

3

Nature of Sources and Historical Construction

Material Remains

The methods of archaeology help us to recover the material remains of the past, relating to ancient, medieval, and modern periods of our history. In India and many other countries, archaeology is used to study prehistory and ancient history. Prehistory is concerned with the period for which there are no written sources, and history is basically based on written material. Prehistoric sites differ from historical sites in several respects. Generally they are not in the form of prominent habitation remains, but principally of fossils of humans, plants, and animals. They are found on the hill slopes of plateaus and mountains, and on the banks of nearby rivers with terraces, and comprise sundry fauna and flora. More importantly, numerous stone tools from the Stone Age have been found at these sites. The remains of tools, plants, animals, and humans from the pre-ice age indicate the climatic conditions that prevailed at the time. Although writing was known in India by the middle of the third millennium BC in the Indus culture, it has not so far been deciphered. Thus, though the Harappans knew how to write, their culture is placed in the proto-historic phase. The same is the case with the Chalcolithic or copper–Stone Age cultures which had no writing. Decipherable writing was known in India only in the third century BC with the Ashokan inscriptions providing solid evidence for historical reconstruction from that time. However, despite the critical use of Vedic and post-Vedic literary sources for history in pre-Ashokan times, archaeology remains a very important source for historians.

The ancient Indians left innumerable material remains. The stone temples in

south India and the brick monasteries in eastern India still stand to remind us of the great building activities of the past. However, the major part of these remains lies buried in mounds scattered all over India. (A mound is an elevated portion of land covering the remains of old habitations.) It may be of different types: single-culture, major-culture, and multi-culture. Single-culture mounds represent only one culture throughout. Some mounds represent only the Painted Grey Ware (PGW) culture, others Satavahana culture, and yet others that of the Kushans. In major-culture mounds, one culture is dominant and the others are of secondary importance. Multi-culture mounds represent several important cultures in succession which occasionally overlap with one another. As is the case with the *Ramayana* and *Mahabharata*, an excavated mound can be used to understand successive layers of the material and other aspects of a culture.

A mound can be excavated vertically or horizontally. Vertical excavation means lengthwise digging to uncover the period-wise sequence of cultures; it is generally confined to a part of the site. Horizontal excavation entails digging the mound as a whole or a major part of it. The method may enable the excavator to obtain a complete idea of the site culture in a particular period.

As most sites have been dug vertically, they provide a good chronological sequence of material culture. Horizontal diggings, being very expensive, are very few in number, with the result that the excavations do not give us a full or even adequate picture of material life in many phases of ancient Indian history.

Even in those mounds which have been excavated, the ancient remains have been preserved in varying proportions. In the dry arid climate of western UP, Rajasthan, and north-western India, antiquities are found in a better state of preservation, but in the moist and humid climate of the mid-Gangetic plains and in the deltaic regions even iron implements suffered corrosion and mud structures become difficult to detect. Only the burnt brick structures or stone structures of the Gangetic plains are well preserved.

Excavations have brought to light the villages that people established around 6000 BC in Baluchistan. They also tell us about the material culture which was developed in the Gangetic plains in the second millennium BC. They show the layout of the settlements in which people lived, the types of pottery they used, the form of house in which they dwelt, the kind of cereals they ate, and the type of tools and implements they used. Some people in south India buried in graves, along with the dead, their tools, weapons, pottery, and other belongings, and these were encircled by large pieces of stone. These structures are called megaliths, although some megaliths do not fall in this category. By digging them we learn of the life people lived in the Deccan from the Iron Age onwards. The

science that enables us to systematically dig the successive layers of old mounds, and to form an idea of the material life of the people is called archaeology.

Their dates are fixed by various methods. Of them, radiocarbon dating is the most important. Radiocarbon or Carbon 14 (C14) is a radioactive carbon (isotope) which is present in all living objects. It decays, like all radioactive substances, at a uniform rate. When an object is living, the process of decay of C14 is neutralized by absorption of C14 through air and food. However, when an object ceases to be alive, its C14 content continues to decay at a uniform rate but ceases to absorb C14 from air and food. By measuring the loss of C14 content in an ancient object, its age can be determined. This is because, as stated earlier, the decay of C14 takes place at a uniform rate. It is known that the half-life of C14 is 5568 years. The halflife of a radioactive material is defined as the period during which half the radioactive content in an object disappears. Thus, the C14 content in an object that ceased to live 5568 years ago would be half of what it was when it was living, and in an object which ceased to live 11,136 years ago, its C14 content would be one-fourth of that it had been when it was living. But no antiquity older than 70,000 years can be dated by this method.

The history of climate and vegetation is known through an examination of plant residues, and especially through pollen analysis. On this basis it is suggested that agriculture was practised in Rajasthan and Kashmir around 7000–6000 BC. The nature and components of metal artefacts are analysed scientifically, and consequently the mines from which the metals were obtained are located and the stages in the development of metal technology identified. An examination of animal bones shows whether the animals were domesticated, and also indicates the uses to which they were put.

I may add that archaeology provides a kind of soil archive which contains various material remains. However, for a total study of prehistory extending roughly up to 3000 BC or so, it is necessary to get an idea of the history of the soil, rocks, etc. This is provided by geological studies. Similarly, the world of plants and animals keeps on changing though at a slow pace. Their history is provided by biological studies. Human history cannot be understood without an idea of the continuing interaction between soils, plants, and animals, on the one hand, and humans, on the other. Geological and biological advances enable us to understand not only prehistory but also history. Taken together with archaeological remains, geological and biological studies act as important sources for the study of over 98 per cent of the total time scale of history starting with the origin of the earth.

Coins

Although a large number of coins and inscriptions have been found on the surface, many of them have been unearthed by digging. The study of coins is called numismatics. Ancient Indian currency was not issued in the form of paper, as is the case nowadays, but as metal coins. Ancient coins were made of metal—copper, silver, gold, and lead. Coin moulds made of burnt clay have been discovered in large numbers. Most of them relate to the Kushan period, that is, the first three Christian centuries. The use of such moulds in the post-Gupta period virtually disappeared.

As there was nothing like the modern banking system in ancient times, people stored money in earthenware and also in brass vessels, and maintained them as precious hoards on which they could fall back in time of need. Many of these hoards, containing not only Indian coins but also those minted abroad, such as in the Roman empire, have been discovered in different parts of India. They are preserved mostly in museums in Kolkata, Patna, Lucknow, Delhi, Jaipur, Mumbai, and Chennai. There are many Indian coins in the museums of Nepal, Bangladesh, Pakistan, and Afghanistan. As Britain ruled over India for a long time, British officials succeeded in transferring many of the Indian coins to private and public collections in Britain. Coins of the major dynasties have been catalogued and published. We have catalogues of the coins in the Indian Museum at Kolkata, of Indian coins in the British Museum in London, and so on. None the less, there are a large number of coins that have yet to be catalogued and published.

Our earliest coins contain a few symbols, but the later coins depict the figures of kings, and divinities, and also mention their names and dates. The areas where they are found indicate the region of their circulation. This has enabled us to reconstruct the history of several ruling dynasties, especially of the Indo-Greeks who came to India from north Afghanistan and ruled here in the second and first centuries BC.

As coins were used for various purposes such as donations, a mode of payment, and a medium of exchange, they throw considerable light on economic history. Some coins were issued by guilds of merchants and goldsmiths with the permission of the rulers. This shows that crafts and commerce had become important. Coins helped transactions on a large scale and contributed to trade. The largest number of Indian coins date to the post-Maurya period. These were made of lead, potin, copper, bronze, silver, and gold. The Guptas issued the largest number of gold coins. All this indicates that trade and commerce

flourished, especially in post-Maurya and a good part of the Gupta period. However, only a few coins belonging to the post-Gupta period have been found, which indicates a decline of trade and commerce in that period.

Coins also portray kings and gods, and contain religious symbols and legends, all of which throw light on the art and religion of the time.

Cowries were also used as coins, though their purchasing power was low. They appear in substantial numbers in post-Gupta times, but may have been used earlier.

Inscriptions

Far more important than coins are inscriptions. Their study is called epigraphy, and the study of the old writing used in inscriptions and other old records is called palaeography. Inscriptions were carved on seals, stone pillars, rocks, copperplates, temple walls, wooden tablets, and bricks or images.

In India as a whole, the earliest inscriptions were recorded on stone. However, in the early centuries of the Christian era, copperplate began to be used for this purpose. Even then the practice of engraving inscriptions on stone continued on a large scale in south India. We have also in that region a large number of inscriptions recorded on the walls of temples to serve as permanent records.

Like coins, inscriptions are preserved in various museums of the country, but the largest number may be found in the office of the chief epigraphist at Mysore. The earliest inscriptions were written in Prakrit in the third century BC. Sanskrit was adopted as an epigraphic medium in the second century AD and its use became widespread in the fourth and fifth centuries, but even then Prakrit continued to be used. Inscriptions began to be composed in regional languages in the ninth and tenth centuries. Most inscriptions bearing on the history of the Maurya, post-Maurya, and Gupta periods have been published in a series of collections called *Corpus Inscriptionum Indicarum*, but not many inscriptions of the post-Gupta period figure in such systematic compilations. In the case of south India, topographical lists of inscriptions have been published. Still, over 50,000 inscriptions, mostly of south India, await publication.

The Harappan inscriptions, which await decipherment, seem to have been written in a pictographic script in which ideas and objects were expressed in the form of pictures. Most Ashokan inscriptions were engraved in the Brahmi script, which was written from left to right, but some were also incised in the

Kharoshthi script which was written from right to left. However, the Brahmi script prevailed virtually all over India except for the north-western part. Greek and Aramaic scripts were employed in writing Ashokan inscriptions in Pakistan and Afghanistan, but Brahmi continues to be the main script till the end of Gupta times. An epigraphist can decipher most Indian inscriptions up to about the seventh century if he has mastered Brahmi and its variations, but subsequently we notice strong regional variations in this script.

Inscriptions found on the seals of Harappa belonging to about 2500 BC are considered symbolic by some scholars. For Indian history, the earliest deciphered inscriptions are Iranian. They belong to the sixth–fifth centuries BC and are found in Iran. They appear in Old-Indo-Iranian and also in Semitic languages in the cuneiform script. They speak of the Iranian conquest of the Hindu or Sindhu area. Of course, in India the earliest deciphered are Ashokan inscriptions. They are generally written in Brahmi script and Prakrit language in the third century BC. They throw light on Maurya history and Ashoka's achievements. In the fourteenth century AD two Ashokan pillar inscriptions were found by Firoz Shah Tughlaq, one in Meerut and another at a place called Topra in Haryana. He brought them to Delhi and asked the pandits of his empire to decipher the inscriptions, but they failed to do so. The same difficulty was faced by the British when in the last quarter of the eighteenth century they discovered Ashokan inscriptions. These epigraphs were first deciphered in 1837 by James Prinsep, a civil servant in the employ of the East India Company in Bengal.

We have various types of inscriptions. Some convey royal orders and decisions regarding social, religious, and administrative matters to officials and the people in general. Ashokan inscriptions belong to this category. Others are votive records of the followers of Buddhism, Jainism, Vaishnavism, Shaivism, and the like. They appear on pillars, tablets, temples, or images as marks of devotion. Yet other types eulogize the attributes and achievements of kings and conquerors, and ignore their defeats or weaknesses. To this category belongs the Allahabad Pillar inscription of Samudragupta. Finally, we have many donative records which refer especially to gifts of money, cattle, land, etc., mainly for religious purposes, made not only by kings and princes but also by artisans and merchants.

Inscriptions recording land grants, made mainly by chiefs and princes, are very important for the study of the land system and administration in ancient India. These were mostly engraved on copperplates. They record grants of lands, revenues, and villages made to monks, priests, temples, monasteries, vassals, and officials. They were written in all languages, including Prakrit, Sanskrit, Tamil,

and Telugu.

Literary Sources

Although the ancient Indians knew how to write as early as 2500 BC, our most ancient manuscripts are not older than the AD fourth century and are found in Central Asia. In India, they were written on birch bark and palm leaves, but in Central Asia, where the Prakrit language had spread from India, manuscripts were also written on sheep leather and wooden tablets. These writings are called inscriptions, but they are as good as manuscripts. When printing was not known, manuscripts were very highly valued. Although old Sanskrit manuscripts are found all over India, they mostly relate to south India, Kashmir, and Nepal. Currently, inscriptions are largely preserved in museums, and manuscripts in libraries.

Most ancient books contain religious themes. Hindu religious literature includes the Vedas, the *Ramayana* and the *Mahabharata*, the Puranas, and the like. They throw considerable light on the social and cultural conditions of ancient times, but it is difficult to use them in the context of time and place. The *Rig Veda* may be assigned to c. 1500–1000 BC, though such collections as the *Atharva Veda*, *Yajur Veda*, the Brahmanas, Aranyakas, and the Upanishads date roughly to 1000–500 BC. Almost every Vedic text contains interpolations, which generally appear at the beginning or the end and seldom in the middle. The *Rig Veda* mainly comprises prayers, whereas the later Vedic texts comprise prayers as well as rituals, magic, and mythological stories. However, the Upanishads contain philosophical speculations.

In order to understand the Vedic texts it was necessary to study the Vedangas or the limbs of the Veda. These supplements of the Veda comprised phonetics (*shiksha*), ritual (*kalpa*), grammar (*vyakarana*), etymology (*nirukta*), metrics (*chhanda*), and astronomy (*jyotisha*), and much literature grew around each of these subjects. They were written in the form of precepts in prose. A precept was called a *sutra* because of its brevity. The most famous example of this writing is the grammar of Panini written around 450 BC. While illustrating the rules of grammar, Panini casts invaluable light on the society, economy, and culture of his times.

The two epics and the major Puranas seem to have been finally compiled by c. AD 400. Of the epics, the *Mahabharata* attributed to Vyasa is older and possibly reflects the state of affairs from the tenth century BC to AD fourth

century. Originally, it consisted of 8800 verses and was called *Jaya* or a collection dealing with victory. These were increased to 24,000 and came to be known as *Bharata* because it contains the stories of the descendants of one of the earliest Vedic tribes called Bharata. The final compilation increased the verses to 100,000 which came to be known as the *Mahabharata* or the *Shatasahasri Samhita*. It contains narrative, descriptive, and didactic material. The main narrative which relates to the Kaurava–Pandava conflict may relate to the later Vedic period, the descriptive portion might be of the post-Vedic period, and the didactic portion generally relates to the post-Maurya and Gupta periods. Similarly, the *Ramayana* of Valmiki originally consisted of 6000 verses which were raised to 12,000, and eventually to 24,000. Although this epic appears to be more unified than the *Mahabharata*, it too has its didactic parts which were subsequently added. The *Ramayana* composition started in the fifth century BC. After that, it passed through as many as five stages, and the fifth stage seems to have been as late as the twelfth century AD. As a whole, the text seems to have been composed later than the *Mahabharata*.

In the post-Vedic period we have a large corpus of ritual literature. Grand public sacrifices to be made by princes and men of substance belonging to the three higher varnas are set out in the Shrautasutras, which provide for several ostentatious royal coronation ceremonies. Similarly, domestic rituals connected with birth, naming, sacred thread investiture, marriage, funerals, etc. are prescribed in the Grihyasutras. Both the Shrautasutras and the Grihyasutras relate to c. 600–300 BC. Mention may also be made of the Sulvasutras, which prescribe various kinds of measurements for the construction of sacrificial altars. They mark the beginnings of the study of geometry and mathematics.

The religious books of the Jainas and the Buddhists refer to historical persons and incidents. The earliest Buddhist texts were written in Pali, which was spoken in Magadha or south Bihar, and was basically a form of Prakrit. They were finally compiled in the first century BC in Sri Lanka, but the canonical portions reflect the state of affairs in India in the age of the Buddha. They tell us not only about the life of the Buddha but also about some of his royal contemporaries who ruled over Magadha, north Bihar, and eastern UP. The most important and interesting portion of the non-canonical literature is provided by the stories of the previous births of Gautama Buddha. It was believed that before he was actually born as Gautama, the Buddha passed through over 550 births, in many cases in the form of animals. Each birth story is called a Jataka, which is a folk tale. The Jatakas throw invaluable light on the social and economic conditions of the period between the fifth and second century BC. They also make incidental

references to political events in the age of the Buddha.

The Jaina texts were written in Prakrit and were eventually compiled in AD sixth century in Valabhi in Gujarat. They, however, contain many passages that help us to reconstruct the political history of eastern UP and Bihar in the age of Mahavira. The Jaina texts refer repeatedly to trade and traders.

We also have a large body of secular literature. To this class belong the law-books, called the Dharmasutras and Smritis, which, together with their commentaries, are called Dharmashastras. The Dharmasutras were compiled in 500–200 BC and the principal Smritis were codified in the first six centuries of the Christian era. They prescribe the duties to be performed by the different varnas as well as by kings and their officials. They set out the rules for marriage together with the laws according to which property is to be held, sold, and inherited. They also prescribe punishments for persons guilty of theft, assault, murder, adultery, and the like.

An important law-book is the *Arthashastra* of Kautilya. The text is divided into fifteen books, of which Books II and III may be regarded as being of an earlier date, and seem to have been the work of different hands. This text was put in its final form in the beginning of the Christian era, but its earliest portions reflect the state of society and economy in the age of the Mauryas. It provides rich material for the study of ancient Indian polity and economy.

Of the non-religious texts, the grammatical works are very important for historical construction. They begin with the *Astadhyayi* of Panini. Panini lived in the north-western part of the subcontinent. He is not mentioned in the Pali texts which principally represent Bihar and UP. Panini is dated to around 450 BC by V.S. Agrawala, who has written about Panini's India in both Hindi and English. In his view, no other text provides as much information about the *janapadas* or territorial states of pre-Mauryan times as Panini's does. Patanjali's commentary on Panini, dated 150 BC, supplies valuable information about post-Maurya times.

We also have the works of Bhasa, Sudraka, Kalidasa, and Banabhatta. Apart from their literary value, they mirror the conditions of the times to which the writers belonged. The works of Kalidasa comprise *kavyas* and dramas, the most famous of which is *Abhijnanashakuntalam*. Besides being great creative compositions, they provide us with glimpses of the social and cultural life of the Guptas.

In addition to Sanskrit sources, we have some of the earliest Tamil texts in the corpus of Sangam literature. This literature was produced over a period of three to four centuries by poets who assembled in colleges patronized by chiefs and kings. Such colleges were called Sangam, and the literature produced in

these assemblies was known as Sangam literature. The compilation of the corpus is attributed to the first four Christian centuries, although they were really completed by the sixth century.

The Sangam literature comprises about 30,000 lines of poetry arranged in eight anthologies called Ettuttokai. The poems are collected in groups of hundreds such as *Purananuru* (The Four Hundred of the Exterior). There are two main groups *Patinenkil Kannakku* (The Eighteen Lower Collections) and *Pattuppattu* (The Ten Songs). The former is generally assumed to be older than the latter, and hence is considered to be of great historical importance. The Sangam texts have several layers, but at present these cannot be established on the basis of style and content, but, as shown later, they can be detected on the basis of stages in social evolution.

The Sangam texts are different from the Vedic texts, particularly the *Rig Veda*. They do not constitute religious literature. The short and long poems were composed by numerous poets in praise of various heroes and heroines and are thus secular in nature. They are not primitive songs, but literature of high quality. Many poems mention a warrior or a chief or a king by name and describe in detail his military exploits. The gifts made by him to bards and warriors are celebrated. These poems may have been recited in the courts. They are compared with the heroic poetry of the Homeric age, for they represent a heroic age of warriors and battles. It is difficult to use these texts for historical purposes. Perhaps the proper names, titles, dynasties, territories, wars, and the like mentioned in the poems are partly real. Some of the Chera kings mentioned in the Sangam texts also appear as donors in inscriptions of the first and second centuries.

The Sangam texts refer to many settlements, including Kaveripattanam whose flourishing existence has now been archaeologically corroborated. They also speak of the Yavanas coming in their own vessels, purchasing pepper with gold, and supplying wine and women slaves to the natives. This trade is known not only from Latin and Greek writings but also from the archaeological record. The Sangam literature is a major source of our information for the social, economic, and political life of the people living in deltaic Tamil Nadu in the early Christian centuries. What it says about trade and commerce is confirmed by foreign accounts and archaeological finds.

Foreign Accounts

Indigenous literature can be supplemented by foreign accounts. To India came Greek, Roman, and Chinese visitors, either as travellers or religious converts, and they left behind accounts of the things that they saw. It is remarkable that Alexander's invasion finds no mention in Indian sources, and it is entirely on the basis of the Greek sources that we have to reconstruct the history of his Indian exploits.

The Greek writers mention Sandrokottas, a contemporary of Alexander the Great, who invaded India in 326 BC. Prince Sandrokottas is identified with Chandragupta Maurya, whose date of accession is fixed at 322 BC. This identification has served as the sheet anchor in ancient Indian chronology. The *Indika* of Megasthenes, who came to the court of Chandragupta Maurya, has been preserved only in fragments quoted by subsequent classical writers. These fragments, when read together, furnish valuable information not only about the system of Maurya administration but also about social classes and economic activities in the Maurya period. The *Indika* is not free from credulity and exaggerations, which is true of many other ancient accounts.

Greek and Roman accounts of the first and second centuries mention many Indian ports and enumerate items of trade between India and the Roman empire. The *Periplus of the Erythrean Sea* and Ptolemy's *Geography*, both written in Greek, provide valuable data for the study of ancient geography and commerce. The date ascribed to the first ranges between AD 80 and 115, whereas the second is attributed to about AD 150. The *Periplus of the Erythrean Sea*, which was written by an anonymous author, describes the Roman trade in the Red Sea, Persian Gulf, and the Indian Ocean. Pliny's *Naturalis Historia*, which relates to the first century, was written in Latin, and tells us about trade between India and Italy.

The last Graeco-Roman scholar who wrote on India was called Kosmos Indikopleustes. He hailed from Alexandria, a centre of Hellenistic culture in Egypt. Around 550 he wrote the *Christian Topography* which mentions Christians in India and Sri Lanka and also refers to horse trade.

Of the Chinese travellers, mention may be made of Fa-hsien and Hsuan Tsang. Both of them were Buddhists, and came to this country to visit the Buddhist shrines and to study Buddhism. The first came in the beginning of the fifth century and the second in the second quarter of the seventh century. Fa-hsien describes the social, religious, and economic conditions in India in the age of the Guptas, and Hsuan Tsang presents a similar account of India in the age of Harsha.

Village Study

Relics of communal sharing in feasts, festivals, and pujas throw light on the egalitarian character of ancient tribal society. Loyalty to the clan and caste persists to this day. Survivals of rituals give us an idea of ancient sects and also of the institutions of marriage and family. High caste people do not milk the cow and never take to the plough. Their contempt for manual labour promotes untouchability. Strong traces of inequality are not confined to castes alone but also colour the relationship between man and woman. Till the 1930s even the sati system prevailed in rural parts of Bihar. Thus social inequalities, which prevail despite universal suffrage, indicate the nature of ancient Indian society. Rural rituals and caste prejudices illustrate many of the Dharmashastra rules governing our ancient polity and society.

Natural Sciences

The use of the findings of social sciences started about thirty years ago for the historical construction of ancient India. Recently the use of natural sciences has begun. Evidence from chemistry, geology, and biology has become relevant to the study of ancient India.

Historical Sense

Ancient Indians are charged with a lack of sense of history. It is evident that they did not write history in the manner it is done today, nor did they write it in the way the Greeks did. We have a sort of history in the Puranas, which are eighteen in number (eighteen was a conventional term). Though encyclopaedic in content, the Puranas provide dynastic history up to the beginning of Gupta rule. They mention the places where the events took place and sometimes discuss their causes and effects. Statements about events are made in the future tense, although they were recorded much after the events had occurred. The authors of the Puranas were not unaware of the idea of change, which is the essence of history. The Puranas speak of four ages called *krita*, *treta*, *dvapara*, and *kali*. Each succeeding age is depicted as worse than the preceding one, and as one age slides into the other, moral values and social institutions degenerate. The importance of time and place, vital elements in history, is indicated. It is said that *dharma* becomes *adharma* and vice versa in accordance with changes in time

and place. Several eras, according to which events were recorded, were started in ancient India. Vikrama Samvat began in 57–8 BC, Shaka Samvat in AD 78, and the Gupta era in AD 319. Inscriptions record events in the context of time and place. During the third century BC Ashokan inscriptions demonstrate considerable historical sense. Ashoka ruled for thirty-seven years. His inscriptions record events that happened from the eighth to the twenty-seventh regnal year. To date, events relating to only nine regnal years figure in the inscriptions that have been discovered. Future discoveries may throw light on events relating to the remaining years of his reign. Similarly, in the first century BC Kharavela of Kalinga records a large number of events in his life year by year in the Hathigumpha inscription.

Indians display a considerable historical sense in biographical writings, a good example of which is the composition of the *Harshacharita* by Banabhatta in the seventh century. It is a semi-biographical work written in an ornate style which became the despair of later imitators. It describes the early career of Harshavardhana. Although highly exaggerated, it gives an excellent idea of court life under Harsha and the social and religious life in his age. Later, several other *charitas* or biographies were written. Sandhyakara Nandi's *Ramacharita* (twelfth century) narrates the story of the conflict between the Kaivarta peasants and the Pala prince Ramapala, resulting in the latter's victory. Bilhana's *Vikramankadevacharita* recounts the achievements of his patron, Vikramaditya VI (1076–1127), the Chalukya king of Kalyan. Even the biographies (*charita*) of some merchants of Gujarat were written in AD twelfth–thirteenth centuries. Similar historical works may have been written in south India, but thus far only one such account has been discovered. This is called *Mushika Vamsha* and was written by Atula in the eleventh century. It is an account of the dynasty of the Mushikas which ruled in northern Kerala. However, the best example of the earliest historical writing is provided by the *Rajatarangini* or *The Stream of Kings* written by Kalhana in the twelfth century. It is a string of biographies of the kings of Kashmir, and can be considered to be the first work to possess several characteristics of historical writing as it is understood today.

Constructing History

So far numerous sites, prehistoric, proto-historic, and historical, have been excavated and explored, but the results do not find a place in the mainstream of ancient Indian history. The stages of social evolution in India cannot be properly comprehended without taking into account the results of prehistoric and proto-

historic archaeology, not to speak of historical archaeology. Although nearly 200 sites relating to the ancient historical period have been excavated, yet their relevance to the study of the social, economic, and cultural trends in ancient times has not been adequately discussed in survey studies. This needs to be done both in the context of the rural and urban aspects of ancient India. So far the significance of largely Buddhist and some brahmanical sites has been highlighted, but religious history needs to be seen in relation to social and economic developments.

Ancient history has so far been constructed principally on the basis of literary sources, foreign and indigenous. Coins and inscriptions play some part, but the texts receive greater weightage. Now new methods must be adopted. Historical knowledge keeps growing. We have to be more critical about the dates and contents of the texts. This may be done if we examine the texts in the context of archaeological evidence. Initially, archaeologists were inspired by written texts, and several sites mentioned in the brahmanical and Buddhist texts were excavated. This immensely enriched historical information, though the digging results did not always confirm the contents of the texts. Though full-length reports of many excavated sites are yet to be published, it is advisable to examine the texts in the context of archaeological findings. For the study of the age of the *Rig Veda* we have to take into account of the Gandhara grave culture in which the horse was used and the dead were cremated in the second millennium BC. We have to establish a co-relation between the later Vedic age, on the one hand, and the Painted Grey Ware and other types of archaeological finds, on the other. Similarly, early Pali texts have to be related to the Northern Black Polished Ware (NBPW) archaeology. Besides, the information derived from the Sangam texts needs to be co-related with that inferred from inscriptions and early Megalithic archaeology in peninsular India.

Archaeological evidence should be considered far more important than the long family trees found in the Puranas. The Puranic tradition could be used to date Rama of Ayodhya to around 2000 BC, but diggings and extensive explorations in Ayodhya do not show any settlement around that date. Similarly, although Krishna plays an important role in the *Mahabharata*, the earliest inscriptions and sculptural pieces from Mathura between 200 BC and AD 300 do not attest to his presence. Given such difficulties, the ideas of an epic age based on the *Ramayana* and the *Mahabharata* must be discarded, although in the past it formed a chapter in most survey volumes on ancient India. Of course, several stages of social evolution in both the *Ramayana* and the *Mahabharata* can be detected. This is so because the epics do not belong to a single phase of social

evolution; we may recall that they have undergone several editions. Further, on the basis of literary traditions and epigraphic material, Vardhamana Mahavira and Gautama Buddha are generally dated to the sixth century BC, but the cities they visited are archaeologically not older than 400 BC and therefore the tradition-based dates of these great personalities need to be reconsidered.

On chronological and rational grounds, archaeology, inscriptions, and coins are more important than texts. However, the grammatical works of Panini and Patanjali have almost fixed dates, and they are comparatively free from myths and legends and are therefore as important as coins, inscriptions, and the results of excavations.

Many inscriptions have to date been dismissed on the ground that they are of little historical value. 'Historical value' is taken to mean information necessary to reconstruct political history. However, a royal inscription contains exaggerations. The term hundreds of thousands seems to be a cliché in Ashokan inscriptions. It is applied to people and animals, and raises doubts about the number of the people killed in the Kalinga war and those brought to Pataliputra. There are exaggerations too in the inscriptions of Samudragupta and King Chandra. Despite these exaggerations, in comparison to Puranic traditions, inscriptions are certainly more reliable. Thus, though the Puranas are used to push back the origin of the Satavahanas, the inscriptions place it in the first century BC. Inscriptions may indicate the regnal period of a king, his conquest, and its extent, but they also reveal trends in the development of polity, society, economy, and religion. This study, therefore, does not use inscriptions merely for political or religious history. Epigraphic land grants are valued not for the family trees and lists of conquest, but more importantly for the rise of new states and changes in the social and agrarian structure, particularly in post-Gupta times. Similarly, coins need to be used not only for the reconstruction of the history of the Indo-Greeks, Shakas, Satavahanas, and Kushans, but also for the history of trade and urban life.

In sum, a careful collection of the material derived from texts, coins, inscriptions, archaeology, etc., is essential for historical reconstruction. We have seen that this raises the problem of the relative importance of the sources. Thus, coins, inscriptions, and archaeology are considered more important than mythologies found in the epics and Puranas. Mythologies may support dominant norms, validate social mores, and justify the privileges and disabilities of people organized in castes and other social groups, but the events described in them cannot be taken to be true. Past practices can also be explained with the help of some ancient survivals in our own times. Familiarity with village life and the

insights derived from the study of primitive people are valuable assets in the construction of ancient history. A sound historical reconstruction cannot ignore developments in other ancient societies. A comparative view may remove the obsession with the idea of the 'rare' or 'unique' in ancient India and may bring out those trends that ancient India shares with the past societies of the other countries. We may also use the results of human genetic research to learn about Indian connection with peoples in other parts of the world. A scientific study of heredity and generationwise inherited traits indicate ethnic mixture, dispersal of population, and dissemination of culture.

Chronology

(BC)	
3 M	Writing enters the Indus culture.
1500–1000	<i>Rig Veda</i> .
1000–500	<i>Yajur Veda</i> , <i>Atharva Veda</i> , the Brahmanas, Aranyakas, and the Upanishads.
600–300	Shrautasutras and Grihyasutras.
6 C	Mahavira and the Buddha as per literature.
500–200	Dharmasutras.
450	Grammar of Panini.
5 C	Mahavira and the Buddha in the context of archaeology.
326	Alexander's invasion.
322	Accession of Chandragupta Maurya.
3 C	Decipherable writing in India.
57–8	Vikrama Samvat.
1 C	Hathigumpha inscription of Kharavela of Kalinga.
1 C	The earliest Pali Buddhist texts compiled in Sri Lanka.
(AD)	
1 C	The <i>Arthashastra</i> of Kautilya finally compiled.
78	Start of Shaka Samvat.
80–115	The <i>Periplus of the Erythrean Sea</i> .
150	Ptolemy's <i>Geography</i> .
319	Start of the Gupta era.

400	<i>Mahabharata</i> , <i>Ramayana</i> , and major Puranas finally compiled.
4 C	Earliest Indian manuscript found in Central Asia.
5 C	Fa-hsien comes to India.
6 C	The Prakrit Jaina texts finally compiled in Valabhi.
7 C	Hsuan Tsang's visit. <i>Harshacharita</i> by Banabhatta.
11 C	<i>Mushika Vamsha</i> by Atula.
11–12 C	<i>Vikramankadevacharita</i> by Bilhana.
12 C	<i>Ramacharita</i> by Sandhyakara Nandi. <i>Rajatarangini</i> by Kalhana.
1837	Ashokan inscriptions first deciphered by James Prinsep.