to Buddhist institutions constituted a unitary – and unifying – field for political action in the broad sense. That is, donations allowed people 'at various class and status levels within the urban environment to express and confirm their positions through ostentatious display' (Heitzman 1984: 132). Donation may have served even more for the *assertion* of aspirations in this new context. Heitzman points out that in spite of the apparently equal opportunity aspects of Buddhism, the 'etiquette' of donation preserved status differences between donors. In this analysis, Buddhist monastic institutions look much like later Hindu temples, which also received humble and magnificent gifts from a variety of donors whose actions left a public or semi-public record. As noted, later temples also played significant economic and political roles, and it remains to be seen if Buddhist monastic institutions were similarly structured.

The operation of Buddhist institutions has been inferred primarily on the basis of texts and secondarily on the basis of patterns of site location, particularly the commonly noted association between Buddhist sites and trade routes (e.g. Ghosh 1973; Thapar 1966; Dehejia 1972; Sarao 1990; Nagaraju 1981; Nilakanta Sastri 1975). The exact reason for this association is generally left vague. More specific proposals include that of Ray (1986: 126) who noted that passage over the Ghats, which are steep on the west side and more gently sloping on the east, would have involved a change from bullock carts on the east side to pack animals on the steep west side. But what exactly did the monks do at such points? Were they involved in the mechanics of trade? Such questions require that we consider

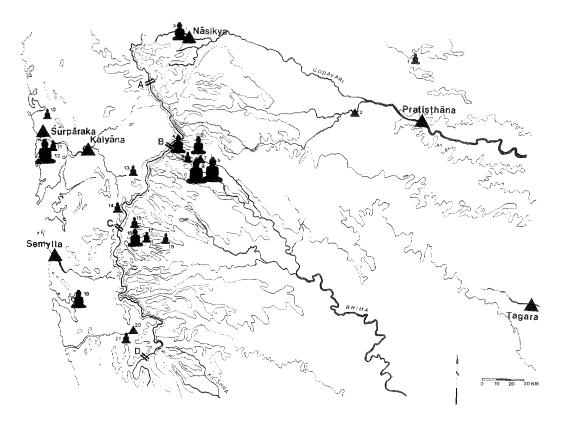


Figure 5 Buddhist monastic sites and settlements along the Western Ghats. Contour intervals are 300 m., except for contour near Paithan (Pratisthana), which is 450 m. elevation. Settlements are indicated by triangles, Buddhist monastic sites by Buddha figures. For figure scale, see text. Key to site numbers: (1) Aurangabad; (2) Nevasa; (3) Nasik; (4) Nanaghat; (5) Ganeshpahar; (6) Manmodi; (7) Junnar; (8) Sivaneri; (9) Tuljalena; (10) Jivdan/Virar; (11) Kondivite; (12) Kanheri; (13) Ambivale; (14) Kondane; (15) Karle; (16) Bhaja; (17) Bedsa; (18) Shelarwadi; (19) Kuda; (20) Mahad; (21) Kol. Key to Ghat passes: (A) Thalghat; (B) Nanaghat; (C) Bhorghat.

more closely the locations of Buddhist sites and the contents and layouts of the caves themselves – tasks it is not possible fully to address here.

Figure 5 illustrates the location of Buddhist monastic sites and settlements in a portion of the western Deccan. On this map, Buddhist site clusters are represented by Buddha figures, with the smallest symbol indicating one to twenty caves, the medium-sized symbol twenty-one to forty caves, and the largest symbol more than forty-one caves. The largest concentration of caves, at Junnar, has 252 rock-cut caves (Nagaraju 1981). Although an attempt was made to include only sites dated to the Satavahana period, the chronological indeterminacy of the construction and use of many locations means that this pattern can be considered only an approximation. Nevertheless, several clusters of sites can be discerned. There are distinct clusters of Buddhist sites near the Nanaghat and Bhorghat passes. A number of coastal Buddhist sites are also indicated, as are isolated sites and sites near large

settlements. Interestingly, some large settlements such as Pratishana (Paithan) seem not to be associated with Buddhist sites. The location of Buddhist sites, aside from those large coastal centers such as Kanheri, appears to be correlated with elevation (even the low lying coastal sites tend to occur on hills), in particular with *accessible* high elevation areas.

In spite of the sketchy information available for small site distributions, there seems to be an association between Buddhist sites and agricultural settlements. Several agricultural settlements in the vicinity of Junnar are mentioned by Ray (1986: 73); these sites could not be securely located and are not illustrated in Figure 5. The settlement at Nasik (Nasikya, Govardhana, cf. Nagaraju 1981; Sankalia and Deo 1955) is c. 16 km from a monastic complex of twenty-six caves (Dehejia 1972; Sankalia and Deo 1955). Several villages are also noted to occur in the area. Buddhist sites in the Bhorghat cluster also were associated with small settlements (Ray 1986: 74).

Although the preliminary nature of this analysis precludes quantitative assessment of these patterns, the link between large settlements and monastic sites can be seen to be weak. Sopara (Surparaka) may be the exception, in that it lies near the large complex of Kanheri, which has eighty-seven caves (Nagaraju 1981). However, neither the Satavahana capital of Paithan (Pratisthana), nor Ter (Tagara), nor Kalyan (Kalyana) are associated with extant monastic sites. This pattern is quite striking, particularly in light of the apparent connections between the Satavahana rulers and Buddhist institutions. It is likely that Buddhist monks in and around these cities simply lived in structures more ephemeral than rock-cut caves (cf. Mangvungh 1990), and thus our understanding of the locational dynamics of Buddhist sites may be seriously biased. As Fergusson and Burgess wryly note (1969), the first requirement for rock-cut architecture is rock. Thus, the powerful association between monastic establishments and hills is not to be wondered at. The Ghats, in particular, furnished exemplary conditions for building:

On the whole the explanation of the phenomenon is probably the prosaic fact that the trap rocks which overlie the country and form the hill sides everywhere in the west are exceptionally well-suited for the purpose. Are singularly uniform in their conformation, and have alternating strata of harder and softer rocks which admit of caves being interpolated between them with singular facility, and they are everywhere impervious to moisture.

(Fergusson and Burgess 1969: 167)

Routes of transportation in the western Deccan are partly geographically determined. The topographic barrier presented by the Ghats to east—west movement meant that certain natural passes, themselves referred to as Ghats (Fig. 5) funneled movement in this direction, as indeed they still do. Other routes are less clearly defined. In this context, the clustering of monastic sites near Ghat passes bears out the posited association between routes and monasteries. If monks were not directly involved in trade, then why were monastic sites clustered in these locations? Some of the answer may have to do with the opening up of the western plain to agriculture as well as the expansion of agricultural production on the plateau itself. Monastic sites situated at this boundary would have been in a position to take advantage of the produce of both environmental zones. Further, the earliest monastic sites were located in the areas of most secure agricultural production, pointing to their need for surplus produce and their close relationship with cultivated

produce. The accessibility of monasteries and their locations on routes of movement would have been highly relevant for institutions not self-sufficient in food or indeed in any other material want, as monasteries were. Monks were not producers but consumers (cf. Kosambi 1989: 185). The locational dynamics of monastic sites may be viewed as multiple and complex, related both to agricultural and to non-agricultural production and distribution.

Another way in which routes have been traced is through close readings of texts such as the *Arthasastra* (e.g. Lahiri 1992: 381–7) in which the *Dakshinapatha*, or southern route, is described (cf. Thapar 1966). This textual evidence is explicitly concerned with trade and contains discussion of commodities to be obtained in various places. The primary conclusion regarding movement to come from such analysis is that large centers were linked, a finding not altogether surprising.

The textual and archaeological evidence for actual trade along these routes of movement have been compared by Lahiri (1992: 384), who found that current archaeological data do not support the notion of an existing trade in (nonperishable) goods between the Deccan and the Gangetic plain. That trade goods and traders moved from place to place is quite clear from documentary sources. However, archaeological data seem to caution against the enthusiastic transformation of this movement of traders and trade goods along particular routes into the invariant conception of such routes as essentially for trade. Many, but not all, Buddhist monastic sites do occur on or near routes, and many of these routes were important in trade networks. Transportation may, however, relate to a wider range of activities than simply trade, and the locations of monastic sites can be viewed in terms of agricultural productivity and accessibility as well as in light of trade patterns.

There is little reason to believe that Buddhist monks played any direct role in exchange, at least in the early Satavahana period. Given the normative prescription for monks to subsist by begging, monasteries had to be near potential resources such as towns, villages, or trading camps. Monastic sites are notable for their lack of evidence for large-scale storage, craft production, or any other indication of participation in exchange networks other than as recipients of gifts (cf. Heitzman 1984; Dehejia 1972; Nagaraju 1981). This is not to say that monasteries were outside exchange networks, however. As consumers, monks not only required (donated or purchased) foodstuffs, but they also used quantities of cloth and ceremonial items (Ray 1986: 183). Ray points to the inscriptional record, noting 'As donations of land and money to Buddhist monasteries are dated from the first centuries AD onwards, we feel that any direct participation by monks in trade in the western Deccan may have been a later development' (1986: 183). In the later Satavahana period, monks may have moved out of the more limited role of consumers and, as Ray (1986: 183) continues, 'They [monks] possibly also supplied (for profit) essential provisions and loaned (at interest) much needed capital to trade caravans.'

Discussion

What factors, then, can account for urbanism and state formation in the western Deccan? Archaeological and historical data, while indicating the existence of both local and

long-distance trade in many types of objects, cannot support such a role for exchange in the Early Satavahana period. Certainly, the discrepancies between archaeological and textual records of raw material sources exposed by Lahiri (1992) should encourage caution. Simply transforming the extensive trade of the later Satavahana period into the cause for state development is not satisfactory.

Agricultural expansion has usually been seen as a precondition for commercial expansion (cf. Heitzman 1984: 124). Agriculture created the subsistence base for the region, and there is little evidence that cities on the Deccan plateau were sustained by anything except local produce. Thus, the establishment of cities in areas where they had previously been absent would have led to a concomitant increase in food production. If agricultural expansion were indeed prior to urbanization, then why did it expand? Arguments for improved climatic conditions cannot be supported (cf. Caratini et al. 1991), and alternative explanations must be developed. Agricultural production in the Deccan may be more profitably viewed as responsive to changes in settlement and political organization than as a basal substratum on which more derived cultural developments rested. Agricultural produce was also implicated in exchange. Cotton, for example, was critical to the textile industry and appears to have been grown on a large scale at Nevasa (Sankalia et al. 1960: 2). Ghat forest products, procured either by collecting parties of lowland residents or through exchange relationships with uplands groups, were also objects of trade in the latter part of the period. The economic transformations of the Satavahana period, then, clearly had implications at a number of levels for farmers, herders, and hunters as much as for merchants, craftspeople, and monks. Rather than focusing exclusively on exchange, and within that on the movement of goods, it is imperative that we analyze both production and exchange of agricultural and nonagricultural products. We must also realize that an understanding of the Early Historic western Deccan requires both an appreciation of the magnificent Buddhist remains and the more 'mundane' considerations of economic and political organization.

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