3. SATAVĀHANA SETTLEMENTS

3.1 The rise of the Satavāhanas in the first century B.C. coincided with an era of prosperity in the western Deccan which continued, though not without fluctuations, until the third century A.D. There was a marked proliferation of urban centres and excavations reveal an improvement in the quality of the structures as well. The potential of the passes across the ghats in controlling trade routes came to be fully realised and Buddhist caves were excavated at the head of these, while there was an expansion of settlements in the fertile valleys below. An intriguing phenomenon of this period is that the prosperity of the western Deccan is by no means an isolated example; urban centres appear to be more widespread than before and occupation spreads to virgin areas and peripheral regions.

This is true of north Rajasthan which had been lying deserted after the end of the Painted Grey Ware phase in the middle of the first millennium B.C. The beginning of the Christian era marked the rise of the Rangmahal culture in this region, with several urban settlements as at Nagar, district Tonk, which shows planning in the north-south orientation of its streets flanked by blocks of houses (Joshi & Sinha, 1981). The evidence from Gujarat indicates a similar expansion and the establishment of a number of settlements such as Vala, the port site of Veraval (Mehta, 1981), Akola (Subbarao, 1953) and Vadnagar (IAR, 1953-54; 1966-67). In the iron rich Chota Nagpur region a localised culture developed in the Khunti area, district Ranchi. It was characterised by baked brick houses and fortifications, as at Sarakdel (IAR, 1964-65), situated mostly on highlands near streams or water reservoirs. These settlements, called Asura sites, were perhaps inhabited by iron prospectors and smelters (Ghosh, 1981).
The peninsula also underwent similar changes in the Christian era. The prevailing Megalithic culture in this region gave way to urban centres, emporia and ports. Prominent among these were the sites of Arikamedu, where a large number of Roman artefacts have been found (Wheeler et al., 1946), Uraiyyur (IAR, 1964-65 to 1967-68), a centre for spinning and weaving and perhaps silk, and the port of Kaveripumpattinam (IAR, 1963-64 to 1966-67). Donatory records from the Buddhist sites of Amaravati, Jagayyapeta, Bhattiprolu, Gudivada, Ghantasala and Guntupalli show the existence of guilds (gosthis) and nigamas at this time (Lueders, 1912: nos. 1335, 1337, 1339).

Jainism also appears to have acquired a foothold in the region as indicated by the inscribed caverns at Malakonda, Prakasam district (Annual Report of South Indian Epigraphy, 1936-37: 75) and Guntupalli, West Godavari district, where a Mahāmegha-vāhana ruler erected pillared halls for the Jains (Andhra Pradesh Epigraphical Series, 3, 1968: 1-7).

This concerted and extensive development may have had its roots in economic demands, like those of long distance trade, the stimulus having perhaps come from the Mauryan penetration into the peninsula (cf., 1.9.8). Each region, however, followed a distinct trajectory of development. In this chapter, the emphasis shall be on our area of study – the western Deccan – and on changes in the overall settlement pattern.

While in Vidarbha the Megalithic period continued up till the time of the Sātavāhanas, in the western Deccan, the situation was different (cf., 1.9.6; 1.9.7). The Mauryan period led to the establishment of new areas of settlement, such as Sopara, the site of an Aśokan edict (Sircar, 1975: 33) and Bharuch on the west coast. It is difficult to form a complete picture of the settlement pattern at this time owing to the limited vertical excavations. At a majority of sites like Maheshwar, Prakash, Bahal, Nasik, Nevasa, Bhokardan, Kaundinyapur, Pauni
and Ter, the Early Historical levels have been assigned to the Mauryan period largely on the basis of the NBPW sherds and punch-marked coins. Neither of these provides a firm criterion for dating (cf., p.74), with the added disadvantage that a general time bracket obliterates any evidence of change in the settlement pattern.

At western Deccan sites, Mauryan settlement is characterised by modest structures of mud with wooden posts and floors made of fine clay and lime. Ring wells are in evidence (Sankalia, et al., 1958:35). Iron was used for weapons, such as arrow-heads and daggers and for implements such as sickles and chisels (IAR, 1956-57:18); copper was restricted to rings; glass was employed for the manufacture of ornaments; and bone points are generally found (Sankalia, et al., 1958; 1960). Beads made from a variety of materials like terracotta, shell, steatite and semi-precious stones are common. Apart from the NBPW, pottery comprises the coarse red, black-and-red and black wares.

Structural relics indicating Buddhist influence in the western Deccan in the pre-Sātavāhana period include remains of an incomplete brick stūpa at Maheshwar (Sankalia, et al., 1958:21) and those of another at Kasrawad, about 5 kms. south-south-west of the former site (Report on the Administration of the Holkar State for 1936:76; 1937:86; 1938:135; 1941:137). At Pauni, the earliest phase of the brick stūpa is also said to belong to the pre-Sātavāhana period (Deo & Joshi, 1972:117).

3.2 Extent of Sātavāhana dominion: Epigraphic and numismatic evidence (cf., 2.2; 2.3) suggests that the early Sātavāhanas established themselves in the upper Godavari valley and that their dominion included Malwa as well, though they lost this part of their kingdom to Nahapāna or perhaps his
predecessor (Sircar, 1966b: 245). The Periplus does not mention Lata (south Gujarat), but sec. 41 of the text seems to include south Gujarat in Ariaka (Aparânta). In a later section (52), the Periplus refers to the passing of Kalyan from the line of the elder Sarganes (probably Sâtakarnî I) to Sandanes. Sylvan Levi (1936) has equated Sandanes with Kaniska and propounded the theory of the Kushan thrust in the western Deccan. This theory has been successfully refuted by several scholars (Mukherjee, 1968: 109) and Khandalavala has suggested that Sandanes was probably a viceroy of Nahapâna (1956-57: 14).

The confrontation between the Sâtavâhanas and the Ksatrapas finds corroboration in the inscriptions of the latter at Karle, Nasik and Junnar and the hoards of Ksatrapa coins counter-struck by Gautamîputra Sâtakarnî, e.g. the Jogalthembi hoard (cf., p. 70). One of the Nasik inscriptions of Uśavadâta mentions the rivers Barnasa, Iba, Parada, Dhamna, Tapti, Karabena and Dhanuka across which free ferries by boats were established (Senart, 1905-6: 78-80). Except the Tapti, all the others are small streams, most of them draining the Konkan coast. The Ksatrapas evidently lost out in this struggle and the Nasik inscription of Balaśrî, Gautamîputra's mother, describes him as the uprooter of the Kṣaharâtas and the restorer of the glory of the Sâtavâhanas (Burgess, 1964, reprint: 109). This inscription is the only one which gives a list of regions included in Gautamîputra's kingdom and describes him as the lord of asika-asaka-mulaka-suratha-kukurâparânta- amûpe-vidabhã-âkarâvanti and vijhachavata-paricâta-sayha- kanhagiri-maca-siritana-malaya-mahinda-setagiri-cakora-pavata (ibid.).

Sircar, on the basis of a passage in the Hathigumpha inscription of Kharavela, suggests that the region of Asika lay between the Krishna and the Godavari rivers, to the south of Asaka
(1964:205), while Mirashi identifies it with Khandesh (1944:168). From a reference in the Mahābhārata, the Ṛṣikas (Asaka) appear to be a tribe (Udyog parva.4.15). Rhys Davids, on the other hand, places Asaka north-west of Avanti, the settlement on the Godavari being a later colony (1970, reprint:27-8). According to the Assaka Jātaka (Bk.II:no.207) there was a king named Assaka who reigned in Potali which is stated to be in the kingdom of Kasi. Mūlaka was the district around Pratiṣṭhāna (Paithan) (Gairola,1956:17-22), though an alternative identification connects the Mūlakas or Mūdakas with the MUndas whom the Visnu Purāṇa (IV.203) mentions as a ruling tribe (Bombay Gazetteer, XVI:629). Vidabha may be taken as the region of Vidarbha. Suratha (south Kathiawar with the capital at Girnar); Kukura or north Kathiawar (Law, 1954:287); Aparānta or north Konkan (Gupta,1973:45) or the entire Konkan coast (Gairola,1956:17-22; Law,1954:13); Anupa with the capital at Mahismati; and Ākara-avanti (eastern and western Malwa with the capitals at Vidisha and Ujjain respectively) are also mentioned in the Junagarh inscription of Rudradāman. The Sakas thus reconquered from the Satavāhana the territories won by Gautamīputra from Nahapāna. (Sircar,1964: 203). Of all these regions, the only one that is referred to in other Satavāhana inscriptions as well, is Aparānta. An epigraph at Kanheri records the gift of a cave and a cistern by Dāmilā, Bhojikī of Aparānta and an inhabitant of Kalyan (Burgess,1883:84). Aparānta seems to have been under Satavāhana rule at the time of Ptolemy who refers to it as the Ariake of the Sadenois as distinct from Larike or south Gujarat (Sircar,1966b:248). Hence Rudradāman recovered only north Aparānta or south Gujarat.

The reference to Malaya (Western Ghats) and Mahendra (Eastern Ghats) implies a claim to sovereignty of the entire Deccan peninsula, while the other mountain ranges referred to extend largely in the western half. These include the
Vijhachavata or the Vindhyanas; Paricāta or the Aravallis; Sayha or the Sahyadrīs; Kanhaagiri or the Salsette hills; Maca or Ramsej to the north of Nasik and Sīrīṣāna or Setagiri, a hill near Nagarjunakonda (Sircar, 1964:204). Setagiri had earlier been identified with Nanaghat (Bakhle, 1926:351-2).

Inscriptions thus provide an outline of the rise of the Sātavāhanas from the time of Simuka described as dakhina-pathapati (Sircar, 1964:no.82) to that of Gautamīputra, the sātavāhanakula-yasa-patithapaka (ibid.:no.86). Gautamīputra Sātakarni is the first ruler whose coins and coin moulds (IAR, 1956-57:38) have been found in the eastern Deccan and his successor Vāsīsthīputra Puḷumāvi for the first time introduced bilingual legends on his silver coins (cf., p.70). This gradual expansion into the eastern Deccan may have been as a result of the unsettled conditions in the western Deccan or else in response to the need to control the fertile lower Krishna valley. Gupta (1955-7:71) suggests that a bifurcation of the dynasty is indicated on the basis of numismatic evidence after the reign of either Yaṣa Śrī Sātakarni or Śrī Śaka. One branch ruled in the Chanda-Tahala region and the other in the Kolhapur area.

The kingdom of the Sātavāhanas was divided into āhāras or districts: Govardhanāhāra with its centre at Govardhana identified with the large modern village of Govardhana-Gangapur on the right bank of the Godavari, 9 km. to the west of Nasik (Law, 1954:284); Sopārakāhāra mentioned in a Kanheri inscription (Burgess, 1883:76); Māmālāhāra of a Karle inscription represented by Mahāl, the hilly portions of the Pune and Satara districts (Lueders, 1912:no.1105); and Sātavāhanāhāra of the Myakadoni inscription (Sircar, 1964:no.90) comprising the Bellary district of Karnataka (Gupta, 1973:48). Kāpurāhāra mentioned in a Nasik inscription of Nahapāna and
placed in the old Baroda State indicates the adoption of this nomenclature by the Ksatrapas (Fleet, 1910:97; Senart, 1905-6: 82-5). The settlements in the vicinity of Paithan do not appear to be included in any āhāra, but probably formed a separate category. An inscription at Kanheri refers to the construction of a kuti and a hall in Paithanapatha (Burgess, 1883:76). An āhāra was perhaps divided into smaller units as an inscription at Nasik refers to Govardhanāhare dakkhināmage as well as puvamāge, the term maga possibly used in the technical meaning of a subdivision (Burgess, 1964, reprint:111).

The term āhāra first occurs in a single pillar inscription of Aśoka atSarnath where it has been inscribed as āhāle and in a minor rock inscription at Rupnath (āhāla). It is contrasted with 'all the territories (surrounding) forts', i.e. tracts not yet fully pacified, but held by military posts (Hultzsch, 1969, reprint:xi). The general Mauryan term is, however, janapada, which is also used in the Jātakas (Bk.XII, nos.467,469) and in the Arthaśāstra of Kautilya (II.2.1). The division of the Sātavāhana region into āhāras (literally food) holds out the possibility that administrative boundaries in this period coincided with agricultural units, as distinct from Paithanapatha which was perhaps a trade-route extending from Ter to Bharuch.

3.3 The Ports: Exploration in the western Deccan has been far from exhaustive and this has resulted in an inherent bias in the emerging settlement pattern. A port and a city of great importance on the Konkan coast was Bharuch (Barygaza, Bṛgukaccha and Bharukaccha) situated at the mouth of the Narmada. After the gulf of Barake (Dwaraka) is the bay of Barygaza and the mainland of the country of Ariake (Periplus: sec.41). Lassen took Ariake to include southern Gujarat, while Indraji equated it with Aparānta (Schoff, 1974:174-9). The Periplus further lists articles brought to this port from
One of the Jātakas (Bk. V: no. 360) narrates how certain merchants (vānijā) of Bharukccha sailing for Suvannabhūmi were approached by Sagga, the minstrel, requesting remission of his passage money in return for his services as a minstrel on the journey. On their acceding to his request, he set out from Varanasi and reached Bharukaccha. The Supparaka Jātaka (Bk. XI: no. 463) refers to Bharukaccha as a pattenagāma where the Bodhisattva was born in the family of a master mariner (niyyāmajethhassa putto hutvā nibbatti). The Jātakamālā of Āryasūra (no. XIV) provides an interesting twist to the narrative. The port where the Bodhisattva lived is here called Supārāga. The merchants sailing for Suvarnabhūmi embark from Bharukaccha, touch at the town of Supārāga and request the Bodhisattva to accompany them. The Milindapañha (Horner's tr.: 172) while enumerating people who would come to admire a newly laid out city, mentions the inhabitants of Bharukaccha and Aparānta. The former is also mentioned in the Divyāvadāna (545-76), where its establishment is attributed to Bhiru, a minister of the king Roruka. Bharukaccha and Roma or ancient Rome are almost juxtaposed in the Sabhā parva of the Mahābhārata (28.49,50).

The site of Bharuch traces its present occupation to the late historical period dating from about the sixth century A.D. This continuous habitation of the site has posed problems for the excavators and it has been possible to dig vertical trenches only, thereby greatly curtailing the data available for study. The ancient settlement at Bharuch came into existence in the latter half of the first millennium B.C. and was surrounded by a mud rampart. Around the beginning of the Christian era, the mud rampart was provided with a heavy brick revetment; the characteristic Red Polished Ware came into use; and there is evidence for the manufacture and use
of terracotta skin rubbers, beads, shell bangles, metal objects and stone sculptures. The Ksatrapa affiliations of the site are indicated by the presence of lead and copper coins of the dynasty in its lowest and middle levels. There is a break in occupation around the fifth century A.D. (IAR, 1958-59:69; 1959-60:19).

The Nasik inscription of Uṣavadāta mentions the construction of rest houses at Bharukaccha (Senart, 1905-6:78-80). Inscription 20 at Junnar records the gift of a two-celled cave by the brothers Budhamita and Budharakhita, inhabitants of Bharukaccha (Burgess & Indraji, 1976, reprint:49). In the vicinity of Bharuch, a few other sites have been discovered (Appendix III), the largest number of antiquities having been found at Nagal. These include beads, ivory and bone points and net-sinkers and copper-antimony rods. There seems to be no evidence of fortification or brick structures (IAR, 1957-58:66).

In the gulf of Barygaza, Ptolemy locates Kamane to the north of the Narmada estuary (VII.5), while the Periplus mentions Kmmone to the south (sec.43). Ptolemy then goes on to give the coordinates of Nausaripa, identified with Nausari on the west coast, about 30 kms. south of Surat and Poulipoula located by Yule at Sanjan on the coast (Sastri, 1927:38f). The Periplus mentions Sopara and Kalyan as market towns of the west coast and describes the blockade of the latter port by Sandanes (cf., p.22). Ptolemy, on the other hand, after describing the gulf of Barygaza mentions Soupara, the mouth of the river Goaris, Dounga, the mouth of the river Benda, Simylla, a mart, Hippakoura and Balipatna (VII:6). Dounga has been identified with Dugad, 15 kms. south of Bhiwindi, while Goaris and Benda are seen to refer to the Godavari and the Bhima by Yule and the Vaitarna and the Bhiwindi by Campbell (Saletore, 1962:41-84). Johnston (1941:208) is of the view that Dounga is Dongri opposite Bassein at the north
end of the island of Salsette and that the rivers referred to are the Ulhas and the Amba. He also equates Dounga with Dhenukākāta. These identifications, however, remain hypotheses and have not been substantiated by excavation.

Fragments of the Major rock edict no. eight and nine of Asoka engraved on a boulder at Sopara (Sircar, 1975: 33) close to one of the old landing places, are the earliest evidence of occupation at the site. Subsequent excavations have unearthed ring wells (Contractor, 1957: 47) and remains of a 3.5 m. thick fortification wall with a ditch (Journal of the Bombay Historical Society, 1939: 187). In the second century A.D. a brick stūpa seems to have been constructed at the site. It has been suggested that this stūpa may have been reopened and reconsecrated during the Mahāyāna period (Dikshit, 1939: 3).

A legend in the Mahābhārata (Śānti parva. 49. 41) explains the name Šūrpāraka (Sopara) as being derived from śūrpa, a winnowing basket. It is narrated that Parāçurama reclaimed the land from the ocean with the aid of a śūrpa and built temples at the site for the brāhmaṇas. According to the Mahāvamsa (VI. 46, 47) Vijaya, the first king of Ceylon travelled from Sopara to Ceylon. The Jātakas are silent regarding the place though it appears in the later version of the Jātakamālā (cf., p. 86). The Divyāvadāna (42f) mentions it as an important centre of trade and commerce.

Donations by the inhabitants of Sopara are recorded at the monastic establishments of Karle, Kanhari and Nasik. Inscriptions nos. 8 and 9 at Karle mention gifts of pillars by Satimita of Soparaka, the sister’s son of bhadanta Dhamutararaya (Burgess & Indraji, 1976, reprint: 31-2). Kanheri inscription no. 12 records the donation of a cistern by a merchant (negama) from Soparaka, while no. 20 mentions the donation of a cave by a jeweller (manikara) (Burgess, 1883: 78,
The Nasik inscription of Usavadāta refers to him as one who has constructed rest houses at several places, Sopara being one of them. It goes on to list the donations made by Usavadāta at the Rāmatīrtha in Sopara (Senart, 1905-6:78-80).

As contrasted to this, Kalyan is little known archaeologically; no excavations have been carried out at the site and only stray finds of the Red Polished Ware and beads have been reported so far (IAR, 1957-58:67). Inscriptions refer to an Ambālikāvihāra at Kalyan and inhabitants of the city have made donations at Junnar and Kanheri. Goldsmiths (suvaṇakāra) from Kalyan gifted a cistern at Junnar (Burgess & Indræji, 1976, reprint:53-4) and another at Kanheri, while the sons of a treasurer (heranika) donated a caitya at Junnar (ibid.).

Donations at Kanheri include several made by the merchants (negama) of Kalyan (Burgess, 1883:nos.15,16,18,19); one by Dāmilā Bhojiki of Aparānta, an inhabitant of Kalyan; and another by a blacksmith (kamāra) of the same place (ibid.).

Possibly the earliest caves on the west coast were those at Thanała and Kondivāte. At Thanała Asoka punch-marked coins have been found¹, while at Kondivāte architectural evidence suggests that the caitya and a few vihāras were cut around 100 B.C., the single inscription having been engraved much later (Dehejia, 1972:152-3). An unpublished inscription at Kondivāte records the donation of a vedikā by a person from Paithan².

A majority of the 109 caves at Kanheri were excavated in the period between A.D. 90 and 181 (ibid.:183), though inscriptions of the ninth to the eleventh centuries indicate a later occupation of the site as well. Inscriptions of the Sātavāhana period at Kanheri mention donation of land in

¹, ²Information from Shri M.N. Deshpande.
villages situated possibly in the vicinity of the monastic establishment. Inscription no.18 records the endowment of a field in the village (gāma) of Saphau by a negama from Kalyan (Lueders, 1912: no.1000); another mentions the gift of money and a field in the village of Magalathana, identified with Magathan, about 6 kms. to the south-west of Kanheri (ibid.: no.1024); and a third records the gift of a village called Sākapadra again by a merchant (Gokhale, 1975: 21-5). Chechinna mentioned in the Nasik inscription of Usavadāta (Senart, 1905-6: 85) has been identified with Chichana or Chinchani in the Thana district of Konkan (Bombay Gazetteer, 1883, XVI: 635).

About 15 kms. to the south of Kanheri is the town of Chaul, the Semylla of the Periplus (sec. 53) and Simylla of Ptolemy. An inscription at Kanheri records the gift of a cave by a merchant of Chemulya or Chaul (Gokhale, 1975: 23). The Periplus continues its enumeration of market towns and includes Mandagora (Bankot), Palaepatne (Dabhol), Malizigara (Jaigarh or Rajapur), Byzantium (Vijayadurg), Turannoboas (Malvan) and Togarum (Deogarh). Palaepatne is mentioned by Ptolemy as Balepatne (VII: 7), while the Hippokoura of Ptolemy (VII. 6) has been identified by Yule with Kuda and by Campbell with Ghodegaon in Kolaba district (Saletore, 1962: 46). Another Hippokoura is mentioned later in the text as the capital of Balekorus (VII. 83; also cf., p. 38).

Caves are located in the vicinity of most of these towns. Two small caves lie at Kol near Bankot (Burgess, 1885: 74); another twenty-six are located at Kuda overlooking the Rajapur creek, while an additional twenty-eight are situated at Mhar to the south-east (Burgess & Indraji, 1976, reprint: 3). The only settlement mentioned in the Kuda inscriptions is that of Karāhakada (Karad), one of whose inhabitants, an ironmonger, donated a cave (ibid.: 16).
Perhaps the sole evidence of an Early Historical wharf is provided by a brick structure in the now defunct Rajbandar port in the Elephanta island off Bombay. Situated between the stūpa hill and the cave hill, the rectangular wharf measures 16m. x 13m. x 3.5m. On the basis of amphorae pieces, Red Polished Ware and Kṣatrapa coins found in contemporary levels, it has been dated to the second to fifth centuries A.D. (Rao, 1981).

Whereas rock cutting was considerably reduced at a majority of sites in the western Deccan around A.D. 200, at the end of the second phase, evidence from sites in south Konkan suggests a fresh impetus. Thus the caves at Khed, Chiplun and at the recent site of Panhale (Kaji) are dated to the end of the third or the beginning of the fourth century A.D. (Deshpande, 1981a: 20-52).

The largest settlement on the west coast appears to be centred in the Ulhas basin with the market towns of Sopara and Kalyan situated in close proximity to each other. Sopara appears to be the more important of the two, possibly the 'administrative' centre of Sopārakāhāra. Another conglomeration of settlements is located around Bharuch, in contrast to the market towns of south Konkan which are primarily ports and appear to stand in isolation. Sopārakāhāra and the region around Bharuch appear to be on an equal footing during the period of the Periplus, but the former seems to have taken the lead in the early centuries of the Christian era, resulting in the establishment of the vast monastic complex at Kanheri. This development is understandable when the advantages of the two regions are weighed against each other. Bharuch provided an outlet for cities like Ujjain, Varanasi and Paithan and formed the terminal point for routes extending across the peninsula, as long as the western Deccan was not opened up for agriculture. Once an agricultural base was established, Kalyan and Sopara seemed to be the natural choice as outlets along the coast.
Merchants did not have to contend with the dangers of entering the port of Bharuch (cf., p.21); Sopārakāhāra extended across the fertile Ulhas basin with its enormous agricultural potential and it controlled the routes across the Sahyadris, through the Thalghat, Nanaghat and Bhorghat. The ports of south Konkan offered poor competition, owing to the unsuitability of the region for agriculture and more difficult access to the hinterland.

Ptolemy refers to south Konkan as the Ariake of the pirates (VII.7) indicating the risks of piracy along the west coast and corroborating Pliny's statement (VI.26) that merchants who sailed from the Egyptian ports to India carried troops with them. A different explanation has been suggested by Campbell who asserts that there is no mention of pirates by Ptolemy, instead the reference is to the Āndhrabhṛtyas (Sastri,1927:38f).

Another characteristic feature of the settlement pattern is the marked correlation between monastic establishments and market towns. To some extent monks are dependent upon urban centres for their subsistence, but the inscriptions speak of a far more complex relationship between the two.

3.4 The Inland Centres: The inland country beyond Bharuch according to the Periplus 'encompasses many lands as well as deserts and great mountains, and wild animals of many kinds... and there are many populous tribes as far as the Ganges' (Huntingford,1980:sec.50). Contrary to this rather daunting description, the central Narmada valley nurtured the kingdom of Anupa with the capital at Mahiṣmati. This was one of the regions included in the domain of Gautamīputra Sātakarṇi and reconquered later by Rudradāman (Sircar,1964:178). Excavation has been carried out at the twin sites of Maheshwar and Navdatoli situated on an ancient crossing of the Narmada.
(Sankalia, et al., 1958), the former identified with Mahismati. There is a continuity of occupation at the site, with the protohistoric period merging into the Early Historic (ibid.:21). In the latter period, there is evidence for the use of small huts with wooden posts and floors made of fine clay and lime. Construction also started on a large brick stūpa, 25.8 m. in diameter with a circumambulatory passage, but it was apparently left incomplete. Uninscribed cast, punch-marked and tribal coins (Ujjayini) were recovered from this phase of occupation (ibid.:66-7). Around 100 B.C. the site of Navdatoli was abandoned and settlement continued at Maheshwar on the opposite bank of the river. Red Polished Ware was the characteristic pottery in use and as at other sites in the western Deccan, this period is marked by an increase in constructional activity and a greater variety in crafts. Fragmentary terracotta tiles have been found in the Early Historical period (ibid.:205) and legged querns replace saddle querns, legged querns being better suited for grinding spices (ibid.:236).

At least four inscriptions at Stūpa I at Sanchi record gifts from inhabitants from Mahisati or Mahismati. Unfortunately only the names of donors are mentioned and there is no indication of their occupations (Lueders,1912:nos.375,497, 498,501).

About 5 kms. south-south-west of Maheshwar is Kasrawad identified with the ancient site of Intbardi, also on the Narmada. Excavation revealed remnants of a dilapidated stūpa constructed of brick indicating the presence of a Buddhist establishment around the third-second centuries B.C. In addition were fragmentary remains of residential blocks, a hall and a reservoir. Sherds of suśrūṣa of the red burnished ware provided significant data for working out contacts and trade. These were inscribed with words in the
Brahmi script of the second-first century B.C. and read sihila (Simhala or Sri Lanka?), takesilie (Taksasilieyah or Taxila) and nigaṭasa vihāre dīpe. It is possible that the surāhīs contained oil, one of them being donated for lighting lamps at a vihāra. Coins from the site include silver and copper punch-marked and cast coins (Report on the Administration of the Holkar State for 1936:76; 1937:86; 1938:135; 1941:137; Diskalkar, 1949:1-18).

Another fording point across the Narmada is situated near Tripuri, district Jabalpur, the site well known for issuing its own coinage in the post-Mauryan period. The Satavahana period is represented by Period IV of the excavator and marked the construction of two Buddhist vihāras at the site, together with a proliferation in crafts. As at Kasrawad, a large quantity of potsherds were found, stamped with Buddhist symbols (Dikshit, 1955; IAR, 1965-66:2; 1966-67:17; 1967-68:23; 1968-69:11).

There is a sprinkling of settlements in the Tapti valley (districts Dhule and Jalgaon in Appendix III), most of them yielding sherds of the Red Polished and other wares. Limited excavation at Prakash (Thapar, 1967:5-167) and Bahal (IAR, 1956-57:17-8) add little to our knowledge of the settlement pattern of the western Deccan, though they do provide information on the crafts practised, such as the making of beads of agate, carnelian and crystal; bangles of shell; a circular copper mirror (ibid.); terracotta votive tanks; pulley-shaped ear ornaments of jasper and crystal; an ivory comb (Thapar, 1967:5-167); bone stylii and a perfume casket (ibid.).

Bahada, mentioned in one of the Ajanta inscriptions, is seen to refer to Bahal (Ghosh, 1968:241). The same name is also identified in a Bharhut inscription which records the gift of a pillar by Ananda, son of Isirakhita and which reads
Bahadagojatiranatana (Lueders, 1912: no. 721), though a Late Historical record of 702 A.D. refers to the site as Bahalapuri. It is likely that Bahalapuri may be some other settlement, as the archaeological evidence indicates that the site of Bahal was destroyed by a flood in the early centuries of the Christian era and was occupied again only during the Yadava times in 1200 A.D.

The route proceeding southwards from Mahismati to Bhogavardhana and Pratisthāna passed the caves at Ajanta and Pitalkhora. Activity at the former site appears to have started around 80 or 70 B.C., with the excavation of caitya X and vihāra XXX, followed by caitya IX and vihāra XII. Most of the paintings of caityas IX and X were completed at this time (Dehejia, 1972: 158). The twelve caves at Pitalkhora lie about 75 kms. west-south-west of Ajanta as the crow flies and belong to the same period (ibid.: 156). On the basis of architectural similarities, the caitya IV at Aurangabad has been dated to the first century B.C. The entire frontage of the caitya has now collapsed and there are no indications to help date it precisely (Dehejia, 1972: 158).

We have already referred to the mention of Bahal in an Ajanta inscription. Another early damaged epigraph from the latter site reads dhamadevasa śa...ṭhānasa pasāda śa/na pavajita and may refer to a gift by Dhamadeva of Paithan (Dhavalikar, 1968: 147-8). Inhabitants of Paithan are known to have made donations at Pitalkhora as well. An inscription on a pillar of the caitya records the gift of Mitadeva, a perfumer (gadhika), while another is the gift of the sons of Saghaka from Paithan (Burgess & Indraji, 1976, reprint: 39).

Bhogavardhana or Bhokardan lies on the right bank of the now dry bed of the river Kelna. On the left bank is the village of Alapur with a series of mounds, yet untapped. The settlement
at Bhokardan has been traced to modest beginnings in the pre-Satavahana period; it declined towards the end of Satavahana rule, though the settlement continued till the early medieval period (Deo & Gupte, 1974:18). No town plans are available; the evidence suggests that in the Satavahana period houses were built of brick laid in clay mortar over a planned foundation of pebbles. 'The floors were well made by means of rammed clay and the roof supported by wooden posts and covered with tiles which could be interlocked with the help of channels and ridges on the nether surface and fixed on to rafters below with the insertion of nails through the perforations on the tiles' (ibid.: 211).

A wide variety of ceramics have been found at the site, including specimens of Red Polished Ware and sherds with Brahmi letters or Buddhist symbols inscribed on them (ibid.:104). The yield of beads numbers nearly two thousand made from eighteen different materials like agate, amethyst, carnelian, faience, garnet, ivory, opal, and shell (ibid.:118). Amongst these, specimens of jade and lapis lazuli are relatively few, perhaps on account of their being imports. The site seems to have been a centre of bead making as several unfinished beads have been found together with two soapstone moulds and possibly a bead polisher. Other crafts practised were those of shell, ivory and terracotta working. Exquisitely carved shell bangles were rivetted with copper or iron pins, while white marine shell was shaped into stoppers and bottles (ibid.:215). Bone and ivory was used for kohl-sticks, beads and points. An ivory figure found here is similar to specimens found earlier at Pompeii and Ter (Barrett, 1960) and may have been used as a mirror handle. Nearly 700 terracotta objects have been recovered and include a diverse range like discs, gamesmen, crucibles, whorls, pendants, anthropomorphic pots and no less than twenty-two votive tanks. In comparison, kaolin objects were few (ibid.:143).
A large number of bone points have been found at Bhokardan (ibid.:190) and also at several other sites in the Deccan, e.g. Nasik as well as in Early Historical levels in the Gangetic valley. Several conjectures have been made regarding their use and they have been described as arrowheads, stylus, weaving needles or ornaments (Sankalia, et al., 1958:222).

The commercial importance of the settlement is further reinforced by the find of coins, seals, sealings and coin moulds. A total of 260 coins were recovered from the site. Of these three were punch-marked and the rest assignable to the Sātavāhanas on typological grounds. Only five had legends and could be attributed to particular rulers of the dynasty (Deo & Gupte, 1974:19). An oval sealing bears a Brahmi legend reading thanenagaragatâyā ida and has been suggested to belong to a lady from Thane nagara, the city being the modern Thane near Sopara (ibid.:77). This solitary bit of evidence is rather inadequate to prove the existence of a city hitherto unknown from any other source.

The inhabitants of Bhogavardhana are known to have made donations at Sanchi and at Bharhut, though these records make no mention of the occupations of the donors (Lueders, 1912: nos. 264, 266, 295, 296 and 572), the sole exception being a pillar inscription at Bharhut, the gift of Arya Kṣudra (Aya Chula), the suttāntika, i.e. one versed in the Sūtrāntas (ibid.:no.797).

The ancient Paithanapatha presumably continued from Bhogavardhana to Paithan, the latter situated about 20 days journey from Bharuch and requiring another 10 days for the route to continue to Ter. From both these places, merchandise was brought to Bharuch by wagons over great tracts without roads (Periplus: sec.51). Ptolemy refers to Baithana as the royal seat of Siri Ptolemaios (VII.82) and a monk from
Paithan is known to have made donations at Sanchi (Buehler, 1894:Stūpa I, n012). The Sutta Nipāta mentions Paithan as the first place to be passed by Bavani's disciples on their way to Sravasti from the hermitage of the sage in Āśmaka country (vs.1001;1011-13). An inscription on a pillar of the caitya at Pithalkhora records the gift of Mitadeva, a perfumer from Paithan, while another pillar is a gift from the sons of Saghaka also from Paithan (Burgess & Indraji, 1976, reprint:39). A Kanheri inscription records an endowment made to a vihāra at Paithan (Burgess, 1883:76), as well as a kūti and a hall excavated in Rajatalaka Paithanpatha (ibid.).

The ancient site of Paithan on the Godavari spreads well over 4 sq.kms. and several mounds rising to as high as 18 m. above the present water level have legendary associations. One area is said to contain the remains of a Sātavēhana palace. A large number of antiquities like coins, moulds, terracottas and pottery have been repeatedly recovered in casual digging and river bed clearance. In spite of this, no systematic excavation has been carried out at the site and whatever little was excavated by Yazdani in 1936-7 or by Dikshit in 1965-6 remains insufficiently published.

Ter, on the left bank of the river Terna, lies in the great cotton centre of the western Deccan. In 1901, Cousins noticed extensive mounds on both banks of the river to the south of the present town. These were covered with brick and pottery debris and contained at one point 'the foundations of brick walls of an early type of construction' (AR-ASI 1902-3:108). The most important ruin at the site is that of a brick caitya subsequently converted into a Hindu temple standing in a small crowded courtyard in the middle of the settlement (ibid.:197).

A much-publicised find from Ter is that of an ivory figurine
8 cms. in height, possibly used as the handle of a mirror (Barrett, 1960). Compared to the famous Pompeii ivory figurine, the Ter specimen appears to be somewhat later. The site has also yielded a large number of terracotta and kaolin figurines made in double moulds and remarkable for the range of coiffure and ornaments; beads of semi-precious stones; coins and jewellery moulds; shell amulets; decorated handles; a range of ancient ceramics (Chapekar, 1969); and a large number of lamps with nozzle wicks, simulating Roman workmanship (IAR, 1966-67: 25-6).

During excavation (IAR, 1968-69: 17) a number of vats for dyeing cloth were unearthed, reminiscent of the statement of the Periplus that much common cloth, all kinds of muslins and mallow cloth were brought from Ter to Bharuch (sec. 51). Further south, at Arikamedu, cisterns or vats for dyeing the muslin had earlier been identified in the 1945 excavation (Wheeler, et al., 1946: 27). There is also evidence of a fortifying wooden palisade around the settlement (IAR, 1974-75: 32). In the vicinity of Ter, two unexcavated but seemingly interesting sites are those of Vadgaon and Irle. Exploration at the former site, 24 kms. south of Ter showed the presence of a brick stupa in the Early Historical period (IAR, 1957-58: 66), while an extensive mound, 3.24 hectare in area was noticed at Irle, 16 kms. south-east of Ter (IAR, 1974-75: 32).

This leads to the conclusion that at the time of the Periplus, i.e. in the first century A.D., the route from Ter to Bharuch across the western Deccan was the most prosperous. Inhabitants from cities along this route made donations at the monastic establishments of Pitalkhora, Sanchi and Bharhut, the only exception being Ter. From Ter the trade route went southwards, feeding the Medak-Hyderabad region where Kondapur is located and proceeded via Akkenpalle, Nalgonda district, where a large hoard of Roman coins of the first century has been found to
catch up with the Krishna valley at Nagarjunakonda. Beyond this the route would have branched off in different directions to reach the sea coast. But the main road seems to have followed the course of the Krishna itself connecting the Buddhist settlements of Goli, Rentala, Gurzala, KesanaPELLI and Amaravati all on the south bank (Chatterjee, 1976:110). With the development of outlets at Kalyan and Sopara, the route across the Deccan seems to have lost some of its importance. No new caves were excavated at Pitalkhora and Ajanta after the initial phase dated to the first century B.C., though these sites were later occupied in the Mahāyāna period. Goods from sites like Bhogavardhana, Paithan and Ter may have been diverted across the ghats to the ports of the Konkan.

The preoccupation of the Periplus with market towns linked to Bharuch may be taken as an excuse for its silence with regard to Nasik, though Ptolemy mentions it after the city of Barygaza (VII, 62). Nāsikyam nagaram (Nasik) is referred to by both Kātyāyana in his Vārttika (on Pānini VI, 1, 63) and by Patañjali in his Mahābhāsya (6, 1, 63). It must have been an important place for the early Sātavāhanas, as their first epigraph records the construction of a cave during the reign of Kanha, the second ruler of the dynasty (Senart, 1905-6:93). Subsequently there are eight more records of the early Sātavāhanas, mentioning gifts and donations to the monks of Tirnuhu hill, and five of the Kṣatrapa kings. Uṣavadāta's inscription in cave X at Nasik mentions the donation of sixteen villages to the gods and brāhmaṇas and the feeding of one-hundred-thousand brāhmaṇas all the year round (Senart, 1905-6:78-80). The Nasik inscription of Gautamiputra Sātakarni refers to him as Benākatakavāmi, the term being translated as the lord now residing at Benakataka situated in the Nasik region (Burgess, 1964, reprint:104).

Rock cutting at Nasik extended over a period of several centuries.
Starting with the excavation of the tiny vihāra XIX in the first century B.C., occupation at the site continued during the Mahāyāna period, when several new caves were cut and older ones converted to Mahāyāna usage. Excavation at the town of Nasik, however, indicates the desertion of the site at the end of period III in c. A.D. 200; perhaps the settlement shifted to a different place (Sankalia & Deo, 1955:29).

Inscriptions at Nasik refer to the seat of administrative authority at Govardhana in Govardhanaḥāra (Senart, 1905-6:73). Govardhana, the centre of several guilds like those of the weavers and potters (ibid.:82-5,88) has been identified with the large modern village of Govardhana-Gangapur on the right bank of the Godavari, 9 kms. west of Nasik. Several villages lying in its vicinity are mentioned, such as Pisaṭpadaka, on the south-western side of mount Tiranhu (Sircar, 1964:203), Samalipada to the east of the mount (ibid.:207-8), Sudisana and Kakkhaḍi (ibid.).

An inscription at the base of an ornate arcade which rises above the door of cave XVIII reads nāsikakanām dhambhiṣa-gāmasya dānam. It has been suggested that the village of Dhambhika which accumulated the common expense to donate the entrance to the cave must have belonged to the township of Nasik (Senart, 1905-6:92). A setthi of Nasik donated a cell at Bedsa (Burgess & Indraji, 1976, reprint:27), while one Naganaka of the same town gifted a seat at Kanheri (Burgess, 1883:75). A Bharhut inscription records the gift of a pillar by Gorakhiti wife of Vasuka from Nasik (Lueders, 1912:no.799).

Another site in the Godavari basin is that of Nevasa situated on both banks of the Pravara. Starting with modest structures in the early centuries of the Christian era, the settlement provides evidence for the extensive use of tiles for roofing, brick walls, elaborate foundations and brick ringed soak-pits.
in the Śatavāhana period. The site of Ladmod, Nevasa, was occupied from the beginning of the second century B.C. to the third century A.D., after which it was uninhabited until about the fourteenth century A.D. (Sankalia, et al., 1960).

An analysis of Early Historical sites in the western Deccan shows that the largest number are located in the Ahmadnagar district, a majority of these being in the Rahuri taluka of the district (Appendix III). The Rahuri taluka forms a part of the extensive alluvial plain of the Godavari basin and is almost half way between the two major settlements of Paithan and Junnar (Maharashtra State Gazetteer, Ahmadnagar District, 1976:19).

3.5 The Maval Region: Junnar, situated 90 kms. north-west of Pune and 25 kms. east of the crest of the Sahyadris was to all indications perhaps the largest monastic establishment in the western Deccan under the Śatavāhanas. Various scholars have given different figures for the number of excavations at the site, the latest attempt having counted as many as 184 caves distributed in the hills encircling the town within a radius of 8 kms. (Jadhav, 1981:84). Unlike Kanheri or the other sites, there is no evidence of Mahāyāna occupation. The inscribed cave at the head of the Nanaghat linking the hinterland to the coast, is dated to the beginning of the first century B.C. (Dehejia, 1972:179). This records among other things gifts such as cows, horses, elephants, villages and money (kāhāpanas), donated by the queen Nāyanikā during the Vedic sacrifices conducted by her. Following soon after are the Tulja Lena and the Budha Lena caves, the latter contemporary with the Karle caitya of 50-70 A.D. The excavation of Lenysadri commenced around 90-100 A.D. and continued until A.D. 110-150, to which period also belong the caves at Amba/Ambika and Bhima Shankar. The last series of caves to be excavated were probably those at Shivneri (ibid.:181-2).
Inscriptions at Junnar record the grant of land in the villages of Valahaka, Seuraka (Burgess & Indraji, 1976, reprint: 48), Sirikadaka, Kada (ibid.: 49), Puvanada (ibid.: 44), Vadalka, Kataputaka (ibid.: 45) and Mahaveja (ibid.: 46). Manamukada hill mentioned in the last inscription is perhaps an ancient name of Manmodi hill in which the caves were cut. The villages mentioned above, in all probability lay in the vicinity of the monastic establishment, Vadalka and Kataputaka being identified with Varada and Katur, 9 and 7.5 kms. north and south-south-west of Junnar respectively.

Exploration around Junnar has led to the discovery of several settlement sites. These include Udapur on the left bank of the river Ad, about 13 kms. from Junnar. To the south and south-west of Shivneri are the habitation sites of Kusur and Nirgude. Another site near Manikdoha in the ox-bow curve of the Kukdi river has now been submerged by the dam, while Padli and Agar are two promising sites on the right bank of the Kukdi. The orientation of the caves at Junnar differs from each other, each group facing the Early Historical settlement of the region (Jadhav, 1981: 65-72). Ancient tracks can still be seen around Junnar and two rock cut cisterns have been found on the road leading to Junnar (ibid.: 60). On both sides of the last milestone for Nanaghat from Junnar, remains of a number of cisterns have been found. On one side is a large platform with ashlar masonry. Near the parapet is a massive jar hewn out of rock which is said to have been used for collecting toll money and on the opposite hill is a small shrine of Ganesa (ibid.: 295).

In the district of Pune, 63 kms. south-west of Junnar is Karle and located in a radius of 30 kms. around it are another sixty caves. These include the caves at Ambivale, Kondane, Bhaja, Bedsa, Pala, Shelarwadi (Fergusson & Burgess, 1880: 168), Induri (IAR, 1957-58: 67), Karanjgaon, Kamra (IAR, 1969-70: 25),
Nadsur, Karsamble (Cousens, 1891:11), Nanoli and Bhamchëndra (Johns, 1876:252-3). Of these, the earliest are those at Nadsur, Bhaja and Kondane, dated to around 70-50 B.C. (Dehejia, 1972: 153-5), the Karle caitya being placed later in the first century A.D. and following this the caves at Shelarwadi and Ambival. The dating of the rest of the caves is problematic.

An inscription of Usavadāta at Karle gives the name of the settlement as Valūraka and mentions the gift of the village of Karajaka (Burgess & Indraji, 1976, reprint:33). A record of Gautamīputra Sātakarni places the site in Māmālāhāra (Lueders, 1912:no.1105). A striking feature of the inscriptions at Karle is the large number of donations made by the inhabitants of Dhenukākāta.

To the south of Karle is a group of caves on the river Nira at the head of a short narrow valley at Sirwal and Wai (Fergusson & Burgess, 1880:211). Beyond these are another fifty-four caves approachable through the Kumbharlight and situated at Karad at the junction of the Koyna and the Krishna rivers, while two more lie at Patan, 30 kms. west-north-west of Karad. The excavation of the caves at Karad has been assigned to a period between A.D. 90 and 150 (Dehejia, 1972:183). There also seems to have been a Sātavāhana settlement near the caves and an inscription at Bharhut records the gift of a coping stone by the town (nigama) of Karāhakaṭa (Lueders, 1912:no.705). Three other inscriptions mention the inhabitants of the town, but do not refer to their occupations (ibid.:nos.767,809,891).

The presence of a large number of caves in the western belt of the districts of Pune and Satara, coterminous to some extent with the ancient Māmālāhāra is justifiable. The Maval region, ideal for agriculture, is endowed with fertile black soil well suited to rice and has heavy and certain rainfall.
To add to this is the fact that the region can be easily defended and only the passes into the valley need be guarded. This aspect was again exploited in the medieval period when forts were constructed at strategic points on the hills, e.g. Sivneri fort at Junnar, Narayanagada, 15 kms. to the south-east of Junnar; Lohagada and Visapur forts in the vicinity of Bhaja; and Rajamachi, 9 kms. north-east of Bhorghat on the main line of the Sahyadris, close to Kondane (Gazetteer of Bombay State, XX:172, 619-25). In spite of the hilly terrain, transport poses no major problem, as the gradient to the caves is gentle and the caves are accessible both by pack animals and by people carrying head-loads.

3.6 Southern Settlements: The upper Krishna valley south of Karad, as far as the confluence of the Krishna and the Panchganga, broadens out into a fertile alluvial plain well suited to agriculture both on account of soil fertility and adequate rainfall. On the right bank of the Panchganga is Kolhapur and situated in the western part of the town is the locality of Brahmapuri known for its rich hoard of bronze objects in 1944. These include an exquisite statuette of Poseidon, bronze vessels, toy cart and animal figurines (Khandalavala, 1960: 29-75). Later excavation revealed that the site was first occupied in c. 200 B.C. The settlement consisted of brick houses with stone foundations. There is evidence for the manufacture of beads and human figurines of terracotta and kaolin and nearly a hundred Satavahana coins have been found (Sankalia & Dikshit,1953).

An extensive site about forty hectares in area lies in the adjacent district of Belgaum. Vadgaon-Madhavpur, a suburb of Belgaum town, first gained prominence in 1945 when a hexagonal pillar inscription of the first century B.C. was found there. The inscription records the performance of a Vedic sacrifice by a brāhmaṇa of the Kaśyapa gotra (Sundara,
1981:88). Recent excavation at the site shows that the central area in the southern part of the site is elevated and on circumstantial evidence, two brick structures, one measuring 14 x 22 m. and the other apsidal, unearthed here may have been for religious purposes (ibid.). For about 270 m. a 'street' was excavated with terracotta tiles and brick structural remains on both sides. While copper coins with the Ujjain symbol, beads of semi-precious stones and dice were found in large numbers, pottery was meagre (ibid.: 92-3). Can one thereby conclude that the street was used for commercial purposes? Further excavation in the northern part of the site revealed residential buildings and wells. The former consisted of square rooms and oblong halls with a tiled roof and raised on a foundation of pebble bedding overlain with a layer of rammed murrum. The binding material used was mud plaster and the walls were plastered with fine lime (ibid.: 94-5). No details are available regarding the antiquities recovered from the site, although the information provided lists beads, terracotta animal and human figurines, plaques, a copper figure of a seated lion, ivory dice and iron objects (ibid.).

Another site further south is Banavasi, district North Kanara, already familiar as the find spot of an inscription of Vasiṣṭhiputra Śiva Śrī Puḷumāvi. Gautamīputra Sūtakarni issued one of his inscriptions from Vaijayanti, identified by some with Banavasi (Senart, 1905-6:71; cf., Sircar, 1964:198). According to a tradition recorded in the Mahāvamsa (XII.41) and the Dipavamsa (VIII.10), the Buddhist teacher Rakkhita was deputed to Banavari (capital of Kuntala) in the reign of Asoka. A Mauryan stūpa found at the site would seem to confirm this tradition (cf., p.50). Ptolemy refers to the city as Banausi (VII.83). The ancient mound here is enclosed by a brick fortification wall on a rubble foundation surrounded by a deep moat (IAR, 1970-71:29).
3.7 Settlements on the Periphery: Before we analyse the settlement pattern that emerges out of this study of Sātavāhana sites, we should briefly survey the location of habitation areas in the regions adjacent to the western Deccan. A fortified site in district Kurnool on the right bank of the Tungabhadra is that of Satanikota dated between the first century B.C. and the third century A.D. Built of Cuddapah slab, the rampart with a moat all around had a facing of burnt brick and an elaborate gateway complex to the south. As many as 200 beads of glass, terracotta and semi-precious stones were recovered; an important find being that of a coin with the legend Śrī Sāta Kumāra (Ghosh, 1981).

Dharanikota, district Guntur, encompassing the Buddhist site of Amaravati has been identified with ancient Dhānyakaṭaka (Lueders, 1912: no. 1271). The earliest structural activity at the site (cf., p. 51) is marked by the construction of a wharf raised on posts at right angles to the navigation channel (IAR, 1963-64: 2; 1964-65: 2). Later instead of a wooden wharf, a brick structure was constructed all along the channel on its inner side and an earthen embankment raised at the back. Sherds of Arretine ware and fragments of handles of Roman amphorae have been found in this phase. Further improvement of the wharf resulted in the construction of a brick revetment with alternate gradients and landings at different levels of the water. With the gradual silting up of the navigational channel, the site was abandoned in the fourth century A.D. (ibid.). The Periplus (sec. 51) mentions that merchandise was brought to Ter from regions along the sea coast, Dharanikota presumably being one of them.

Sircar (1976: 132) cautions against equating Dhānyakaṭaka with Dhenukāṭaka, the latter site identified by Kosambi (1955: 59) with Deogadh on the opposite curve of hills from Karle. Inhabitants of Dhenukāṭaka are mentioned in several inscriptions
at Karle, Kanheri and Shelarwadi. The inscription at Kanheri records the gift of a nun, the daughter of a lay worshipper and inhabitant of Dhemukakata (Burgess, 1883:85). Of the fourteen inscriptions at Karle, five are by yavana donors (Vats, 1925-6:nos. 4, 6, 10; Burgess & Indraji, 1976, reprint:nos. 7, 10) and the others by traders, perfumer, carpenter and a gahapati (ibid.).

At Yelleswaram in the Krishna valley, the Satavahana settlement is enclosed by a fortification wall. On the banks of the river are remains of a bathing ghat with a flight of steps and a huge mendapa (Khan, 1963:10).

In the Vidarbha region, settlements were located at Paunar, district Wardha (Deo & Dhavalikar, 1968), Pauni on the Wainganga in district Bhandara (Deo & Joshi, 1972), Kaundinyapur, district Amaravati (Dikshit, 1968), Manndhal, district Nagpur (Shastri, 1981) and Bhatkuli also in district Amaravati (Dhavalikar, 1981). Excavation at Pauni revealed the remains of a brick stupa with a pradaksināpatha (Deo & Joshi, 1972), while Bhatkuli is said to be the ancient Bhojakata mentioned in Bharhut inscriptions (Lueders, 1912:nos. 723, 861).

The pattern that emerges from this study indicates a shift from the route connecting the east coast to Bharuch via Ter and Paithan; divergence of traffic to Kalyan; and the proliferation of settlements and monastic establishments around Kalyan as well as in the upper Godavari and the upper Krishna valleys, exploiting the agricultural potential of the region and controlling communication through the passes along the Sahyadris. Any attempt at working out a hierarchy of settlements or at ranking them according to either dimension or services offered is foiled by lack of relevant data. The evidence, however, does not indicate the presence of a single nodal centre in the āhāras: Govardhanāhāra had two towns -
Govardhana and Nasik; in Soparakahara, both Kalyan and Sopara were market towns; Mamalahara had large monastic establishments at Junnar and Karle. Similarly Nagal near Bharuch and Irel in the vicinity of Ter appear to be extensive sites. This phenomenon may be explained as the development of satellite centres.

3.8 References in Literature: The inscriptions of the Satavahanas refer to three kinds of settlements - nagara, nigama (market town) and gama. The Nasik inscription of Vasisthiputra Pulumavi speaks of navanara-svami Vasithiputo, the term navanara being translated as a new city (Sircar, 1964: 207).

The Jatakas tend to keep to this basic division of nagara-nigama-gama, though there is a mention of variations like dvarama (a village in the suburbs of a town) (Bk. VII: no. 408) and paccantagama (frontier village) (Bk. XV: no. 506). Similarly distinctions like nigamagama (Bk. IV: no. 323), paccantanagaram (Bk. XII: no. 474) and paccantanapadam (frontier district) (Bk. XXI: no. 539). Rajdhani is the capital city (Bk. VII: no. 402). The Milindapañha and the Jatakamala of Aryasura in no way add to this information.

The Jatakas refer to settlements belonging to members of a particular occupation, e.g. a village of 500 carpenters (vaddhakigama) not far from the city, where the carpenters built houses for a wage (Bk. II: no. 156); a village of hunters (nesadagama) near Varanasi (Bk. II: no. 159); and a village of robbers (coragama, Bk. XV: no. 503). The only two castes mentioned as living in separate villages are the brahmanas (Bk. VII: no. 402) and the candallas (tadu Ujjeniyabahi candala-gamako hoti, Bk. XV: no. 498).

Unfortunately, data of this sort is difficult to identify in archaeological records, unless a horizontal excavation were
carried out and a meticulous record kept of all the antiquities associated with a structure. This would also help in identifying ports of trade and facilities provided for storage, anchorage, etc.

Kauṭalya in his *Arthaśāstra* (II.1.19) rules that the king should populate the countryside by bringing in people from other lands or by shifting the surplus population from his own lands. Villages should consist mainly of śūdra agriculturists with a minimum population of one hundred and a maximum of five hundred families. Starting with a samgrahana or headquarters in a group of ten villages, he should establish a kavatika amidst two hundred, a dronamukha amidst four hundred and a sthōnīya in the middle of eight hundred villages. The *Manusmṛti* favours the appointment of a lord over each village and over ten, twenty, hundred and thousand villages (VII.115). These stipulations tend to suggest the ideal rather than the general practice.

Similarly while describing the lay-out of a city, Kauṭalya (II.4.6-16) decrees that the royal residence should occupy one-ninth of the city area a little to the north of the centre. The residence of the purohita or ācārya should be in the north-east, while dealers in perfumes, flowers, makers of articles of toilet and ksatriyas should live in the eastern quarter. In the south-east should be the store house for goods and also workmen's quarters and beyond that in the southern quarter grain dealers, courtesans and vaiśyas should live. The western quarter should be for workers in wool, yarn, bamboo and leather and for the śūdras. In regions near the city wall, quarters for guilds and foreign merchants should be situated.

This orderly segregation of castes within a city is nowhere reflected in Buddhist literature. The *Milindapāñha* while
describing the nagara of Sagala, a nānaputabhedana (a centre for all kinds of merchandise) resorts to the stereotype, e.g. with a rampart, watch towers and city gates; having parks, pleasure grounds, woods and lakes; with well laid out carriage ways and cross roads; and with shops (Horner's tr.I:2). Elsewhere it is the city architect who is responsible for planning and building a city (ibid.:46).

The founding of cities in the Jātakas, as elsewhere, is a royal prerogative. Jātaka no.513 (Bk.XVI) states that the king made a settlement on a certain mountain and forming a lake, prepared cultivated fields and bringing a thousand families with much treasure, he founded a village and instituted a system of alms giving to ascetics. This village grew into the town (nigama) of Cullakammasadamma. In another Jātaka (Bk.XVI:no.537), in order to honour a tree spirit, the king had a vast lake constructed near a banyan tree and founded a village by transporting many families. The gāma grew into a nigama with eighty thousand shops. In the Mahaummaga jātaka (ibid.), the text further states that a courtier was left in charge of the village.

The towns in the Jātakas were surrounded by walls and moats, interspersed with gates and watch towers (Bk.XXII:no.546), while the villages were sometimes protected by bamboo palisades (Bk.II:no.177). At the city gates were rest houses for travellers (Bk.I:no.96) and alms halls. A treasurer is said to have built six alms halls (dānasālā), one at each of the four city gates, one in the heart of the city and the sixth at the door of his house (Bk.XXI:no.535). At the time of closing: the city gate, the gate keeper cried aloud three times (Bk.III:no.259). The city gate also seems to have been the centre for a good deal of cultural and commercial activity. In the Vissayhajātaka, the Bodhisattva mowed grass, tied it in bundles and took it to the city gate to sell it (Bk.IV:no.340).
Two *candālas* wanting to show off their art of sweeping, one day went to the city gate (Bk.XV:no.498). The city also seems to have had streets of specialised workers. In the course of his walks through the city of Varanasi a man came to the ivory workers' street (*dantakāravīthi*) (Bk.I:no.72). In the Bhimasena jātaka (Bk.I:no.80), the Bodhisattva was born a *brahmaṇa* in a *nigamagāma* in the north country and when he grew up, he went to Takkasila for studies. On completion of his studies, he left Takkasila and arrived in the Andhra country in search of practical experience and went to the weavers' quarters.

A comparison between these literary references and archaeological remains shows superficial similarities. Fortification walls are known to occur at several sites such as Bharuch, Sopara, Ter and Vadgaon-Madhavpur. In an Amaravati relief, watch towers along fortress walls are depicted. The presence of a street with shops on both sides may be inferred at Vadgaon-Madhavpur.

An inscription at Kanheri refers to the gift of a merchant of Kalyan. 'In the monastery at Kalyan in the Gāndharikā-bhāmi (name of a ward or a street of Kalyan), a house with two apartments and a dining hall have been built and a perpetual endowment given for these, also a *nivesanam* in the Mukudasivayiva (name of a ward of the town). Out of (the rent of) these, two shares are to be spent on the house with two apartments, three shares on the quadrangular hall, ten (shares) are (to be given to the ascetics) in the monastery for clothes and one share to those in the quadrangular hall' (Burgess,1883:81). The arrangement outlined in the inscription appears rather complex and being a solitary example defies all attempts at analysis.

The most difficult to pinpoint is the stimulus which may have
led to the formation of cities. At this stage the link between trade and the development of urban centres would appear evident, e.g. the growth of Ter, Paithan, Bhokardan, Maheshwar and Bharuch, all of them situated along the trade route. Other examples would be the ports of Kalyan and Sopara. It would, however, be simplistic to accept a single factor leading to urbanisation. The exploitation of the fertile basins of the Ulhas, the Godavari and the Bhima-Krishna would suggest the need for a firm agricultural base in the inland regions of the western Deccan. An intriguing piece of evidence in this regard is the presence of monastic establishments in all these regions as early as the first century B.C.

3.9 Monastic Establishments: The excavation of rock cut monasteries in the western Deccan appears to coincide with the fluctuating fortunes of the Sātavāhanas and was the result of two distinct phases of activity. The first phase extended from c. 100 B.C. to 20 B.C. and was followed by a lull of about seventy years. The second phase commenced around A.D. 50 and continued till the beginning of the third century A.D. (Dehejia, 1972:148). Though large donations for these caves were made by lay devotees, it would seem that rock cutting activity depended to some extent on political stability as well.

One of the earliest caves to be excavated was the two chamber caitya at Kondivate containing a rock cut stūpa in the circular end. This was followed by the apsidal pillar less caityas at Nadsur and Pitalkhora (ibid.:83) and the plan for the typical apsidal caitya seems to have been finalised by the time the Bhaja caitya was excavated. This plan continued to be copied and elaborated upon. The caitya at Bhaja is divided into a nave and side aisles by a row of pillars. The caitya arch is carved of stone and the facade is completely open, though originally it would have been filled in with a wooden
screen with a doorway. The vaulted ceiling of the nave still retains its original wooden ribbing. At the far end is the stūpa which consists of a simple drum and anda. Roughly contemporary with Bhaja are the caityas at Kondane, Pitalkhora III and XIII and Ajanta X (ibid.:84). Another early effort is the circular caitya at Tulja Lena, Junnar, which belongs to the first phase, though the paintings may have been added later. Another significant development in the caitya form is illustrated by caitya IX at Ajanta, the caityas at Nasik, Budh Lena and Aurangabad. The front is now entirely of stone and below the caitya window; a doorway and windows open into the cave. Caitya IX at Ajanta deviates from the general pattern and is rectangular on plan. A further elaboration can be seen at Bedsa where a verandah has been added to the apsidal caitya. This marks the culmination of the first phase of rock cutting in the western Deccan and also includes vihāras of the quadrangular variety at Nasik, Bhaja, Kondane and Pitalkhora.

In the second phase rock cutting extended to several new sites such as Karle, Kanheri, Ambivale, Mahad, Karad., Kuda and Shalarwadi and is more extensive at Nasik and Junnar. At Karle, the caitya follows the apsidal plan with the difference that a stone screen is added to enclose the verandah with a free standing lion pillar beyond this. The pillar capitals consist of animals with rider couples (Khandalavala, 1956-57:11-26). The final stage in the development of the caitya is to be seen at Kanheri. Beyond the stone screen of the verandah is an entire courtyard, enclosed in front by a low wall with guardians at the entrance (Dehejia, 1972:91).

A significant change from this general categorisation into caitya and vihāra can be seen at Nasik caves X and III, both vihāras. Inside cave X on the centre of the back wall, flanked on each side by three cells, is what remains of a
relief stūpa. At some time after the Buddhist occupation, this was recut into the form of a Bhairava (Trabold, 1970:76). This cave also contains a number of inscriptions of Nahapāna. Cave III is an elaborate copy of this and was begun soon after in the reign of Gautamīputra Sātākarni and completed under his successor Pulumāvi. The combination of the caitya and the vihāra is to be seen in several examples of the late Hīnayāna period and perhaps provides the basis of Mahāyāna architecture of the fifth century A.D. (Dhavalikar, 1970-71: 50-61).

The caves at Junnar reveal a number of variations from the general plan of development. In addition to the usual apsidal vaulted caitya, there are the flat roofed rectangular ones and the circular caitya at Tulja Lena (Jadhav, 1981:191). Most of the vihāras at Junnar do not conform to any specific type; at Lenyadri they consist of rows of interconnected cells with stone beds in each. The most prolific phase of rock cutting in Junnar is attested by records belonging to the time of Pulumāvi (Dehejia, 1969:166).

It would seem that the stimulus for the development of urban centres may have been long distance trade as well as the need to expand agricultural settlements. Owing to their dependence on alms and donations by devotees, monastic complexes had to be situated close to habitation areas. As we shall discuss in the next chapter, royal donations to these would suggest tacit encouragement in this effort. Furthermore, monastic establishments may have been used to forge channels of communication which could later be used to enforce authority. An important role of the monasteries would have been as centres for information and their capacity for information processing, storage and analysis. This need for information would be greatest in societies in the process of social and economic change.