CHAPTER 6

Conclusion
Studies in early urbanization particularly with a view to examining the settlement pattern and social structure of an individual urban centre are rare in south Asian Archaeology. The majority of sites are explored and not excavated. Even when they are excavated, their settlement structure is not a major theme, which excavators keep in mind. Therefore, there is a great need for the archaeologist to adopt new methods and new approaches to the study of settlement pattern. Two major works one by Makhan Lal (Settlement History and the Rise of Civilization in the Ganga-Yamuna Doab from 1500 BC-300 AD, Delhi, 1984) and the other by G. Erdosy (Urbanisation in Early Historic India, Oxford, 1988) are attempts at understanding the settlement pattern of the early historic doab region. There are several problems in using archaeological data in the study of settlement pattern of a site or a region.

a). It is rather difficult to say with certainty whether the total number of sites discovered is exactly the same that were occupied during different periods. Quite a number of sites on river banks might have got totally eroded due to changing river course. It is also possible that new settlements came up over time, adding to the number of sites already in existence.

b). It is also difficult to determine whether a site was temporarily or permanently occupied.

In spite of these constraints, Mathurā appears to be an excellent case for the study of settlement pattern. The present study has been undertaken to understand the spatial aspect of its early growth and the cultures, socio-political and economic history of this region.

Settlement pattern is a very important component in the study of growth of urbanization. For example, the identification and location of a fortified
settlement indicate the seat of authority controlling other settlements. Settlements (mounds) inhabited by different socio-religious groups and their inter relationship helps in working out the socio-political structure of the city (for example, Kankali Tila as a Jaina establishment, Katra as a Buddhist establishment and so on.).

The evidence for an early economy developing into urban economy has been provided by archaeological excavations. This, combined with literary sources suggests that Mathurā can be seen as an important variant in the typology of early historical urban centres, primarily because of the wealth of its art material and epigraphic material.

Archaeology of literate society poses problem of methodology both from the need to properly integrate different categories of information and from the peculiar qualities of textual sources. Relation between material remains and literary records deserves special attention. We started with text-aided archaeology (in case of Mathurā, Growse and Cunningham took help of the accounts of Fa-hien and Huan-Tsang to excavate sites in Mathurā), but we have reached a stage in which we need to understand changes in archaeological cultures in relation to changes in data provided by texts. For example, the city of erstwhile Śūrasena Mahājanapada was looked down upon in the Āṅguttara Nikāya as dusty, with uneven grounds, infested with fierce dogs and even for dearth of alms. It can be compared to the stage of small settlements of PGW culture. The period between 400-200 BC not only witnessed mud fortifications around the city but also flourishing textile industry (IAR, 1974-75, p. 49). A very interesting development is the diversity of secular house planning square, oblong or even circular (H. Hartel, Excavations at Sonkh), this leads us to infer about the varied tastes of builders or their resources in the urban complex of Mathurā. The changing character of Mathurā can be appreciated from a passage in the Mahābhāṣya of Patañjali. The text regards the inhabitants of Mathurā as more cultured than the citizens of Sankasya & Pātaliputra. Thus, the excavated
urban sites can be compared to literary data. But one major problem here is that most of the early historical urban sites including Mathurā are excavated vertically with a view to determining their chronology. Only regular horizontal excavations could really unravel the structure, layout and life in urban centres. Second, the literary sources are often of controversial nature. General absence of historical material in traditional Indian literature has led to serious disputes concerning dating. In addition, all the major literary sources, the Epics, the Purāṇas, the Jātakas, & the Dharmaśāstras, suffer from the problem of having been continuously revised over several centuries, and hence containing a mixture of materials. Archaeologists like Cunningham and his successors had therefore to depend mostly on the evidence of foreign authors such as Megasthenes, Fa-hien and Hieun Tsang as a starting point for their archaeological work. Believers in Brahmanical epic lore tried to push back Mathurā’s antiquity to a hoary period without any support from archaeological evidence. (Bhāgavata Purāṇa, Harivamśa Purāṇa).

Harivamśa Purāṇa describes Mathurā as rising beautiful as the crescent moon over the dark streams of Yamuna. The District of Mathurā has always been celebrated for its wide extent of pasture land and many herds of cattle. It is more than probable that the word Mathurā is connected with Sanskrit ‘math’, to ‘churn’ (Harivamśa Purāṇa 2395). The really old local names are almost all derived from the physical character of the country.

According to the Hindu topography, town forms the centre of a circuit of 84 kos, called the circle of Braj or Braj Mandal (F.S. Growse, ‘The Country of Braj’, Journal of Asiatic Society of Bengal, 1871, vol. 1, p.34). The district lies in the basin of Yamuna which traverses through the central part of the district from the north to south and divides the district into two physical units: the eastern and trans-Yamuna and western and cis-Yamuna tract. The trans-Yamuna tract is a part of Ganga-Yamuna doab and this tract is agriculturally

Approachable through land routes and a navigable river and situated in fairly hospitable surroundings, the locality of Mathurā, was from an early age a natural and convenient area for human settlement. How ancient is Mathurā and its surroundings is difficult to determine. Though no systematic exploration has been done so far around Goverdhan hills, paleolithic tools have been reported to be found there (R.C. Gaur, ‘Mathurā Goverdhan regions: An archaeological Assessment,’ in *D.C. Sircar Commemoration Volume*, Delhi, 1987). These surface finds, however, may at best indicate occasional presence of Paleolithic or Chalcolithic man in the Mathurā area and cannot be taken as a definite evidence of a regular Paleolithic or Chalcolithic settlement.

Archaeologically, excavations have indicated development of a township from a village around Ambarish Tila (situated near the Yamuna and in the northern part of the present city). The beginning of a rural settlement around Ambarish Tila is now archaeologically datable to a period ranging from 6th c.B.C to the closing decades of 4th c.B.C. This period is represented by the use of PGW and also perhaps in the later phase of occupation by the Black polished pottery (*IAR*, 1974-75, p.32.) Linear distances between the PGW sites in Mathurā region suggest that both the spacing of and relationship between settlements were random.

Urbanisation in Mathurā began, with the commencement of Northern Black Polished Ware potteries the date ranging from 4th c.BC – 2nd C. BC. In the NBP period, distances between the sites in Mathurā region suggests a relatively uniform spacing in the region between Mathurā and Noh, the average distance spacing between one site and its nearest neighbour being between 10 to 15 kms ( Roshan Dalal, *The Geography of Mathurā Region*, in D.M. Srinivasan, Gen. ed. *Mathurā : a Cultural Heritage*, Delhi, 1984). This suggests a natural
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emergence of sites on a relatively isotropic surface. Not much is known about these sites to determine their relationship, but the fortified city of Mathurā located on the bank of the Yamuna was the most important. Of the sites between which distances have been measured, only Noh and Sonkh have been excavated and on the basis of the excavations both seem to have been relatively important. However, more excavations are necessary before any conclusion can be reached about these distances. It is interesting that similar distance patterns have been noticed in other NBP areas, for example Allahabad district (George Erdosy, *Urbanisation in Early Historic India*).

In the Śunga and the Śaka-Kuśāṇa periods, sites were located in circular pattern and located along the radial routes converging towards the city of Mathurā. The geometric pattern formed by circles and radial routes suggest somewhat planned location for a specific purpose at optimum distances from the city of Mathurā or these sites emerged naturally to support Mathurā.

Settlements were usually adjacent to river courses in the PGW and NBPW periods, but in the Śunga and the Śaka- Kuśāṇa periods several sites were not near any natural water source, indicating that with the development of technology, site location may be based on factors other than topography and environment. In NBPW, the Śunga and the Śaka-Kuśāṇa periods the relationship between the sites was as, or more, important than the topography in influencing the settlement pattern. However, the topographical and environmental base cannot be ignored at any level of development.

For the assessment of the chronology of cultural periods of ancient Mathurā, it has to be remembered that its archaeological history has a gapless (cultural) continuity ever since the first settlement was founded here. Any one who probes into the past from an unknown to known direction takes into account, various datable factors like epigraphs, coins, terracottas plaques/figures, ring wells etc. Keeping in view such datable antiquities, there may not be any
serious disputes with regard to the date of Period II or even of Period III, for the later has its beginning almost with the emergence of terracotta ring wells, representatives pottery of the period being NBPW and associated ceramics. Period II is preceded by Period IB, the overlap phase containing PGW and only 17 sherds NBPW distributed in about half a dozen layers. Probably these limited quantities of NBPW could only be part of imported items to Mathurā from an area where they were originally produced i.e. the eastern U.P. and Western Bihar. It may also be mentioned in this connection that terracotta items somewhat similar to the terracotta animal figurines of Pd IB and early levels of Pd II of Mathurā were also found at Śrāvasti (K.K. Sinha, *Excavation at Śrāvasti*, 1959), where they have been placed in Period I (600BC- 300 BC) marked by the presence of NBPW, the origin of which is regarded by most of the scholars to be somewhere in 6th BC, in mid-eastern India; its transportation to Mathurā (from eastern India) might have taken considerable time in those days. Therefore Pd. IB is dated around 500 BC (MC. Joshi & A.K. Sinha, ‘Chronology of Mathurā: An Assessment’, *Purātattva*, no10).

In respect of the date of Period. IA, the above mentioned factors have to be taken into account for the deposit of Period IA is superimposed by that of Period IB. Further in view of the occurrence of PGW together with a very limited quantity of Black slipped and coarse Black and Red ware, and evidence of only two structural levels in Period IA, it is difficult to push back its antiquity much beyond 600 BC. What is significant in this regard is that even at other PGW sites of neighboring areas, viz Atranjikhera (Gaur, 1968), Bateshwar (*IAR* 1975-76), Khalu (*IAR*,1965-66), Jakhera (Sāhi 1978), Allahpur (Dikshit, 1973), Noh (*IAR*, 1970-71) and Jodhpura (*IAR*, 1972-73), the quantity of Black slipped and Black & Red wares gets less and less and loses significance in the later levels of PGW culture which further levels suggests to a later date for the PGW deposits at Mathurā.
Excavations show that Dhulkot fortifications within which were located Katra and other mounds enclosed an area of three square kilometers adjacent to river Yamuna (IAR, 1973-74, p.32). This was the main city of Mathurā. Within and in close proximity to this area are more than ninety sites where sculptures and inscriptions have been found. Some of these are from mounds just outside the fortification, others are from the localities within the old and new city areas. These constitute the core area of Mathurā.

Vedic literature makes no mention of Mathurā or its variants such as Madhurā. The Yādavas are not associated with this region as they are in other sources, but the Yadu as a clan are mentioned frequently. (Macdonell and Keith eds., Vedic Index, II, reprint, Delhi, 1967, p.185.) Yādava association is stressed in the Harivamśa, Viṣṇu and Bhāgavata Purāṇas. These are all texts composed much later than the events, which they claim to describe. The founding of the city of Mathurā by Satrughnais described in Viṣṇu Purāṇa (IV. 4.11) and the Rāmāyaṇa (VII. 61 and 62). Bhāgavata Purāṇa narrates the story of Kṛṣṇa in detail, starting from the episode of his birth to the eventual migration away from Mathurā. A variant of Kṛṣṇa Kaṁsa episode also occurs in Gatha Jātaka. Two major problems in this connection are: (a) search for historicity in the biography of Kṛṣṇa, (b) Yādava connection with Mathurā.

History of Mathurā, as a focus of Śūrasena activity moves from the realm of speculation to more certainty, since it is referred to in a wide variety of sources, such as the Mahābhārata, Manusmṛti, Jaina texts and Buddhist texts (Ariguttara). The historicity of Śūrasena is further attested by Greek and Latin writers quoting Megasthenes. Arrian writes that the god Herakles was held in special honour by the Suesenoi, an Indian tribe who possesses two large cities, Methora and Cleisobora and through whose country flows a navigable river called laobars. (McCrindle, Ancient India as described by Megasthenes and Arrian). Pliny writes that the river Jomanes flows through the Palibothri into
the Ganges between the town of Methora and Carisobora \textit{(Hist. Nat. VI. 22)}. Ptolemy refers to Madura, the city of gods \textit{(Ptolemy, 50)}.

Herakles is generally identified with Kṛṣṇa, it would point to Vāsudava Kṛṣṇa cult being popular in this region at least as early as fourth century B.C. Confirmatory evidence of this comes from Pāṇini (IV. 3. 98; VIII. 1. 15), where reference is made to the worship of Vāsudava and to the Dvandva compound of Saṃkarsana–Vāsudeva. The identification with the cults is made even more explicit in Patañjali (III. 43; 1. 436).

The classical accounts refer to Methora as a town of Śūrasena and do not connect it with the Mauryas although it must certainly have been under Mauryan control and that the Sursenoi are described as an Indian tribe and not merely as a territorial unit.

Mathurā was inhabited by a physician \textit{(Vinaya)}, a courtesan \textit{(Divyavadāna)} and was a city of rich merchants \textit{(Milindapañha, 331)}. Buddhist texts give a good account of trade routes from Mathurā to Rājgrha \textit{(Vinaya text)}. There were boats plying between Mathurā and Rajgrha \textit{(Divyavadāna)}. This reference shows the inland trade through rivers. \textit{Anguttara} tells indirectly a great deal about the economic condition of Mathurā.

The \textit{Āvaśyaka Cuntī} records that Mathurā was a great commercial centre and from there merchants would go to conduct business in Daksina Mathurā, identified with the present day Madhurai. The \textit{Ācaranga Cuntī} identifies Mathurā as a \textit{sthalapatha} where goods for trade were carried overland while \textit{Brhat-Kalpabhāṣya} observes that it was noted as a cotton manufacturing centre and business centre whose inhabitants lived on trade and not on agriculture.

Mathurā was situated on a strategic geographical location, and there was a network of communication within the emerging patterns of geopolitics and commerce. Situated at the western periphery of the Ganga Plain, on the cross
roads of principal geo-political and cultural division of India, the city commanded a gateway from the rich alluvial Ganga plain to central and southern India and to the flourishing ports of the western seaboard. Its nodality was evidenced in its principal sub-continental highway systems the Uttarapatha (Northern and North Western highway) and Daksinapatha (Southern route), and also in the route to western sea-coast.

The great economic importance of Mathurā was not derived from its hinterland or from the resources of the region, but due to its expanding commercial network. There was a population of professional groups in the society, the most frequent reference being to commercial and artisanal groups (see. *Epigraphia Indica*, Lüders List, Lüders, MI. etc) As these groups are mentioned in connection with religious benefactions, there cannot be any doubt regarding the social and economic eminence these professionals had reached.

In the analysis of the early historical trade routes connecting Mathurā with various regions, our attempt has been to use archaeological as well as inscriptional and literary sources, Mathrua’s links developed primarily in response to the demands of commerce, and conquest as well as ethnic migration and cultural interaction. In addition, the developing institutional structures of the urban economy characterized by local professions artisanal and mercantile guilds and financial and organizational instruments of long distance trade such as, Śresthin (banker) and Sārthavāha (the carvan leader) as well as the expansion of international commerce lent special significance to long distance trade. These factors contributed to Mathurā’s transformation from a local metropolis into a subcontinental pivot of trade and communication.

The history of Mathurā as a focus of Śūrasana activity is described in the *Mahābhārata* (Sabhaparva XX, 1105-6). Jaina and Buddhist sources are not contemporary, nevertheless what is said about the city has some significance. Jaina sources describe Śūrasena as one of the Ārya–Janapadas lying to the
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south of Kurus and to the east of Matsya (J.C. Jain, *Life in Ancient India as depicted by Jaina Canons*, p.308-9). Its capital Mathurā was listed among the ten most important capitals of Janapadas. Buddhist texts list Śūrasena as one of the sixteen *Mahājanapadas* and state that it had close links with Matsya i.e. Macca (*Ariguttara*, 1.213; IV 252).

There is surprising lack of evidence associating Mathurā with the Mauryan period, other than that from excavations. There are no Aśokan inscriptions in the vicinity which is admittedly a negative evidence, but nevertheless telling. Archaeological data suggest a transition to urbanization during this period and it is therefore possible that some inscriptional evidence may just appear. It is difficult to be dogmatic about precisely when Mathurā became an urban centre as urbanism is a gradual process. Since the pre-Mauryan evidence does not indicate an urban settlement and post-Mauryan evidence does, it may be assumed that transition to urbanism took place in the Mauryan period. The emergence of Mathurā as an important political urban centre in the post-Mauryan period was a gradual process and this process perhaps may be well examine in terms of three well marked political phases: (1) the revival of local authority and political separation from Magadha, (2) beginning and gradual intensification of contacts with centres of powers in the northwest and development as an outlying area of the region, (3) emergence as a core area and eastern centre of a north-western empire, the Kusāṇa empire.

Our next chapter ‘Society at Mathurā’ traces major evolutionary stages. The population of Mathurā during the early phases consisted of ruling elites of the Andhakas and Vṛṣṇis, belonging to the Sātvata sept of the Yadu tribe. Pāṇini mentions Andhakas and Vṛṣṇis as of Kṣatriya gotra. Presence of the Kṣatriya s would also indicate the presence of other castes in Mathurā. Further heterogeneous elements appeared in the society of region with the extension of Scytho-Parthain rule to Mathurā during the last decades of first century BC or in the beginning of first century AD. The Kuśāṇa period helped to transform
Mathurā into a base for absorption of men and ideas from outside its orbit. Donative inscriptions indicate various types of vocations followed by people. In this period, population of the area in and around Mathurā increased as expansion in the habitational area, levels 23 & 24 as indicated by excavation reports of Sonkh by H. Hartel.

There was general decline of trade and urbanism based on artisanal and commercial activities from 3rd and 4th c. AD which affected not only Mathurā but also many northern and western Indian towns. It is because of this that while we have seven levels of Kusāṇa structures at Sonkh, we have only two levels of Gupta structures.