

HISTORY OF INDIA-I

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** This Unit has been adopted from **MAN-002** (Archaeological Anthropology), **Block 5** (Palaeolithic Cultures), **Units 1, 2, 3, 4** (Lower Palaeolithic Cultures, Middle Palaeolithic Cultures, Upper Palaeolithic Cultures, Palaeolithic Art) and **Block 6** (Mesolithic Cultures), **Units 1 & 2** (Mesolithic Features and Indian Mesolithic Cultures).

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*****These Units have been adopted from **EHI-02** (India: Earliest Times to 800 A.D.), **Block 3** (Evolution of Early Indian Society: 2000 B.C. to 1000 B.C.), **Unit 12** (The Early Vedic Society) and **Unit 13** (Changes in the Later Vedic Phase).

***** This Unit has been adopted with some changes from **EHI-02** (India: Earliest Times to 800 A.D.), **Block 4** (India: 6th to 4th Century B.C.), **Unit 17** (Buddhism, Jainism and Other Religious Ideas).

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GUIDELINES FOR STUDY OF THE COURSE

In this Course we have followed a uniform pattern for presenting the learning material. This starts with an Introduction to the Course underlining the significant developments in chronological order and covers four major Themes with coverage of 19 sub-themes or Units. For the convenience of study, all the Units have been presented with a uniform structure. Objectives as the first section of the Unit have been included to help you find what are you expected to learn from the study of the Unit. Please go through these objectives carefully and keep reflecting and checking them after studying a few sections of the Unit. Introduction of the Unit introduces you to the subject area covered and guides you to the way subject matter is presented. These are followed by the main subject area discussed through sections and sub-sections for ease of comprehension. In between the text, some Check Your Progress Exercises have been provided. We advise you to attempt these as and when you reach them. These will help you assess your study and test your comprehension of the subject studied. Compare your answers with the answer guidelines provided after the Summary. The Key Words and unfamiliar terms have been provided at the end of each Unit. At the end of each Unit under Suggested Readings we have also provided a list of books and references. These include sources and books which are useful or have been consulted for developing the material for the concerned Unit. You should try to study them.

COURSE INTRODUCTION

India's history covers a long span of time. It was punctuated by changes in political, economic, social and religious aspects. Of course there were continuities too. The purpose of this course is to introduce you to the major changes and continuities which marked the various stages of history of India. It should be kept in mind that human communities all over the world did not go through the same pace of change and also that the nature of changes, where they took place, was not uniform. That is why when we study Indian society in different stages of its history, we should not expect that even when major changes took place in India, they were identical with what happened, say, in the history of China or in the history of Europe. There were of course stages of change in many societies which were similar in nature. For example, a significant change which took place in Indian society was the transition from food-gathering and hunting to farming. In a later stage, there was the emergence of State organisation. These are broad changes which took place in many other societies also at different points of time, but within these broad changes there were variations. When we study Indian history, we therefore need to know two things:

- 1) What were the major stages of change in Indian history and how did they come about?
- 2) What were the particular institutions and cultural elements in Indian society which may be considered different from those in other societies?

In Indian history when we use the term 'Ancient', we imply the existence of other periods such as 'Medieval' and 'Modern'. You shall be reading about the history of 'Medieval' and 'Modern' periods later on, but right now you may well ask the question: what is meant by 'Ancient' and what distinguishes the 'Ancient' from other periods of our history? Frankly speaking, this is not an easy question to answer. In one sense we have borrowed the idea of dividing the history of our country into three periods by following the writings on European history. But this division is not entirely without justification, although historians continue to debate as to when the 'Ancient' period ended and when the 'Medieval' period began.

In the history of a society we cannot arbitrarily choose a date to draw a sharp line between two periods but it is possible to distinguish the history of one period from that of another by comparing the major social, economic, political and cultural characteristics of these periods. In doing this, historians have come to feel that the historical processes and institutions which went into the making of the ancient period of our history and characterised its society started undergoing perceptible changes from about the 6th-7th centuries CE. There was of course never a complete break from the earlier period, but while certain old institution ceased to exist, others started acquiring new shapes. For example, the republican form of political organization which continued in many parts of northern India till the Gupta period went out of existence during it. In the area of economy, new types of agrarian relations emerged. Caste system which had started emerging from the Later Vedic period took new shapes in the post-Gupta period. There were further elements of regional cultures, like regional languages, which started crystallising in the post-Gupta period. All these changes perhaps indicate that a new phase in Indian history had begun in the 7-8th centuries, although we will be wrong in thinking that they marked a sharp break with the earlier phase.

Another question which is relevant and which also you may feel like asking is: How do we know about historical events and historical changes which took place

so far back in the past? In other words, when historians write about the past what do they depend on since they cannot observe the past? A simple answer to this will be that human societies of all ages have left behind some indication in the form of surviving material, of how they lived. For example, we know about the human communities which lived as hunters and gatherers from the simple stone tools which they prepared and from other types of evidence – like the crude drawings which they made on their rock-shelters. But, in fact, the answer is not as simple as this. What the ancient people left behind has to be discovered and the meaning of what they left behind has to be understood properly, and in most cases, doing this involves work of several types of experts. We cannot make out how exactly a stone tool was made by simple looking at it; it is an expert — in this case a prehistoric archaeologist — who alone has the required training to provide information on this. Supposing an archaeologist comes across remains of animals the ancient hunter hunted, the animals have to be identified by another expert — a palaeontologist. Similarly, the dating of such remains to find out how far back in time do they go has to be done by another type of scientist in his laboratory.

This does not mean that finding out details about only such objects requires collaboration between different types of experts. If you are studying about an age when coins of metal were in use, the numismatist who specialises in the study of coins may give further details about them, but if you want to know the exact percentages of different metals used in making the coin, you shall again have to depend on laboratory tests carried out by scientists. Similarly, only a specialist epigraphist can read and give us the meanings of what was written in the form of inscriptions using different scripts and languages of the past. In the medieval period the ruler of Delhi Firoz-Shah-Tughlaq brought to Delhi Ashokan pillars on which were engraved inscriptions in unknown letters (you can still see one such pillar at Firuz-Shah-Kotla), but even the scholars of his period could not read the letters. It was only many centuries later that an employee of the English East India Company, James Princep, who after considerable efforts, finally deciphered the script in which the inscription and many other inscriptions of Ashoka were written.

These are some examples of how historians have to labour to gather information about the past, and the material remains and records from past societies from which they gather information are called sources of History. These sources of course are not uniform for all periods of History. For example, you have already found out that hunting/gathering communities have not left behind any written records because the art of writing was not known to them. Even after writing came to be known not all written records are of identical nature. Even so, historians have to depend on whatever sources are available to them and reconstruct the past for us. The reconstruction of the past of course does not mean that the historian gives us simply the contents or the information which the sources contain. He has to interpret them and thus make us interested in the meaning of the objects which have survived from the past and also in making connections between these objects. If the archaeologists simply arrange before us the tools of different stone ages, we shall not be able to either say how they were made or what use they were put to, nor shall we be able to see how the periods in which these tools were made were different from one another in many respects, in climate, in the mode of getting food, in the social organization of human groups and even in customs and beliefs. Let us take another example. From the study of written texts and from excavations carried out by archaeologists we come to know that cities emerged in the Ganga valley between the sixth century BCE and fourth century BCE. Since this was a new phenomenon in the history of this region, historians are required to explain, in addition to telling

us that cities emerged and in the context of the social situation of the period what they represented.

By giving us explanations and interpretations historians should help us think and even provoke us into questioning their explanations and their ways of understanding the past. This means that like in other areas of knowledge, history writing also keeps on changing and shifting its focus. This may to some extent explain why in the writing of ancient Indian history, historians have moved away from writing mainly about kings and their achievements and have taken up the study of different dimensions of society and of how changes took place in society. Between historians, interpretations or explanations vary; controversies exist in the explanations of various historical phenomena, and in addition to new sources which archaeologists epigraphists, numismatists and others bring to light, it is also new ways of looking at things and new questions which crop up which keep on expanding the horizon of our knowledge about the past and do not allow this knowledge to remain stagnant.

The Course on Ancient Indian history that you are going to study is divided into four **Themes**. Each Theme consists of a number of Units. Each Theme is intended to introduce to you a major concern or period which may be considered as significant in the context of the history of the ancient period of our country. **Theme I** is a broad category which deals with issues like geographical regions of India, sources of ancient Indian history, the tools, technology, society, and art of the Palaeolithic people in a regional context. Regions of India have been seen from a historical and geographical perspective. The Unit (1) explores the close relationship between humans and land. How historians and geographers have visualised the geographical space, and how the consciousness of space was present among the ancients are some of the issues addressed in the Unit. It also discusses important sources for the reconstruction of ancient Indian history. The last two Units (2 & 3) in the first Theme deal with prehistoric cultures. Attempt has been made to move beyond the discussions about origins and chronology and explore the nature of various archaeological cultures and the changes manifested by them. The analysis is based on empirical data, excavations, and tangible material remains. The prehistoric period of history is an important phase that provides the antecedents to the earliest history.

The second **Theme** explores the transition towards the proto-historic cultures of the Indian subcontinent. The first Unit (4) under this theme takes us to the beginnings of agriculture and domestication of animals. This slow, gradual change from Palaeolithic lifeways established new type of links between humans, animals and land and was revolutionary. The last three Units (5, 6, 7) deal with the Harappan civilization. The excavations carried out in Harappa and Mohenjodaro, in the 1920s changed our perception of Indian history. New cities dating back to 2600 BCE were discovered; even *ante* – dating the Vedic cultures. The Units deal with the processes by which the urban centres evolved gradually, their antecedents, town planning, social structure, trade, religion and decline.

In **Theme III** the focus will be on exploring the cultural profiles of different regions of India between the beginning of the second millennium BCE and 6th century BCE. The Theme also underlines the fact that change was not a constant movement towards development. The highly urbanised Harappan culture suffered decline and gradually agriculture-based rural cultures were formed in all the major regions of the subcontinent. Small settlements based on small scale farming come to be transformed into regular rural settlements of later periods. Initially the cultures of the small farming settlements were Chalcolithic, but from the beginning of the first millennium BCE, iron came to be known to different cultures, for example, Painted Grey Ware

culture of the Upper Ganga valley as also the megalithic cultures of peninsular India. The impact of this metal on different cultures is yet to be properly assessed but the point can be forcefully made that all the crucial ingredients of village life such as the techniques of cultivation (even of irrigation), production of varieties of major crops cultivated even today and combining farming with rearing domesticated animals were present in some measure or the other in the regional cultures of the subcontinent between the second millennium BCE and first millennium BCE. This widespread cultural pattern, of course, co-existed with other cultural patterns such as pastoralism and we must also remember that despite the emergence of farming communities, hunting and gathering continued as a way of life. Secondly, in the Ganga valley, the pace of historical change became suddenly fast from the first millennium BCE onward. The Vedic texts along with archaeological material are used to reconstruct the society, economy, polity of the Early Vedic and the Later Vedic period. A new type of society emerged which meant that people living in it had new questions about life, sought meanings in life and had new aspirations. The *Upanishads*, the teachings of the Buddha and Mahavira, and various other types of ideas of the period sought answers to life's problems. Buddhism and Jainism spread rapidly in the centuries that followed.

The last **Theme IV** is concerned with the period from the 6th century BCE till the end of the Mauryan period. The changes taking place in the Vedic period matured in 6th century BCE. Large territories of *mahajanapadas* emerged; monarchies and republics formed. 'Second Urbanization' flourished. Historians place the beginning of the early historical period of Indian history in this phase. The use of metallic money, trade, rise of powerful *gahapatis* and *setthis*, cities and towns bred a sense of alienation among the people. A complex social order arose in which relations between the different social groups was defined. The *Caturvarna* system which appeared in the Later Vedic phase provided the theoretical frame in which society was organized. The fight for supremacy among the *mahajanapadas* resulted in the emergence of Magadha as the most powerful *mahajanapada*. It is during this period that India's northwest came to play a significant role in Indian politics. The great Persian empire was crushed by the expanding army of Alexander of Macedonia of North Greece. He advanced to Panjab plains and fought valiant battles with territories of this region headed by their warriors. The contact with the Persians and the Greeks, opened up north-western part of the subcontinent to Persian and Greek cultural influences. Later the Mauryas laid the basis of a huge empire which incorporated the north-west too. The last two Units (18 & 19) take a sweeping view on the status of gender in ancient India and how in the fields of environment, science and technology ancient Indians achieved and accomplished a lot.

The History Elective Course, EHI-02 was written more than twenty years back. When it was published for the first time, thanks to the work of distinguished panel of experts, Convenor and Course preparation team, it was well appreciated. Now, IGNOU is bringing out a revamped course which will address substantial changes in the readings of early Indian history. Since the 1990s much more data has been brought to light. The new interpretations of the existing data also require a fresh look at various issues of early India. An attempt has been made to incorporate such changes in the present Course.

BLOCK 1

RECONSTRUCTING ANCIENT INDIAN HISTORY

UNIT 1 GEOGRAPHICAL REGIONS¹ AND SOURCES*

Structure

- 1.0 Objectives
- 1.1 Introduction
- 1.2 Geographical Regions
 - 1.2.1 Specific Major Geographical Units
- 1.3 Uneven Patterns of the Emergence of Historical Regions
- 1.4 The Nature of Regions
- 1.5 Sources for the Study of Ancient Indian History
 - 1.5.1 Literary Sources
 - 1.5.2 Archaeology
 - 1.5.3 Foreign Accounts
- 1.6 Summary
- 1.7 Key Words
- 1.8 Answers to Check Your Progress Exercises
- 1.9 Suggested Readings

1.0 OBJECTIVES

After reading this Unit, you should be able to learn:

- why in the study of the history of a country an understanding of its physical features is necessary;
- how we look at physical features as students of history;
- what are the different types of sources for the reconstruction of ancient Indian history; and
- what are the problems associated with the use of literary sources.

1.1 INTRODUCTION

History without geography is largely incomplete and devoid of its vital substance. It loses focus in the absence of the concept of space. History derives its focus from the concept of space. That is why history is regarded both as the history of humankind and the history of environment. It is difficult to separate the two. The history of humans and the history of environment mutually influence each other.

Reciprocal exchange between humans and nature began early, where each influenced the other. In the Indian subcontinent there are a diversity of situations, from deserts to regions of high rainfall and from vast alluvial plains to high mountains and rocky table-lands. Environment means the “physical surroundings and conditions, especially as affecting people’s lives” (The Concise Oxford Dictionary of Current English, 8th edition, 1990). Soil, rainfall, vegetation, climate

¹This Part of the Unit has been adopted from EHI-02, Block-1.

* This Part of the Unit has been written by Dr. Suchi Dayal, Academic Consultant, Faculty of History, SOSS, IGNOU.

and environment exercise considerable influence on the evolution of human societies.

The later part of the Unit introduces the different types of sources that historians use for the reconstruction of the past. There are three main types of sources: Literary; Archaeological; and Foreign Accounts.

1.2 GEOGRAPHICAL REGIONS

The main purpose behind describing the physical features is to acquaint you with the visible differences in the topography of the different parts of India. There is a deep relationship between the physical geography of any region and its settlement patterns.

The basic physiographic divisions are three:

- 1) Himalayan Uplands,
- 2) Indo-Gangetic plains,
- 3) Peninsular India.

Himalayas are the youngest fold mountains on the Earth. Large quantities of alluvium are continuously carried down into the plains from these mountains owing to weathering and erosion. The Himalayan snow feeds the three great river systems — Indus, Ganga and Brahmaputra — which tend to flow perennially.

The Indus plains saw the evolution of the first civilization while the Ganga plains have sustained and nurtured urban life, state and society and imperial fabrics from the first millennium BCE.

The northern plains and Peninsular India are separated by a large intermediate zone, which may be called Central India, extending from Gujarat to western Odisha over a stretch of 1600 kms; the Aravalli hills in Rajasthan separate the Indus plains from the Peninsula. The intermediate zone is characterized by the presence of the Vindhyan and Satpura ranges and the Chotanagpur plateau covering portions of Jharkhand, Odisha, West Bengal, Bihar and Chhattisgarh.

On the southern edge of the intermediate zone or Central India begins the formation called Peninsular India. It is defined by the flow of four major rivers which flow into the Bay of Bengal. Mahanadi, Godavari, Krishna and Kaveri have produced vast alluvial plains and helped the creation of nuclear areas in the plains and deltas enabling the sustenance of cultural growth through the ancient, medieval and modern periods.

The Narmada and Tapti have a westward flow and run into the Arabian Sea after traversing a long distance in hilly Central India. The well-known feature of the region is the Deccan Plateau. It extends from the Vindhya in the north to the southern limits of Karnataka. The black soil in Maharashtra and in the adjoining part of the Central India is especially rich, for it retains moisture and is considered to be ‘self-ploughing’. The soil yields good crops of cotton, millets, peanuts and oil seeds. The early farming cultures (Chalcolithic) in western and Central India emerged in this region.

1.2.1 Specific Major Geographical Units

So far, we have considered features of the broad geographic divisions at a general plane. Let us now take up the specific major geographical units, which at instances conform to linguistic divisions, and look into their traits from a historical perspective.

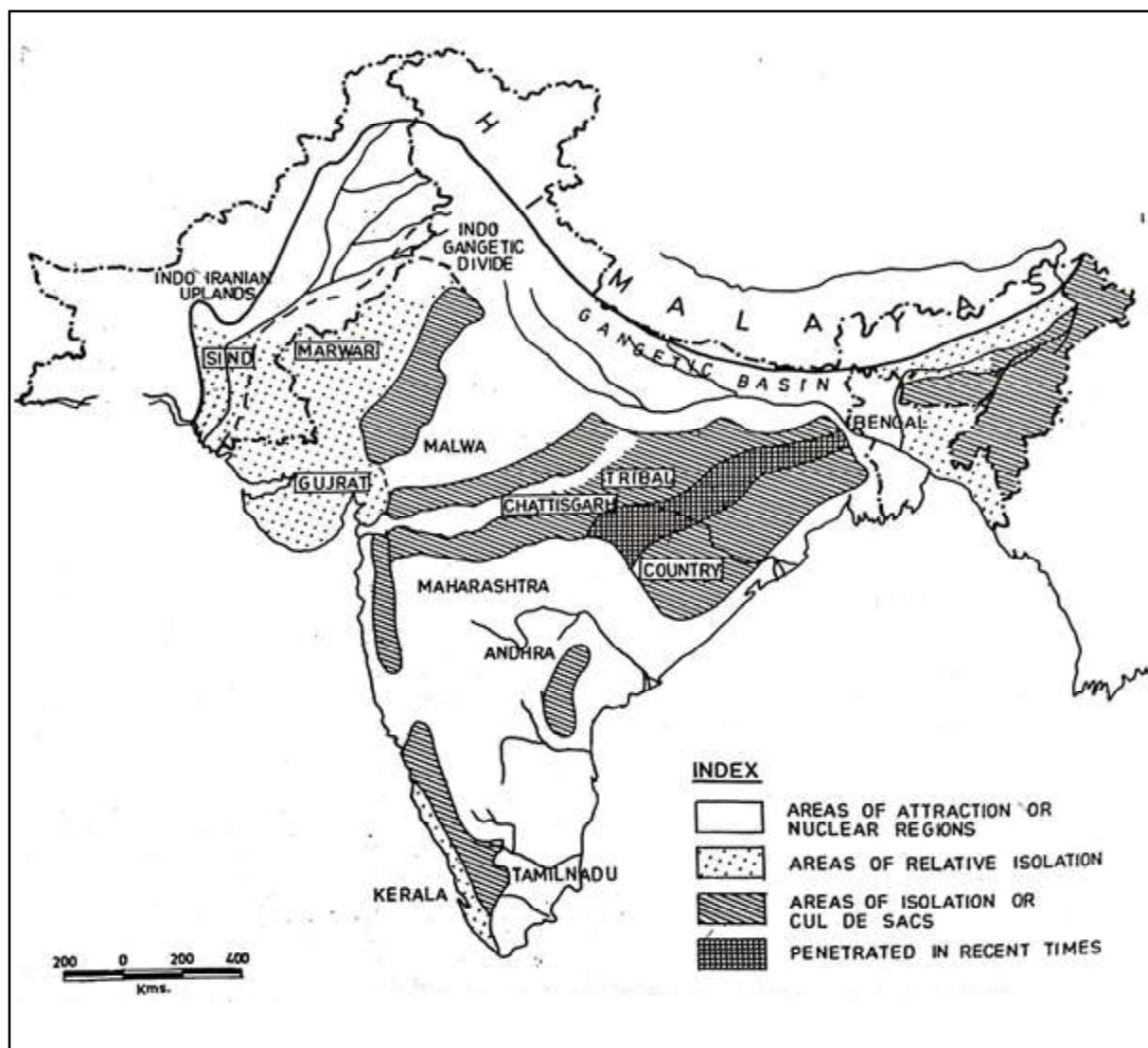
The Himalayas and the Western Frontier

The Himalayas can be divided into three broad units:

- Eastern,
- Western,
- Central.

The eastern mountains run to the east of the Brahmaputra in the north-south extending from Assam to south China. Although, the routes through the eastern mountains are difficult, that has not prevented the flow of cultural influences from Southeast Asia and South China in the prehistoric and historical times.

The central Himalayan region, extending from Bhutan to Chitral, lies at the fringe of the great table-land of Tibet. There have been trade and other contacts between India and Tibet across the frontier.

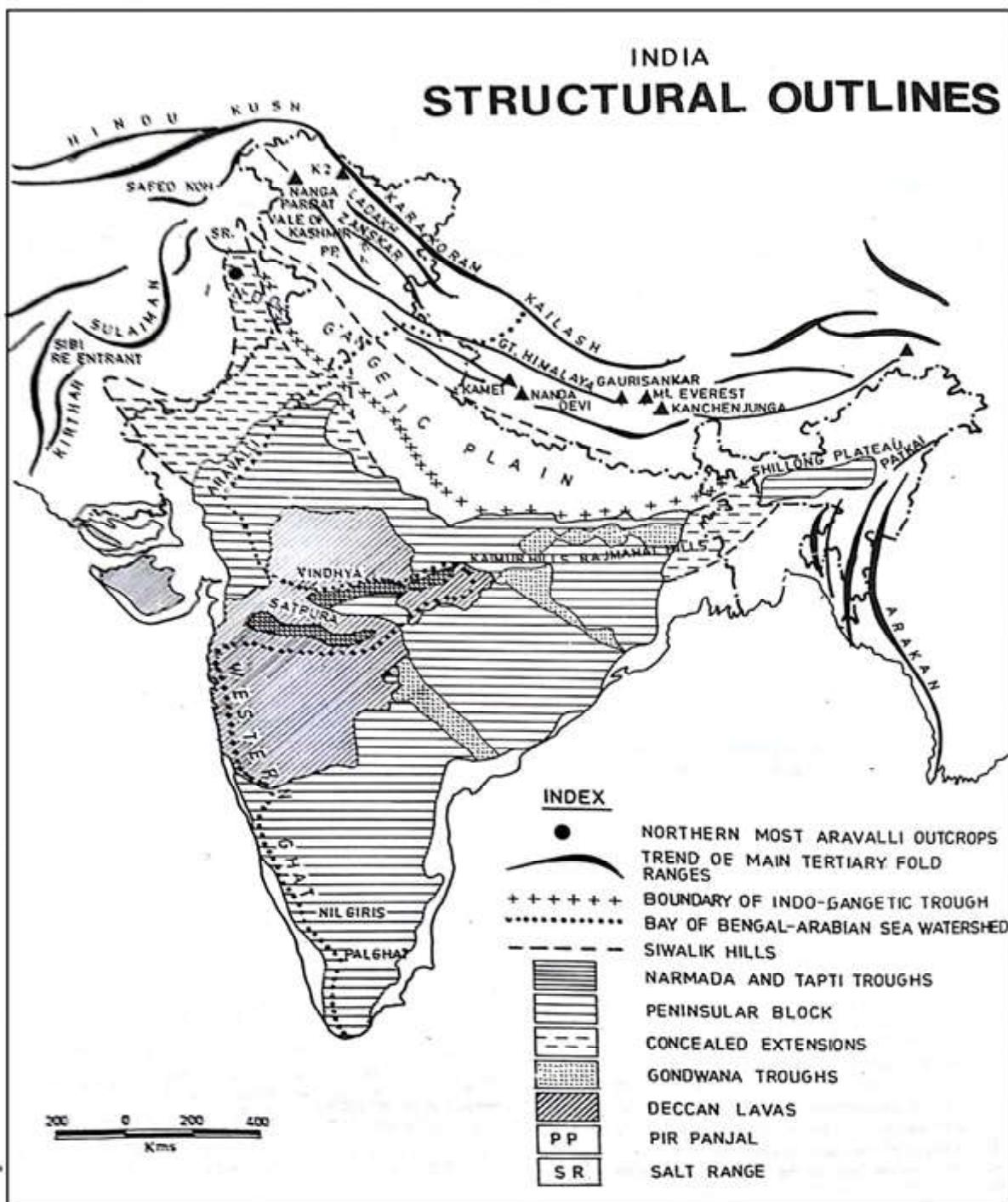


Map: Physical Regions of India

The narrow Hindu Kush range extends south-westward from the Himalayas deep into Afghanistan, covering ancient Gandhara. Geographically and culturally, western Afghanistan has affinities with eastern Iran but south-east Afghanistan has been culturally close with the Indian sub-continent right since the Neolithic age. The Khyber pass and other passes and the Kabul river link it with the Indus plains. It is no surprise that the site of Shortugai in this part of Afghanistan was a trading out-post of the Harappan civilization.

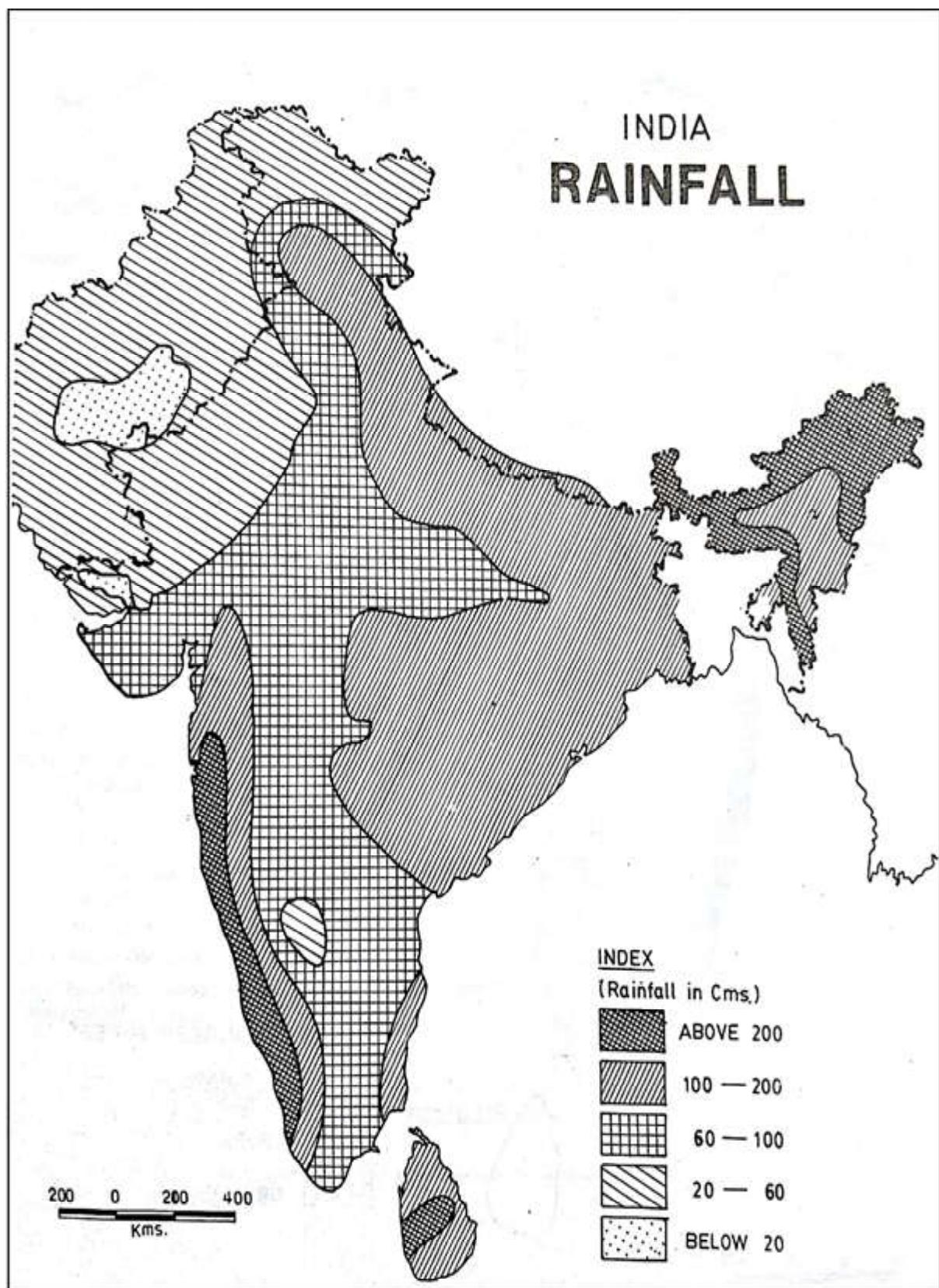
Ancient towns like Kabul and Kandahar are situated on trade routes between Iran and India.

The great routes connecting the Indian plains with Iran and Central Asia through Afghanistan run through the Gomal, Bolan and Khyber passes. These routes have brought in traders, invaders and varied cultural influences all through the

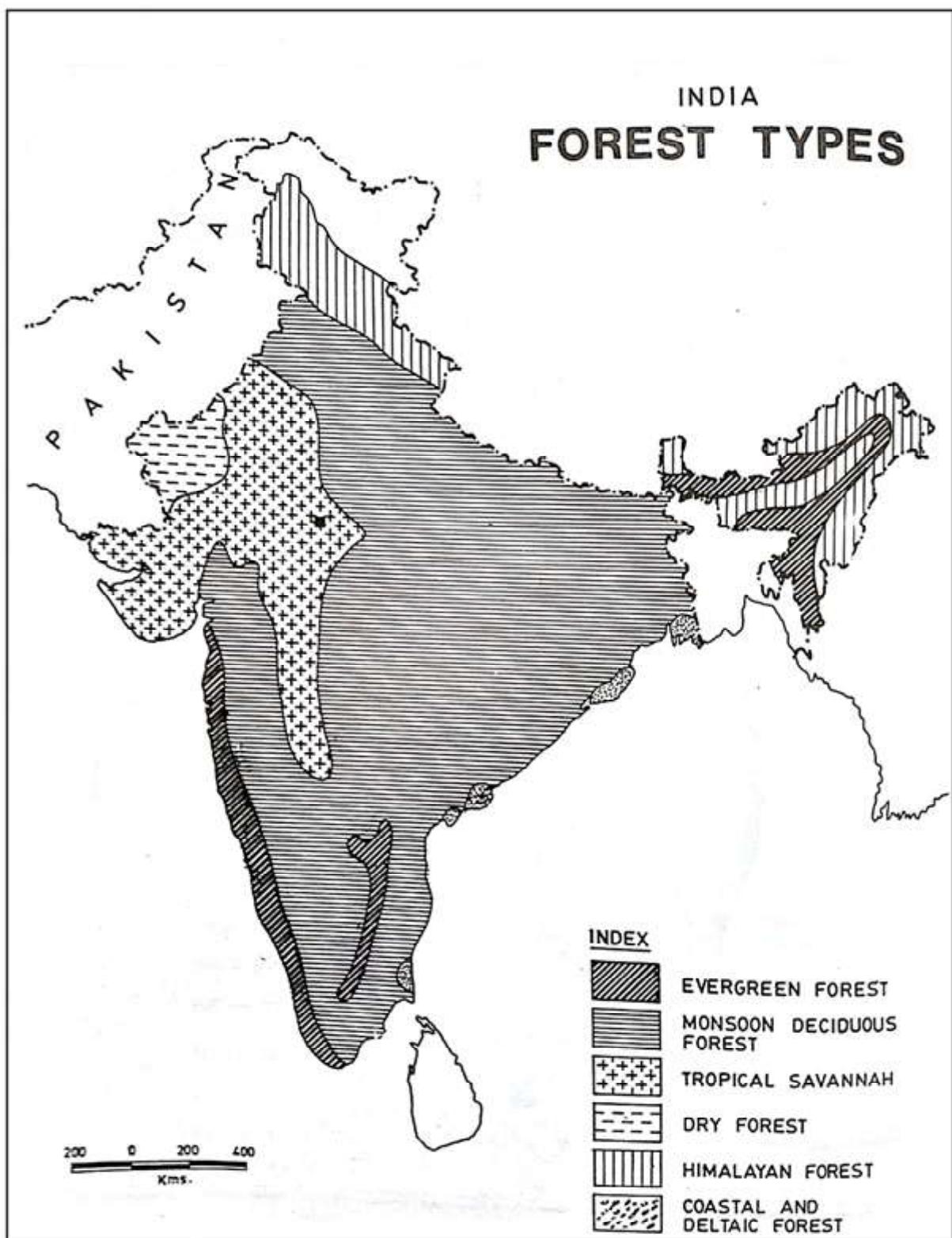


Map: Structural Outlines of India

historic times and even before. The Greeks, Shakas, Kushanas and Hunas and others made their entry into India through these routes. Buddhism and other aspects of Indian civilization entered Afghanistan and Central Asia through these passes. Historically, thus, the Afghan and Baluchistan hills have been an important frontier zone.



Map: Rainfall Zones of India



Map: Types of Forests in India

The Indus Plains

The passes lead to the rich plains of the Indus, which can be divided into two regions:

- Punjab, and
- Sindh.

Punjab (today divided between India and Pakistan) literally means the land of five rivers. These are Ravi, Beas, Chenab, Zhelum, and the Sutlej. These five tributaries of the Indus flowing across a vast alluvial plain have made the region the bread-basket of the subcontinent. Punjab has been the meeting place and the melting pot of cultures.

The lower Indus valley and the delta constitute Sindh. Sindh is situated by the Indus and produces large quantities of rice and wheat. As mentioned earlier, the Indus plain has nurtured the sub-continent's first urban culture during the later 3rd and early 2nd millennium BCE. Two of its major cities Harappa and Mohenjodaro are located in the Punjab and Sindh respectively.

Gangetic Northern India

The Ganga plains can be divided into three sub-regions:

- Upper,
- Middle, and
- Lower.

The Upper plains in western and central Uttar Pradesh largely include the *Doab*. This has been an area of conflict and cultural synthesis. There is increasing evidence of the extension of the Harappan culture into this zone. This was also the centre of the Painted Grey Ware culture and the scene of pulsating activity in the Later Vedic period.

At the confluence of the Ganga and the Yamuna at the terminal point of the *Doab* is Prayagaraj (ancient Prayaga). The Middle Ganga plains correspond to eastern Uttar Pradesh and Bihar. This is where ancient Kosala, Kashi and Magadha were situated. It was the centre of city life and money economy and trade since the 6th century BCE. This region provided the basis for Mauryan imperial expansion and it continued to be politically important till the Gupta period (5th century CE).

The Upper and Middle Ganga plains are geographically defined by the Himalayas on the north and the Central Indian hills on the south. The Lower plains are co-terminus with the province of Bengal. The wide plains of Bengal are formed by the alluvium brought by the Ganga and the Brahmaputra.

The Ganga plains have nurtured greater number of settlements and have sustained a higher population density than other similar regions. It has been the heartland of Indian civilization from the first millennium BCE, through the Classical phase, up to the present. Adjoining the Bengal plains is the long Assam valley produced by the Brahmaputra. It spreads over more than 600 kms. Culturally, Assam is close to Bengal but in terms of historical development it emerges as a late starter like Odisha.

Eastern, Western and Central India

Central India is an entirely different region and does not have a central focal point. The south-eastern part of the state to the east of the Aravallis is part of a sub-region called Malwa. Because of the fertility of the soil the region yields good crops. Chalcolithic settlements are distributed in good numbers in the region. Given its geographical location, it must have acted as a bridge between the Harappans and the other Chalcolithic communities in Central India and the northern Deccan.

Central India constitutes the present-day states of Madhya Pradesh and Chhattisgarh. The Central Indian belt, especially southern Bihar, western Odisha and eastern Madhya Pradesh, has been an area of tribal concentration. Cultural influences from adjoining regions have influenced and integrated the tribals into the dominant caste-peasant base of Indian society from early historic times and more so from the Gupta period.

Gujarat is situated on the western fringe of the Central Indian Belt. It consists of three natural divisions: Saurashtra, Anarta (N. Gujarat) and Lata (S. Gujarat). The central peninsula of Gujarat is called Kathiawar. The low-lying Rann of Kutch is another feature which during the monsoon turns into a swamp. Although Gujarat appears to have been a zone of isolation, actually, it is a region of continuous ancient settlements dating back from the Harappan period. Because of its protected position and the lengthy coastline Gujarat has been the focus of coastal and external trade for more than four thousand years.

To the south-west of the delta of the Ganga at the eastern end of the hills of Central India are the coastal plains of Odisha. Not only has it been an agrarian base but also a centre of socio-cultural development. Odisha began to develop her linguistic and cultural identity late in the first millennium CE.

Peninsular India

The Deccan Plateau and the surrounding coastal plains define the contours of Peninsular India. The plateau is divided into four major regions which largely correspond to the states of Maharashtra, Andhra, Telangana and Karnataka. Neolithic settlers in south-western Andhra based themselves on pastoralism as an adaptational strategy; the Chalcolithic communities of the northern Deccan increasingly relied on agriculture.

The Extreme South

The wide eastern coastal plain in the south and its adjoining hinterland constitute Tamil Nadu. The Kaveri plain and its delta constitute its epicentre. The rivers in the region being seasonal, the peasants of the region relied on tank irrigation since the Pallava-Chola times. The ecological variations, which supported alternative, at times, interrelated ways of life, are attested to in the *Sangam* literature.

The western coastal plain, too, broadens in the extreme south and corresponds to the region known as Malabar or the present state of Kerala. In addition to rice and other crops, Kerala produces pepper and spices which have been traded with the West since the post-Mauryan times. Relatively isolated by land, Kerala has been open to the sea and interestingly first the Christian and then the Muslim influence here came by sea.

1.3 UNEVEN PATTERNS OF THE EMERGENCE OF HISTORICAL REGIONS

It should be remembered that in history the processes of the emergence of regions have been uneven. The uneven pattern of cultural growth and the differential configuration of historical forces in the numerous regions were greatly influenced by geography.

The uneven development of regions can be demonstrated through interesting historical situations. For example, in the second half of the third millennium BCE one encounters Mesolithic cultures in Gujarat and at the same time Neolithic cattle-keepers were traversing the landscape of the Deccan. What is striking is that the mature, advanced Harappan civilization co-existed with these cultures and regions at different levels of growth. Such tendencies have persisted all through Indian history. To put it differently, while the Indus and Saraswati basins were colonized in the third millennium BCE, the first large scale agricultural communities of the Deccan, Andhra, Tamil Nadu, Odisha and Gujarat belong essentially to the Iron Age, and can be placed in the second half of the first millennium BCE. Though the Gangetic north attracted settlements early on, the vast areas of intermediate zones or forested hills of Central India were never thoroughly colonized and, therefore, they continued to provide shelter and isolation to tribes at different stages of primitive economy. In the subcontinent, civilization and a more complex culture with hierarchical social organization reached different areas in different periods and the regional spread of a more advanced material culture was unevenly balanced.

1.4 THE NATURE OF REGIONS

A yet another way to classify regions is to understand them in terms of Areas of Perennial Nuclear Regions, Areas of Relative Isolation and Areas of Isolation. Let us see the merit of such a classification.

In Indian history we see the early emergence of some regions as perennial bases of power. In such regions we observe an uninterrupted succession of powerful kingdoms. In contrast, there were other less favoured regions too.

The perennial nuclear regions correspond to the major river valleys, such as the Ganga, Mahanadi, Godavari, Krishna and Kaveri, and they have been areas of attraction for human settlements. The availability of resources and the convergence of trade and communication routes have added to their importance. Logically, they have emerged as important centres of power.

However, it should be remembered that nuclearity or otherwise of a region is linked with how historical factors converge on it. Areas of relative isolation in Central India such as the country of Bhils, Bastar and the Rajmahal hills, in terms of structure of settlements, agrarian history, social organization and state systems, differed from the nuclear regions. Because regions developed historically, the distinction between the three types of regions is not unalterably fixed once for all. Transformation from one category to the other is possible at a certain point.

Can geography and environment be taken as some kind of prime movers? All natural regions are only areas of possibilities and these possibilities are actualized

through human intervention at the stage of their technological attainments. Thus, history cannot be perceived in terms of geographical determinism.

If we look at the Harappan civilization, we find that it was the active interaction between the environment and social set up that led to the ecological fallout. The first urban civilization, Harappan civilization, of the Indian subcontinent evolved in a very wide region of the north-west. Archaeological evidence indicates extensive use of the plough during this time. They had also begun to add indigenous rainy season crops like rice and pulses to the winter crops of wheat, barley, lentils of West Asian origin. The agricultural surplus thus produced permitted the establishment of many towns, where the surplus served to promote further processing and exchange of materials, as well as trade and artisanal activities. Exchange over long distances, as opposed to barter on a small scale, called for maintenance of records, and the Indus Valley civilization offers the first evidence of literacy in Indian history. The gradual weakening and disappearance of the urban centres of this civilization has been attributed to a variety of possible causes. The drying up of the Saraswati river, flooding of the Indus, climatic change as evident from palaeobotany, salination of the agricultural soil due to irrigation and over-utilization of the natural resources leading to depletion of the natural vegetation cover: all or some of these led to the collapse of the Indus civilization.

Scholars are giving importance to ecological imbalances as one of the main reasons for the decline of this civilization. This was caused by wearing out of the landscape by continuous human and animal use over a long period of time. The depletion of the subsistence base caused strain on the entire economy of the civilization. This is reflected in gradual deterioration in town planning and living standards of the people. Gradually, the Harappans moved out of the core regions to areas offering better subsistence possibilities.

Check Your Progress Exercise 1

- 1) Discuss the three main physiographic divisions of India in five lines each.

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- 2) Write a note on the nature of regions.

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1.5 SOURCES FOR THE STUDY OF ANCIENT INDIAN HISTORY

Sources are important for the reconstruction of the past. Any remnant of the past can serve the purpose of a source.

We have a variety of sources for reconstructing the history of ancient India. Broadly, they can be classified under the following main categories:

- i) Literary,
- ii) Archaeological,
- iii) Foreign Accounts.

Under the literary sources can be included the Vedic, Buddhist and Jain literature, the Epics, *Puranas*, *Sangam* literature, ancient biographies, poetry and drama. Under the broad head of Archaeology, we may consider epigraphic, numismatic and architectural/archaeological remains that are recovered as the result of archaeological explorations and excavations.

In Indian history there is a primacy accorded to the written records. However, archaeological artifacts in the form of temple remains, coins, house remains, post-holes, pottery, silos etc. also constitute an important category of evidence. For all the three periods of Indian history – ancient, medieval and modern – the archaeological evidence has acquired a lot of significance. It is indispensable for those periods which did not have any writing; for example, the prehistoric and proto-historic period of Indian history.

The sources can also be divided into primary and secondary. All archaeological artifacts recovered from the earth or written documents in the form of temple records; *talapatra* (palm-leaf manuscripts); inscriptions on palm leaves, pillars, rocks, copper plates, pot sherds etc. together constitute what are called the **primary** sources. These are used by the historians to write articles, books or any form of written history which are used by the subsequent researchers and are, hence, called the **secondary** sources.

The written primary sources are of two kinds:

- i) Manuscript sources/ Inscriptions
- ii) Published material.

One needs to be careful with all such records as one should find out the purpose behind them, what audience they were intended for, and, thus, accordingly proceed with caution.

There are some crucial aspects which need to be taken care of when one is studying texts for historical information. Upinder Singh has pointed out that if the text was composed at a specific period than its use as a historical source is unproblematic. However, the exercise becomes much more complex if the composition extends over a long period of time. For example, in the case of the Indian Epic *Mahabharata*, it is difficult to bracket it as a text composed at a specific point of time. In such cases the historian has to sift through various chronological layers and look critically into various additions and interpolations. Language, style and content of a text have to be analyzed. In the case of both-

Mahabharata and *Ramayana*, critical editions have been made where different manuscripts of these texts have been analyzed and an attempt has been made to identify their original core.

Certain questions have to be kept in mind while studying texts, for example, why were they composed? For whom? What was their social and cultural context? A text may represent an ideal and must not be taken as a description of what was actually happening at that time. A text, like so many of Indian religious texts, may contain myths which may have pointers to historical information, but should be studied with caution.

1.5.1 Literary Sources

Most of the early Indian literature contains much that deals with religion, theology, cosmology, cosmogony, magic, ritual, prayers and mythology. There are problems associated with dating these texts since their period of composition and compilation differ by a wide margin. As their subject matter is theology or religion, it is difficult to understand them historically. The *Vedas*, *Upanishads*, *Brahamanas*, *Shashtra* literature, Epics and *Puranas* etc. deal broadly with non-secular themes. We will be studying these different categories of early Indian literature as sources of Indian history.

Vedas

The earliest known literature from the Indian subcontinent is in Sanskrit. The word *veda* is derived from the Sanskrit root ‘*vid*’ which means ‘to know’. *Veda* means knowledge. They are oral literature par excellence. They are traditionally regarded as ‘heard’ or revealed texts. The Vedic literature consists of three different classes of literary works which are:

- a) *Samhitas* or collections, namely collections of hymns, prayers, incantations, benedictions, sacrificial formulas and litanies. Four *Samhitas* are in existence which differ from each other:
 - 1) *Rigveda Samhita*: The collection of the *Rigveda*. It is the *veda* or the knowledge of the songs of praise (*ric*).
 - 2) *Atharvaveda Samhita*: The collection of the *Atharvaveda* or the knowledge of magical formulae (*atharvan*).
 - 3) *Samveda Samhita*: The collection of the *Samveda* i.e. the knowledge of melodies (*saman*).
 - 4) *Yajurveda Samhita*: The collection of the *Yajurveda* i.e. the knowledge of the sacrificial formulas (*yajus*).
- b) *Brahamanas*: These are voluminous prose texts which contain theological matter, especially observations on sacrifice and the practical or mystical significance of the separate sacrificial rites and ceremonies.
- c) *Aranyakas* (forest texts) and *Upanishads* (secret doctrines): They contain the incantations of the forest hermits and ascetics on God, the world, mankind and contains a good deal of oldest Indian philosophy.

The whole Vedic literature is considered to have been revealed by God and therefore considered sacred. Chronologically, it spans a thousand years with some belonging to an earlier period and some portions to a later period. The *Rigveda* is the oldest and consists of ten books or *mandalas*. Books II-VII are the earliest.

These are also called Family Books because each is ascribed by tradition to a particular family of *rishis*. When we refer to Early Vedic literature, we essentially refer to Books II -VII of the *Rigveda*, believed to have been composed between c. 1500-1000 BCE. The Later Vedic Literature includes Books I, VIII, IX and X of the *Rigveda*, *Samveda*, *Yajurveda* and *Atharvaveda*, *Brahmanas*, *Aranyakas* and *Upanishads*. These were composed between c. 1000 BCE to 500 BCE.

Though most of the Vedic literature contains songs, prayers, theological and theosophical matter, these have been used by the historians to cull out political, religious and social data of much historical value. Information about processes like the transition from a pastoral, pre-class/caste society in the *Rigveda* to agrarian, class, caste society and the formations of political territories in the Later Vedic period has been obtained from these texts.

Then, there is a category of texts — the *Sutras* — which form part of the post-Vedic literature. These have been classified as ‘*smriti*’ or ‘memorized rather than heard’ (*shruti*) texts. The suggested meaning is that these were composed by humans — great sages — and as such, do not enjoy the sanctity of the *Vedas* though they are considered authoritative in their own right. The *Sutra* texts are manuals on ritual (c. 600-300 BCE). These include:

- a) *Shrautasutra*: contains rules for the performance of the great sacrifices.
- b) *Grihyasutra*: contains directions for the simple ceremonies and sacrificial acts of daily life.
- c) *Dharmasutra*: These are books of instructions on spiritual and secular law. They are the oldest law books.

Post-*Sutra* texts are the *Smriti* texts which are *Manu Smriti*, *Narada Smriti* and *Yajnavalkya Smriti*. These were composed between c. 200 BCE and 900 CE. They prescribe duties for different *varnas* as well as for kings and their officials. They set out rules for marriage and property. They also prescribe punishments for persons guilty of theft, assault, murder, adultery etc.

Oral and Written Tradition in Early India

A large portion of early Indian literature belongs to the oral tradition. The *Vedas* are traditionally regarded as *Shruti* i.e. ‘heard’ or revealed texts, words said to have been uttered by God Brahma in the ears of the first Man. They were handed down from one generation to the next with emphasis on memorization. Lotika Varadarajan feels that the process of memorization of the sacred texts obfuscated the vulgarization and corruption of the ritual utterances. This would have not been possible if these were transmitted through the written word. Knowledge was sacred and closed and only to be transmitted to a worthy student.

The advent of literacy is associated with urbanization in India. The increase in trade and commerce coincided with the use of script and references abound about promissory notes, letters of credit, records of items produced and exchanged and even usury. The inscriptions were the greatest expressions of literacy. The Ashokan inscriptions dating to the third century BCE used the Brahmi script, the earliest evidence of the use of Brahmi. Romila Thapar remarks that what is true about Indian culture was that the oral and the written were closely integrated in cultural expression and written was not imposed on the oral tradition thus preventing it from becoming an alien feature.

Kautilya's *Arthashastra*

It is an important law book. The text is divided into fifteen books of which Book II and III may be regarded as being of an earlier date and seem to have been the work of different hands. It was put into final form in the beginning of the Common Era. However, the earliest portions reflect the state and society of the Mauryan period. It provides rich material for the study of early Indian polity and economy.

Ramayana and Mahabharata

The two famous Epics — *Mahabharata* and *Ramayana* — are known as *Itihasa* ('thus it was') or narratives. Both took many centuries to come into shape and the period roughly assigned to them is c. 500 BCE-500 CE. Vyasa's *Mahabharata* is older and possibly reflects the state of affairs from the tenth century BCE-fourth century CE. The main narrative which relates to the Kaurava-Pandava conflict may relate to the Later Vedic period; the descriptive portion might be post-Vedic and the didactic portions generally relate to post-Maurya and Gupta periods (Sharma, 2005). Since both *Mahabharata* and *Ramayana* contain interpolations and portions added at various points of time, historians have to be careful in sifting material. They also have to take into account different chronological layers. The *Ramayana* of Valmiki appears to be more unified than the *Mahabharata*. Some of the sites mentioned in the *Ramayana* and *Mahabharata* have been excavated. Ayodhya excavations have revealed settlement going back to the Northern Black Polished Ware period. Hastinapura, Kurukshetra, Panipat, Baghpat, Mathura, Tilpat and Bairat have been excavated and these date back to the Painted Grey Ware period. Both Epics are a mine of information on religious sects, how they were integrated into mainstream Hinduism, social practices and norms current at the time, and philosophy.

Puranas

These are a category of texts attributed to Vyasa. There are eighteen *Mahapuranas* and numerous *Upapuranas* (secondary *Puranas*). The major *Puranas* were compiled by c. 400 CE. Their content indicates that these were the works of various hands. The *Puranas* has five sections- *sarga* (the creation of the world), *pratisarga* (re-creation), *manvantaras* (periods of the various Manus), *vamsha* (the genealogy of gods and *rishis*), and *Vamshanucharita* (an account of royal dynasties). Many *Puranas* like Vayu, Brahmanda, Brahma, Harivamsha, Matsya, Vishnu contain useful information for reconstructing the history of ancient India. As mentioned before, the *Puranas* contain considerable genealogical information. However, it is the later genealogies of the *Kali* Age that are historically important. There is much on ancient dynasties such as Haryankas, Shaishunagas, Nandas, Mauryas, Sungas, Kanvas and Andhras. Certain kings with their names ending in the suffix 'naga' are also mentioned who supposedly ruled in northern and Central India. Interestingly, we do not know about these kings from any other source. The dynastic lists end with the Guptas indicating that the *Puranas* may have been compiled by fourth-sixth centuries CE. However, there are a few which are later such as *Bhagvata Purana* (tenth century) and *Skanda Purana* (fourteenth century).

Puranas are also important for providing geographical information on rivers, lakes, mountains and other places. Hence, they are crucial for reconstructing the historical geography of ancient India. Besides, they are a good source of information on the three major cults of Hinduism — Vishnu, Siva and Shakti.

Various processes like how different cults became integrated within the major religious traditions, and how minor cults like Ganpatya, Krishna, Brahma, Karttikeya emerged, can also be gleaned from them. *Puranas* have been understood as a vehicle through which the brahmanas spread their social and religious values.

Sangam Literature

The earliest Tamil texts are found in the corpus of *Sangam* literature. This is the work of poets who composed them over a period of three to four centuries. They assembled in colleges which were called *Sangams* and the literature produced in these colleges was called *Sangam* literature. There were three *Sangams* or literary gatherings — the first and last at Madurai and the second at Kapatapuram. This entire body of literature is dated to first four centuries of the Common Era, though they may have been completed by the sixth century. There is, however, some doubts about the historicity of these gatherings. Scholars, therefore, like to use the term “early classical Tamil literature” rather than *Sangam* literature (Singh, 2008).

The poems, some 30000 lines of poetry, are on the theme of love and war. They were modelled on the bardic songs of ancient times and transmitted orally for a long time before they were compiled. They do not constitute as religious literature. The poets came from all walks of life and included teachers, merchants, carpenters, goldsmiths, blacksmiths, soldiers, ministers and kings. Due to their varied themes and authorship they are a mine of information on everyday life of the people of their times (Singh, 2008). They constitute literature of the highest quality.

Many poems mention a king or a hero by name and describe in detail his military exploits. The gifts made by him to bards and warriors are celebrated. May be, these poems were recited in the court. It is a possibility that the names of the kings refer to historical figures. Chola kings are mentioned as donors.

The *Sangam* literature mentions many flourishing towns such as Kaveripattinam. They also speak of *Yavanas* coming in their own vessels and purchasing pepper for gold and supplying wine and women slaves to the natives (Sharma, 2005). Their information on trade is corroborated by archaeology and foreign accounts.

Biographies, Poetry and Drama

Early India is a repository of masterpieces of drama and poetry. Historians have used them to cull out information on the times in which they were composed. The earliest Sanskrit poets and playwrights include Ashvagosha and Bhasa. Ashvagosha authored *Buddhacharita*, *Sariputraprakarna* and *Saundarananda*. Bhasa was a dramatist and wrote *Pancharatra*, *Dutavakya*, *Balacarita* and *Svapna-Vasavadatta*. The great Sanskrit writer Kalidasa (fourth-fifth centuries) authored dramas like *Abhijnana-Shakuntalam*, *Malavikagnimitram*, *Vikramorvashiyam* and poetic works such as *Raghuvamsha*, *Kumarasambhavam* and *Meghadutam*. They provide important insights into the social and cultural life of the Guptas. Then, there are ancient dramas on historical themes. Mention may be made of Vishakadatta’s *Mudrarakshasa* (seventh-eighth centuries). This drama is based on how Chanakya tries to win over Rakshasa, a minister of the Nandas, to Chandragupta Maurya’s side. His other play *Devichandraguptam* centres on an incident in Gupta king, Ramagupta’s reign.

Narrative literature included *Panchatantra* (fifth-sixth centuries) and *Kathasaritasagara* (Ocean of Streams of Stories). They are collections of popular folk tales.

Biographies of well-known kings are an interesting piece of literature. These were written by court poets and writers in praise of their royal patrons. Banabhatta's *Harshacharita* (seventh century) talks in eulogistic terms about Harshavardhana of the Pushyabhuti dynasty. It is the oldest surviving biography in India. According to Bana, it is an *adhyayika*, a genre of texts related to *itihasa* tradition. It speaks highly of the king but at the same time, hints at the fratricidal struggle for the throne. Bilhana's *Vikramankadevacarita* (twelfth century) is about the Chalukyan king Vikramaditya VI.

Buddhist and Jaina Literature

Among the non-Brahmanical and non-Sanskritic sources of early India, Buddhist and Jain literature constitute an important category. Said to have been composed after the death of the Buddha, the Pali texts *Tripitakas* or the 'Three Baskets' tell us about the state of affairs in India at the time of the Buddha and sixteen *Mahajanapadas*. *Tripitakas* is the common name which is given to the Buddhist canonical literature and their commentaries in Pali language. The *Tripitakas* are in Pali, Chinese and Tibetan versions. They consist of three books — the *Sutta*, *Vinaya* and *Abhidhamma*. The *Sutta Pitaka* contains the discourses of the Buddha on various doctrinal issues in stories, poems and dialogue form. The *Vinaya* is about the 227 rules and regulations for monks and nuns of the *Sangha*. It includes explanations about the founding of each rule by the Buddha. It contains information about the Buddha's life, events and the story of Buddhism down to the first schism. It was written in 386 BCE. The *Abhidhamma Pitaka* (literally 'higher *Dharma*') contains matter related to Buddhist philosophy in accordance with the *Theravada* school and contains lists, summaries and questions and answers. The *Sutta Pitaka* contains five *Nikayas* of which *Khuddaka Nikaya* is a collection of discourses. It contains *Theragatha*, *Therigatha* and *Jatakas* which are important sources for the historian. The *Jatakas* contain stories about the former births of the Buddha in the form of a *deva*, man, animal, fairy, spirit or a mythological character. Many stories and motifs were borrowed from pre-Buddhist and non-Buddhist oral vernacular traditions. Due to their popularity they were transformed into sculptural bas-reliefs at Bharhut, Sanchi, Nagarjunakonda and Amaravati. They are important as they provide a glimpse into the history of Buddhism and popular Buddhism.

Theragatha (Verses of Elder Monks) and *Therigatha* (Verses of the Elder Nuns) are a collection of poems with verses which were narrated by the early members of the Buddhist *Sangha*. *Therigatha* is the first surviving poetry supposed to have been composed by women in India. Hence, it is important for not only Buddhism but also gender studies. The *gathas* of the *Therigatha* strongly support the view that women are equal to men in terms of spiritual attainment.

Non-canonical Buddhist literature includes *Milindapanha* (first century BCE-first century CE) which consists of a dialogue between Indo-Greek king Menander and a Buddhist monk Nagasena. The Sinhalese chronicles *Mahavamsha* ('Great History') and *Dipavamsha* ('History of the Island') entail the history of Buddhism

from the time of the Buddha's Enlightenment to third century BCE in India and fourth century in Sri Lanka.

Jaina literature constitutes another important category of texts which are in a form of Prakrit called Ardha Magadhi. The literature of the *Digambaras* is in Jaina Sauraseni while *Shvetambara* literature is in two dialects of Ardha Magadhi. Mahavira's teachings to his disciples were first compiled in 14 *Purvas*. In the fourth century BCE Sthulabhadra convened a great council at Pataliputra and reconstructed the Jaina canon in 12 *Angas*. Later in the fifth century CE at a council at Valabhi, the existing texts were formalized and presented in written form. The scriptures accepted by the *Shvetambaras* are- 12 *Angas*, 12 *Upangas*, 10 *Prakirnas*, 6 *Chedasutras*, 2 *Sutras*, 4 *Mulasutras*. These texts deal with code of conduct, various legends, Jaina doctrines and metaphysics. The *Digambaras* believe that most of the original *Purvas* are lost. Hence, the *Digambaras* do not accept the scriptures accepted by the *Shvetambaras*. The *Digambaras* use the scriptures written by great *Acharyas* but based on the original teachings of Mahavira for their religious practices. We can use the Jaina literature for information on history and doctrine of Jainism, doctrines of rival schools, the life stories of the saints and life of the monks in the *sangha*.

From the above discussion it is clear that much of ancient Indian literature is religious in character. This became the basis of the notion that early India wrote no history. What the Indologists were looking for was an awareness of evidence, interest in causation, premium on chronology and sequential narrative in the early Indian Sanskrit texts. What they found instead was what they called fantasy, fables, religious idioms and exotic tales. Recent studies by scholars have attempted to unravel the ways some societies articulate a particular perspective of the past for varied reasons. Romila Thapar talks about one such tradition that is the *itihasa-purana* tradition in early India. She notes that it is important to realize the significance of the fact that some societies choose to record their past in particular forms. One such form is an embedded form of consciousness which needs to be prised out of the texts. These include origin myths, compositions in praise of heroes or genealogies of ancient descent groups. Some other texts have a more externalized form of history, such as biographies of rulers and those in authority, written in a recognizable form.

1.5.2 Archaeology

Archaeology is a branch of knowledge that studies material culture to understand the past. It has a close relation to history. Sculptures, pottery remains, bone fragments, house remains, temple remnants, coins, seals, inscriptions, floral remains like charred grains, ancient pollen and spores etc. constitute material culture that forms the subject matter of archaeology.

It is the archaeological evidence that has permitted us to study the prehistoric period. In India, even proto-historic period has been reconstructed on the basis of archaeology. However, we cannot limit the usefulness of archaeology to these periods alone; it is significant even for those periods which have written evidence, and which fall in the sphere of history proper. For example, the history of the Indo-Greeks has been reconstructed solely on the basis of coins.



Figure : Hoard of Mauryan Punch Marked Coins. Credit: CNG Coins.

Source: Wikimedia Commons (https://en.wikipedia.org/wiki/File:Hoard_of_mostly_Mauryan_coins.jpg).

Archaeological methods like excavation and exploration are important as they provide significant amount of data on trade, state, economy, societal aspects, religion and such mundane aspects like how people lived, ate and clothed themselves. Excavations have provided immense amount of data bearing on the Palaeolithic, Mesolithic, Neolithic, Chalcolithic, Iron Age, Megalithic and many other cultures. Since Harappan script is still undeciphered, information about this period has been solely obtained from archaeology. It tells us about origin, spread, settlement patterns, town planning, trade, polity, economy, agriculture, hunting, crops, agricultural implements, technology, beads, seals, fire altars, religion and how this civilization declined.



Figure : Mauryan Ruins of Pillared Hall at Kumrahar of Pataliputra laid bare by Excavations.

Source: 1912-13 Archaeological Excavation by ASIEC at Pataliputra. Source: Wikimedia Commons (https://en.wikipedia.org/wiki/Kumhrar#/media/File:Mauryan_ruins_of_pillared_hall_at_Kumrahar_site_of_Pataliputra_ASIEC_1912-13.jpg).

Coins

Coinage has been found either in excavations as archaeological finds or as hoards. The study of coins is called **Numismatics**. Coinage is metal currency and has a definite shape, size and weight standard. It also bears the stamp of the issuing authority. The side of the coin which carries the message is called obverse and the opposite side is reverse. The ‘Second Urbanization’ in the early Indian history is the first instance where we find literary and archaeological evidence of coinage. This was the time of the emergence of States, growth of towns and cities, and spread of agriculture and trade. Coins in early India were made of copper, silver, gold and lead. Coin moulds made of burnt clay, dating to the Kushana period (first three centuries of the Common Era), have been found in hundreds. They point to the increased commerce during this time.

Most of the coins belonging to major dynasties have been catalogued and published. The earliest coins in the subcontinent are Punch Marked Coins. These are mostly of silver and sometimes of copper. With the expansion of Magadhan empire, the Magadhan type of Punch marked coins replaced those which were issued by other states. Though the earliest coins carried only symbols, the later ones had figures of king, divinities and also mention their dates and names. For example, Western Kshatrapa coins give dates in Shaka era. The area of circulation of coins has enabled us to reconstruct the history of several ruling dynasties. The coins offer valuable information on political organization. For instance, the coins of Yaudheyas and Malavas carry the legend ‘*gana*’ which tell us about their non-monarchical form of polity. The image of ship on the Satavahana coins of the Deccan bears testimony to the significance of maritime trade.

Post-Maurya coins were made of lead, potin, copper, bronze, silver and gold. They were issued in large numbers, pointing to increased volume of trade during this period. The Guptas also issued a number of gold coins. Known as *dinaras*, they were well executed die-struck coins. The obverse depicts the reigning king in various poses. Coins of Samudragupta and Kumaragupta I show them playing the *vina*. In the post-Gupta period the gold coins declined in number and purity. This became the basis of the highly contested feudalism theory of R. S. Sharma who believed that debasement of coinage and increased use of cowries point to decline of trade and commerce in this period. This, of course, has its critics.



Figure : A Gupta Gold Coin Depicting Queen Kumaradevi and King Chandragupta I.
Credit:uploadalt.

Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Queen_Kumaradevi_and_King_Chandragupta_I_on_a_coin.jpg).

Inscriptions

The study of inscriptions is called **Epigraphy**. Inscriptions are carved on seals, copper plates, temple walls, wooden tablets, stone pillars, rock surfaces, bricks or images. The oldest inscriptions are in the Harappan script of c. 2500 BCE, which is still un-deciphered. The earliest deciphered inscriptions are the Ashokan inscriptions which have been found on rock surfaces and stone pillars all through the subcontinent. These epigraphs were first deciphered in 1837 by James Princep, a civil servant in the employ of the East India Company in Bengal. Most of these are in Brahmi and Kharosthi script. Ashokan inscriptions are in a fairly developed script and it is assumed that writing must have existed in the earlier period too. Potsherds with short inscriptions have been found in excavations at Anuradhapura in Sri Lanka which can be dated to pre-Mauryan period of fourth century BCE. The first pure Sanskrit inscriptions appeared in first century BCE. The early inscriptions were a mixture of Prakrit and Sanskrit which by the fifth century CE were replaced by Sanskrit as the language of royal inscriptions.

Inscriptions are of various kinds. Ashokan inscriptions were royal orders pertaining to social, religious and administrative matters addressed to the officials or people in general. Lumbini pillar inscription of Ashoka is a commemorative inscription since it records the visit of the king to the Buddha's birthplace. Then, there are memorials like the *sati* stones or hero stones, some of which carry inscriptions. Donative inscriptions which record the erection of a temple or a shrine have been found in hundreds in the Deccan and south India in the early medieval period. Royal land grants like the copper plate grants are also donative records which record grants of land and other items to brahmanas and other beneficiaries. Inscriptions which eulogize their patrons begin with a *prashasti*. Examples are Hathigumpha inscription of Kharavela, a first century BCE/first century CE king of Kalinga (Odisha) and the Allahabad (Prayagraj) Pillar inscription of the Gupta king Samudragupta. Some inscriptions record the construction of a dam, reservoir, tank, well or charitable feeding house. The Junagadh (Girnar) inscription of *Shaka* ruler Rudradaman records the construction of a water reservoir called *Sudarshana* lake during the time period of Chandragupta Maurya, its completion during the reign of Ashoka and its repair in the second century CE. Apart from these different kinds of inscriptions we also find miscellaneous types such as labels, graffiti, religious formulae and writing on seals etc.

Inscriptions are a good source of political, social and economic history. They are valuable tools for the historian as they tell us about contemporary events and about the common people. The spread of inscriptions is taken as an indicator of the reigning king's domain. Many inscriptions contain useful information about genealogy, dynastic details and sometimes, names of even those kings who have been missed out in the main genealogies. Land grants of the Pallava, Chalukya and Chola period inform us about revenue systems, agricultural details and political structures.

Inscriptions have many more uses, for example, they help us to date the sculptures on which they occur; give us information about extinct religious sects like the *Ajivikas*; tell us about historical geography; history of iconography; art and architecture; history of literature and languages; and even performing arts like music. They are more reliable than the literary texts as they are not always religious in nature.

1.5.3 Foreign Accounts

Many travellers came to India as pilgrims, traders, settlers, soldiers, and ambassadors. They have left behind accounts of places they visited and things they saw. If studied with due caution, these accounts give a lot of valuable information.

The Greek writers mention Sandrokottas who is said to have met Alexander as a young man. In the eighteenth century, William Jones identified Sandrokottas with Chandragupta Maurya which formed the basis of Mauryan chronology. Seleucus's envoy, Megasthenes, wrote the *Indica*, an account of his stay at the court of Chandragupta Maurya where he was the Greek ambassador. Though this text is no longer there, subsequent writers refer to certain portions of it and it has been possible to reconstruct the administrative structure, social classes and economic activities of the Mauryan period. Greek and Roman accounts give useful information about the Indian Ocean trade in early India. *The Periplus of the Erythrean Sea* (80-115 CE) and Ptolemy's *Geography* (150 CE), both written in Greek, give information about geography and ancient trade. Early Greek and Latin works by Strabo, Arrian, Pliny the Elder tell us about Oceanic trade.

Of the pilgrims, mention may be made of Fa-Hsien and Huien Tsang, who were Chinese Buddhist monks who visited India and have left behind travel accounts. They visited many holy places and Buddhist shrines. Fa-Hsien's travels lasted from 399-414 CE and were confined to Northern India. Huien-Tsang left his home in 639 CE and spent over ten years travelling in India. Fa-Hsien has described the social, religious and economic conditions during the Gupta's and Huien Tsang during Harshavardhana's times.



Figure : A Depiction of Chinese Monk Huien Tsang on his Journey to India.

Tokyo National Museum. Source: Wikimedia Commons (https://upload.wikimedia.org/wikipedia/commons/9/9a/Xuanzang_w.jpg).

In later periods, Arabs scholars such as Al-Beruni, who belonged to the region of Khive (modern Turkmenistan) visited India to learn about its people and study Indian texts in their original language. His *Tahqiq-i-Hind* is truly encyclopaedic in nature and covers topics like Indian scripts, sciences, geography, astrology, astronomy, philosophy, literature, beliefs, customs, religions, festivals, rituals, social norms and laws. His work is a valuable source for eleventh century India and he was the first to have identified the initial year of the Gupta Era. Arabs and Indians were involved in Oceanic trade and Arab accounts such as that of Sulaiman mention India.

Check Your Progress Exercise 2

- 1) What is a *Veda*? Discuss the four *Vedas* briefly.

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- 2) What is archaeology? Enumerate the main archaeological sources for the reconstruction of ancient Indian history.

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1.6 SUMMARY

The Himalayas in the north and the ocean in the south, south-west and south-east create a superficial view of the isolation of the Indian sub-continent. Cultural influences have been exchanged across these frontiers and there have been maritime contacts with the west, West Asia and Southeast Asia. Internally, even the rugged, difficult terrain of Central India has not really impeded the movement of ideas and influences between the varied regions of the country. Admittedly, geography and environment influence historical development considerably, even if they do not determine it entirely.

Inscriptions tell us a lot about historical events which occurred at a specific time and place. However, inscriptions and literary texts mostly represent the voice of the elite — the kings, brahmanas, court poets etc. Here archaeological sources come to the rescue. They may voice the sentiments of what the common folks felt, saw and lived. Excavations, particularly, are a useful source. Still, we need to study archaeological evidence in relation to literary evidence. Many a times if we juxtapose these two categories of evidence, we find that each corrects and substantiates the other and a more complete picture can be arrived at.

1.7 KEY WORDS

Archaeology	: The study of material remains to understand the past.
Chalcolithic	: a cultural stage post-Neolithic which is characterized by the use of stone and copper.
Environment	: The surroundings or conditions in which a person, animal or plant lives or operates.
Eulogy	: A speech or piece of writing that praises someone or something highly, a kind of tribute.
Geographical determinism	: How the physical environment predisposes society and states towards particular development trajectories.
Harappan Civilization	: The civilization which flourished in the Indo-Gangetic plains from c. 2600-1800 BCE, having main cities like Harappa, Mohenjodaro, Lothal, Kalibangan among many.
Human Ecology	: The relationship between humans and their natural, social and built environments.
Nuclear regions	: Those regions which are transformed by historical and cultural developments into perennial centres of power.
Palaeobotany	: The study of fossil plants. This is a branch of Palaeontology dealing with the recovery and identification of plant remains from geological contexts and their use for the biological reconstruction of the past.
Salination	: The process of increasing the salt content of the soil.

1.8 ANSWERS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress Exercise 1

- 1) The main physiographic divisions of India are — Himalayan Uplands, Indo-Gangetic Plains and Peninsular India (for details see Section 1.2).
- 2) Here you will be discussing the nature of regions. The regions can be seen as Perennial nuclear regions, Areas of relative isolation and Areas of isolation. You will have to discuss the characteristics of each. See section 1.4.

Check Your Progress Exercise 2

- 1) The word *Veda* is derived from the root ‘*vid*’ which means ‘to know’. The *veda* means knowledge. There are four Vedas: *Rigveda*, *Samveda*, *Atharvaveda* and *Yajurveda* (for details see Sub-section 1.5.1).

- 2) Archaeology is that branch of knowledge that studies material culture in order to understand the past. Excavations, explorations, coins and inscriptions are the main archaeological sources for the reconstruction of ancient Indian history (for details see Sub-section 1.5.2).
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1.9 SUGGESTED READINGS

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UNIT 2 PREHISTORIC PERIOD*

Structure

- 2.0 Objectives
 - 2.1 Introduction
 - 2.2 Nomenclature
 - 2.3 Birth of Prehistory
 - 2.4 Geographical Features of India
 - 2.5 Phases within the Indian Palaeolithic and Dating
 - 2.6 Archaeological Record of the Palaeolithic
 - 2.7 Lower Palaeolithic Stage in India
 - 2.8 Middle Palaeolithic Cultures
 - 2.9 The Upper Palaeolithic Culture
 - 2.10 Mesolithic Culture
 - 2.11 Summary
 - 2.12 Key Words
 - 2.13 Answers to Check Your Progress Exercises
 - 2.14 Suggested Readings
-

2.0 OBJECTIVES

In this Unit, you will learn about:

- the birth of Prehistory in India;
 - how Palaeolithic and Mesolithic cultures are defined;
 - the kind of archaeological evidence that is available to reconstruct tool typology, technology;
 - sites and their regional settings; and
 - the salient features of Indian Palaeolithic and Mesolithic cultures.
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2.1 INTRODUCTION

In this Unit, we shall learn about the earliest stage in the history of man's biological and cultural evolution. This is the stage when creatures ancestral to Humans began to branch off from their ape-like cousins. This journey covers a time span of 2.5 million years. It involved improvements both in aspects of the biological make-up like bipedal posture and brain enlargement. In cultural behaviour the critical factor was the intentional preparation of tools out of natural materials like stone and wood.

In this Unit, we will be studying the Palaeolithic and Mesolithic cultures; archaeological evidence which has been used to reconstruct tool typology and technological aspects; different sites of these cultures, their regional setting and salient features.

* This Unit has been adopted from MAN-002, Block 5 and 6

2.2 NOMENCLATURE

The branch of archaeology which deals with the study of the initial stage of human history is called **Prehistory**. Stated in other words, **Prehistory** deals with the origins and growth of human societies before the advent of writing systems. This stage is succeeded by **Proto-history** which is a transitional stage between Prehistory and History in India. The **Proto-History** stage covers the third and second millennia and early half of the first millennium before the Common Era. It is characterized by the rise of many early agro-pastoral Neolithic-Chalcolithic communities characterized by settled village life, domestication of animals like cattle and sheep/goat, cultivation of crops like wheat, barley, rice and millets, and the emergence of various crafts and arts. In the Indus valley, this phase eventually led to the growth of an urban civilization based on town planning and bronze technology.

Another way of classification is that of the division of human past or History into three main periods, namely:

- 1) Stone Age,
- 2) Bronze Age, and
- 3) Iron Age.

These are not simply technological stages. They do not just imply that tools and implements were made of stone during the Stone Age, of bronze during the Bronze Age and of iron during the Iron Age. These Ages imply much more than technology. They imply subsistence economy or the ways of acquiring food, social organization, including caring for the weak, sick and old, modes of disposing of the dead, art and other aspects of life.

Stone Age is divided into three periods, namely:

- 1) **Palaeolithic** or Old Stone Age,
- 2) **Mesolithic** or Middle Stone Age, and
- 3) **Neolithic** or New Stone Age.

The word ‘lithic’ is derived from the Greek word ‘*lithos*’, meaning stone. Palaeolithic means Old Stone Age, Mesolithic means Middle Stone Age and Neolithic means New Stone Age.

2.3 BIRTH OF PREHISTORY

The birth of prehistory took place in 1859 when the findings of primitive stone implements in association with fossilized bones of extinct species of wild cattle and other large mammals were ratified before the Royal Society in London in northern Europe. It became clear that northern Europe was occupied by humans much before its landscape assumed its present form. A long phase of infancy was, thus, prefaced to human history. In his book *Prehistoric Times* (1865) Sir John Lubbock announced the birth of a new science called **Prehistory**. He divided the Stone Age into Palaeolithic (Old Stone Age), Neolithic (New Stone Age) Ages. And by the end of the 19th century, not only an intermediate stage called the Mesolithic was introduced between the Palaeolithic and the Neolithic, but several stages were identified within the Bronze and Iron Ages. Furthermore,

thanks to the cultural sequence obtained from cave and open-air sites in France, three phases were recognized within the Palaeolithic: Lower, Middle and Upper.

2.4 GEOGRAPHICAL FEATURES OF INDIA

India (or South Asia, for general geographical and cultural purposes) is a distinct geographical entity at the sub-continental level. The Indian landscape is endowed with all the prerequisites for a successful hunting-gathering way of life: suitable landforms permitting free movement of hunter-gatherer groups; occurrence of a variety of basic rocks and siliceous stones for making tools; existence of perennial water bodies in the form of large and small streams and springs; and availability of a large variety of wild plant and animal foods. It is, therefore, not surprising that, barring the Himalayan tract proper and the Indo-Gangetic alluvial tracts, Stone Age groups occupied the whole of the Indian landmass.

2.5 PHASES WITHIN THE INDIAN PALAEOLITHIC AND DATING

Indian Palaeolithic is divided into three developmental stages:

- i) Lower,
- ii) Middle, and
- iii) Upper.

The Lower Palaeolithic has two cultural traditions:

- i) Soanian pebble-tool tradition, and
- ii) The Peninsular Indian handaxe-cleaver tradition.

Lower Palaeolithic traditions involved the use of large pebbles or flakes for making choppers and chopping tools, hand-axes, cleavers, knives etc. The Middle Palaeolithic is based on the use of a variety of flakes struck from cores for preparing scrapers, points, borers and other tools. Further refinements came in the Upper Palaeolithic stage. Now, implement types like blunted and penknife blades, blades with serrated edges and arrow points were made on long parallel-sided blades struck in a series from cylindrical cores by punch technique.

Besides relative dating, it has been possible, in recent years, to date some of the sites in absolute terms by means of scientific dating techniques such as the Radiocarbon, Palaeomagnetism, Thermoluminescence, Potassium-Argon, Argon-Argon and Uranium-Thorium.

2.6 ARCHAEOLOGICAL RECORD OF THE PALAEOLITHIC

Palaeolithic sites are of two principal types:

- i) open air sites, and
- ii) caves or rock shelters.

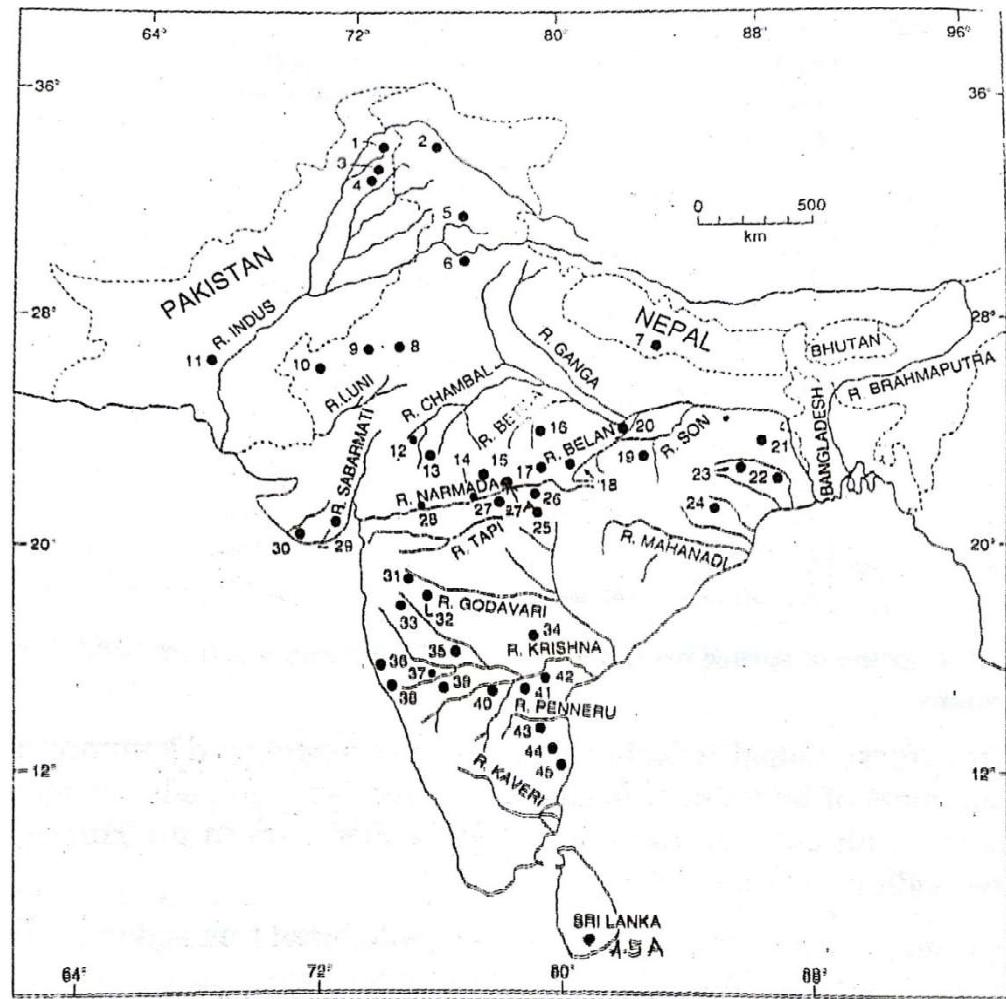
Open air sites are more common in all parts of India and occur on or close to large and small rivers and also in interior basins or valleys and foothill zones of

the hill ranges. They represent various formation processes ranging from true *in situ* or undisturbed sites found on weathered bedrock or else in soft silts to occurrences in colluvium and river-borne gravels. Cave and rock shelter sites occur in hilly areas covered with sedimentary rocks (sandstones and limestones). Bhimbetka complex in Madhya Pradesh and Kurnool caves in Andhra Pradesh are well-known examples.

2.7 LOWER PALAEOLITHIC STAGE IN INDIA

As we have noted earlier, the Lower Palaeolithic phase in India (see map 2.1) consists of two principal tool-making or cultural traditions, viz.

- a) The Soanian tradition forming part of the East and Southeast Asian chopper-chopping tool tradition, and



Important Lower Palaeolithic sites in South Asia: 1) Riwat; 2) Pahlgam; 3) Jalalpur; 4) Dina; 5) Beas-Banganga complex; 6) Sirsa-Ghaggar complex; 7) Dang-Deokhuri complex; 8) Didwana; 9) Jayal; 10) Jaisalmer-Pokaran Road; 11) Ziarat Pir Shaban; 12) Berach complex; 13) Chambal complex; 14) Bhimbetka; 15) Raisen complex; 16) Lalitpur; 17) Damoh complex; 18) Son complex; 19) Sihawal; 20) Belan complex; 21) Sisunia; 22) Singhbhum complex; 23) Paisra; 24) Brahmani complex; 25) Wainganga complex; 26) Mahadeo Piparia; 27) Adamgarh; 27A) Hathnora; 28) Durkadi; 29) Samadhiala; 30) Umrethi; 31) Gangapur; 32) Chirki-Nevasa; 33) Bori; 34) Nalgonda complex; 35) Hunsgi and Baichbal basins complex; 36) Mahad; 37) Anagwadi; 38) Malwan; 39) Lakhmapur; 40) Nittur; 41) Kurnool complex; 42) Nagarjunakonda complex; 43) Guddapah complex; 44) Rallakalava complex; 45) Kortallayar complex; 45A) Ratnapura complex.

Map 2.1: Lower Palaeolithic Sites in India. Source: MAN-002, Block 5.

- b) The Handaxe-cleaver or biface assemblages constituting the Acheulian tradition, which is widely known from the western half of the Old World (African, Western Europe, West and South Asia).

The term “**Old World**” is a term that is used in the West to refer to Africa, Europe, and Asia (Afro-Eurasia, or the eastern hemisphere), regarded collectively as the part of the world known to its population before contact with the Americas and Oceania or the “**New World**” (Western hemisphere).

Source: https://en.wikipedia.org/wiki/Old_World

The Soanian Cultural Tradition

The existence of this tradition was recognized in 1939 by H. de Terra of Yale University and T. T. Paterson of Cambridge University in the north-western part of the subcontinent. On the basis of their field studies in the area, they identified

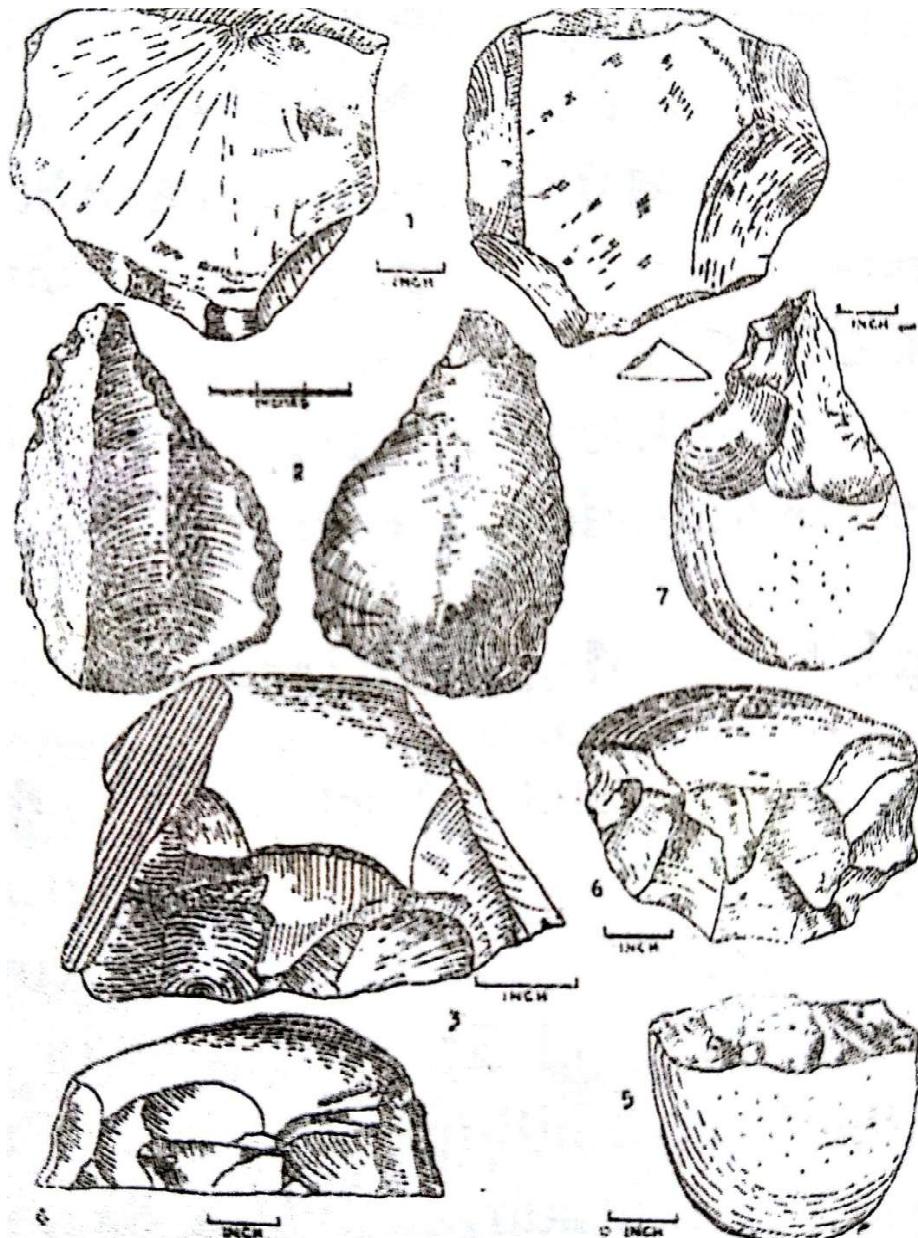


Fig. 2.1: Chopper and Flake Tools of the Early Soan Tradition. Source: MAN-002, Block 5.

a series of five terraces on the river Soan, forming part of the Indus drainage system. They correlated these terraces with glacial and interglacial events of the Kashmir valley, and, on stratigraphical and typological considerations, put up what has been called the Soan culture-sequence.

The tools consist of pebbles with working edges on their sides or ends, obtained by means of flaking from one or both surfaces (producing choppers or chopping tools) (Fig. 2.1).

Robin Dunnell, who worked in this area (now in Pakistan) in the 1980s, raised serious doubts about the palaeo-climatic interpretations and cultural sequence put forward by Terra and Paterson. But the term “Soan culture” has stuck on in Indian Prehistory. From the Indian side of the border, pebble tool assemblages were found in the Sirsa and Ghaggar valleys of Haryana, Beas and Banganga valleys of Himachal Pradesh, and Hoshiarpur-Chandigarh sector of the Siwalik Frontal Range (Figure 2.2).

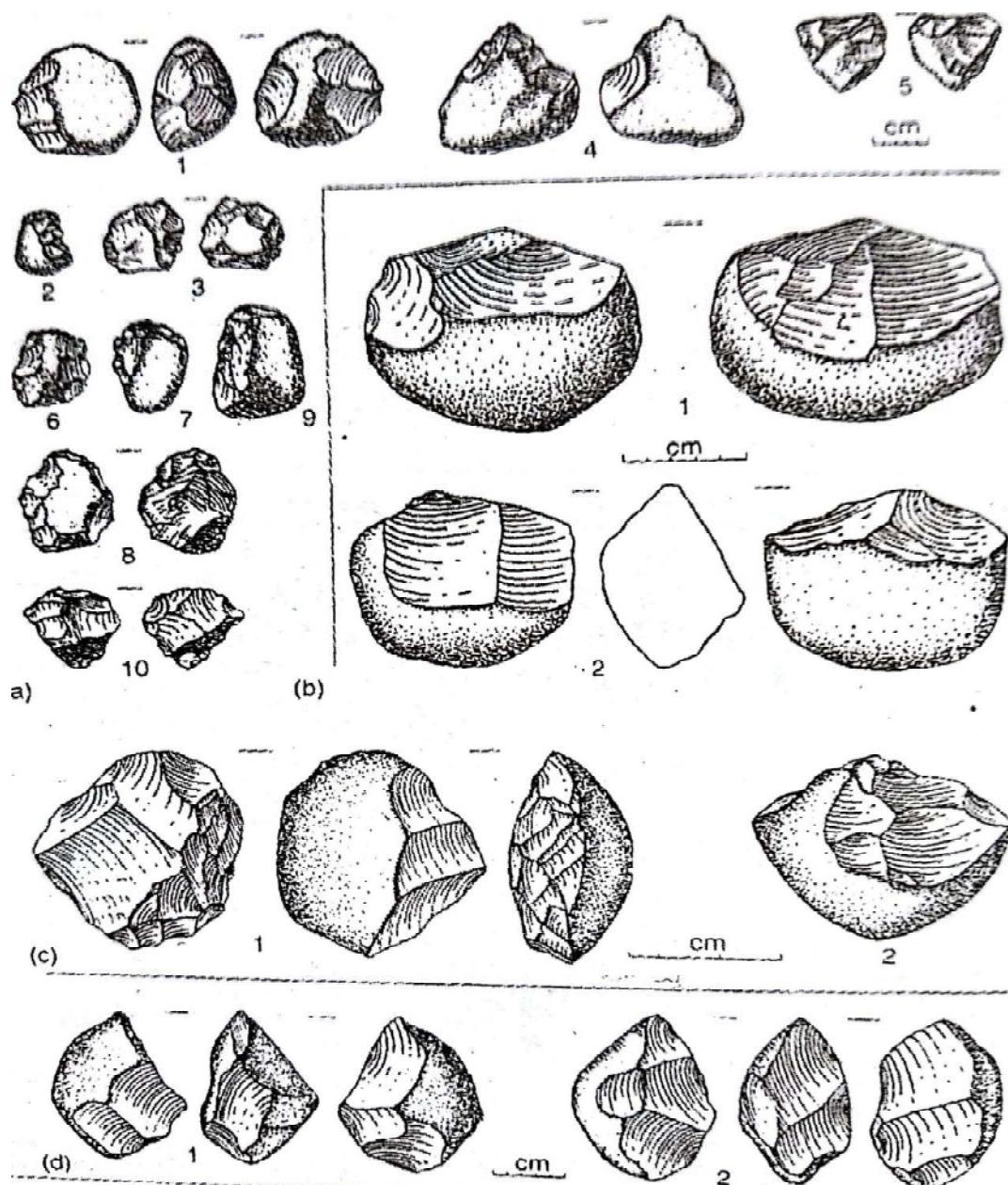


Fig. 2.2: Pebble Tools from Lower Palaeolithic Sites in India: a) Nittur, Karnataka; b) Jaisalmer-Pokaran Road, Rajasthan; c) Sirsa Valley, Haryana; d) Mahadeo Piparia, Madhya Pradesh. Source: MAN-002, Block 5.

The Soan assemblages from Punjab have been assigned by some workers to the Middle Palaeolithic tradition.

Prehistoric Period

The Acheulian Cultural Tradition

The term ‘Acheulian’ is used for hand-axes and cleavers found as tool assemblages and representing advanced and increasingly symmetrical shapes. Quartzite was the preferred rock for tool-making. Where it was not naturally available, the Acheulian groups made use of other available rocks like limestone in the Bhima basin, dolerite and basalt in Maharashtra, and fossil wood in Bihar and Bengal. Stone hammer, soft hammer and prepared core techniques were employed for detaching flakes and shaping them into implements.

Stone tools are the main evidence through which an understanding of the prehistoric people’s lifeways is arrived at. Archaeologists use certain terms to define stone tools. If a large piece of rock is intentionally broken into two or more pieces, the largest piece is called core and the tool made out of it called a core tool. The smaller pieces detached from the parent rock are called flakes and tools made on flakes are called flake tools.

Time Range

Lower Palaeolithic in India: 600,000 years BP to 150,000 years BP

Middle Palaeolithic in India: 165,000 BP to 31,000 years BP

Upper Palaeolithic in India: 40,000 years BP to 12000 years BP

Important Sites of the Lower Palaeolithic

- 1) Singi Talav in western Rajasthan has yielded an assemblage comprising of choppers, polyhedrons, bifaces, scrapers and points.

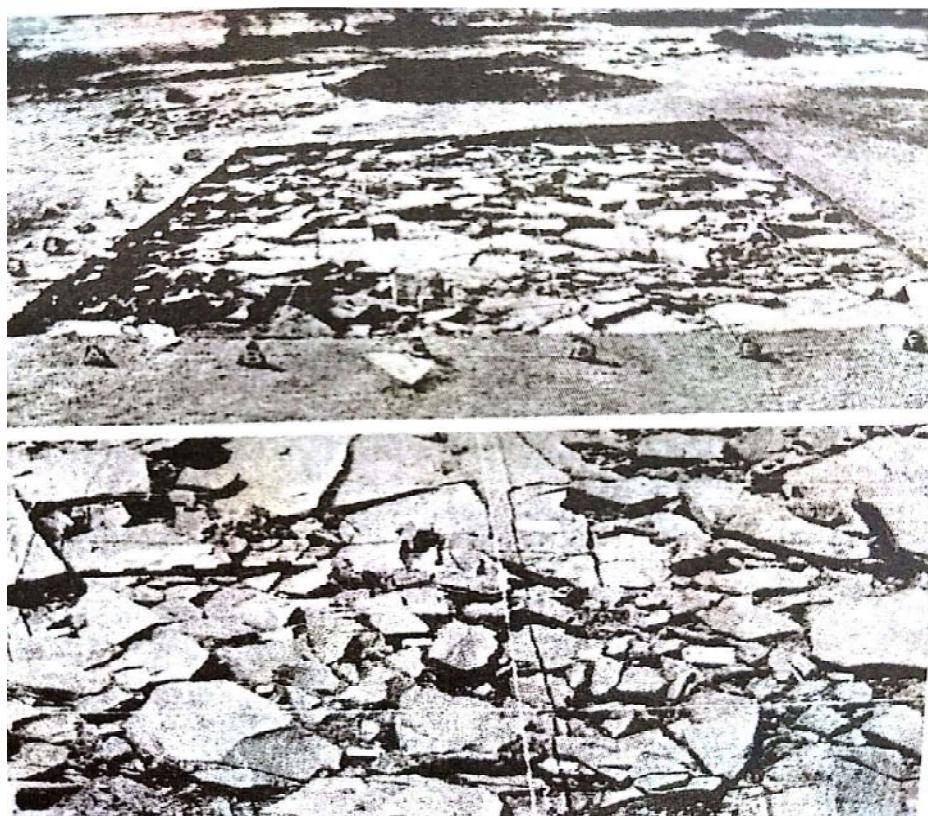


Fig.2.3: Acheulian Horizon Exposed in Trench I at Isampur, Karnataka. Source: MAN-002, Block 5.

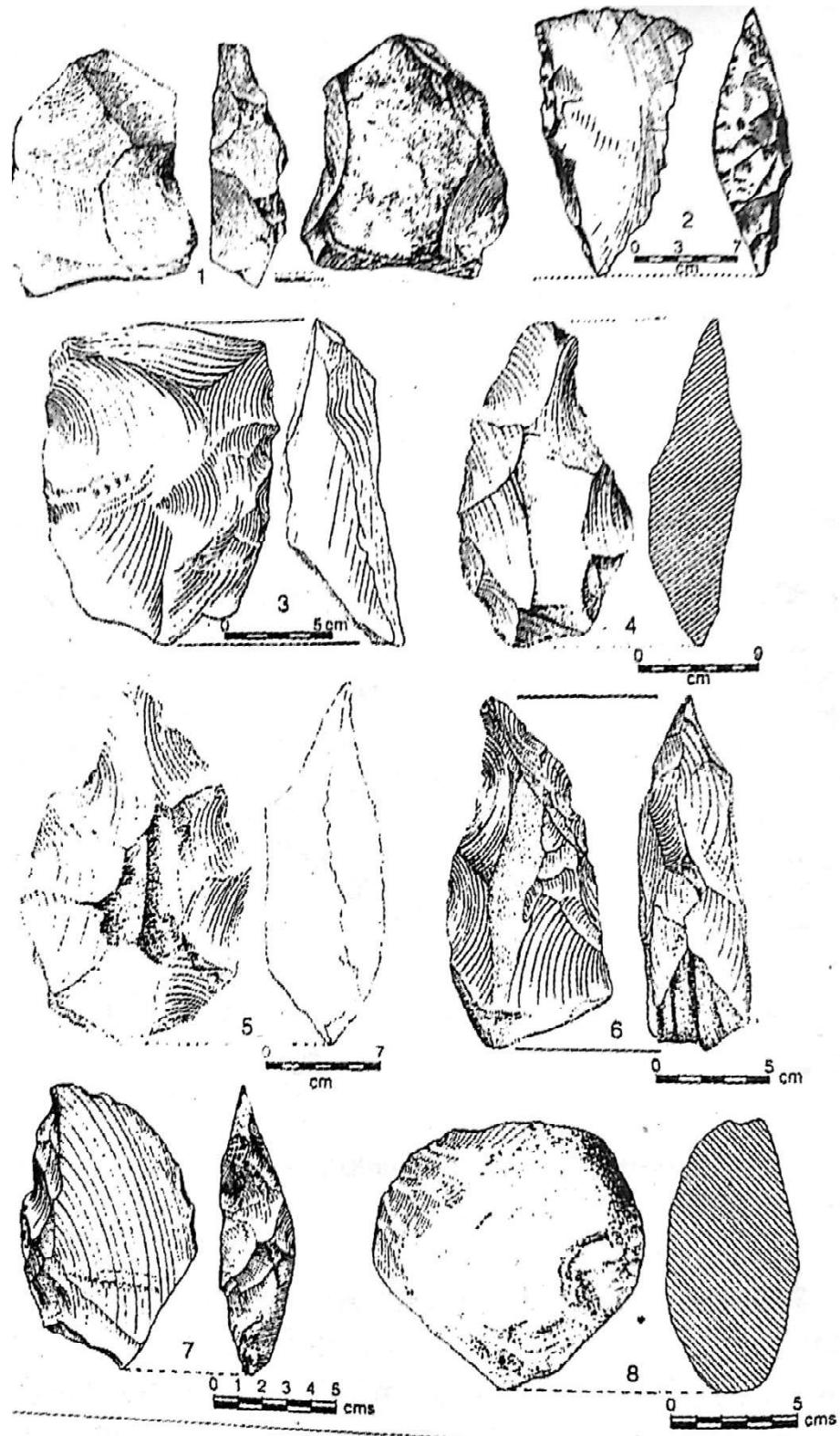
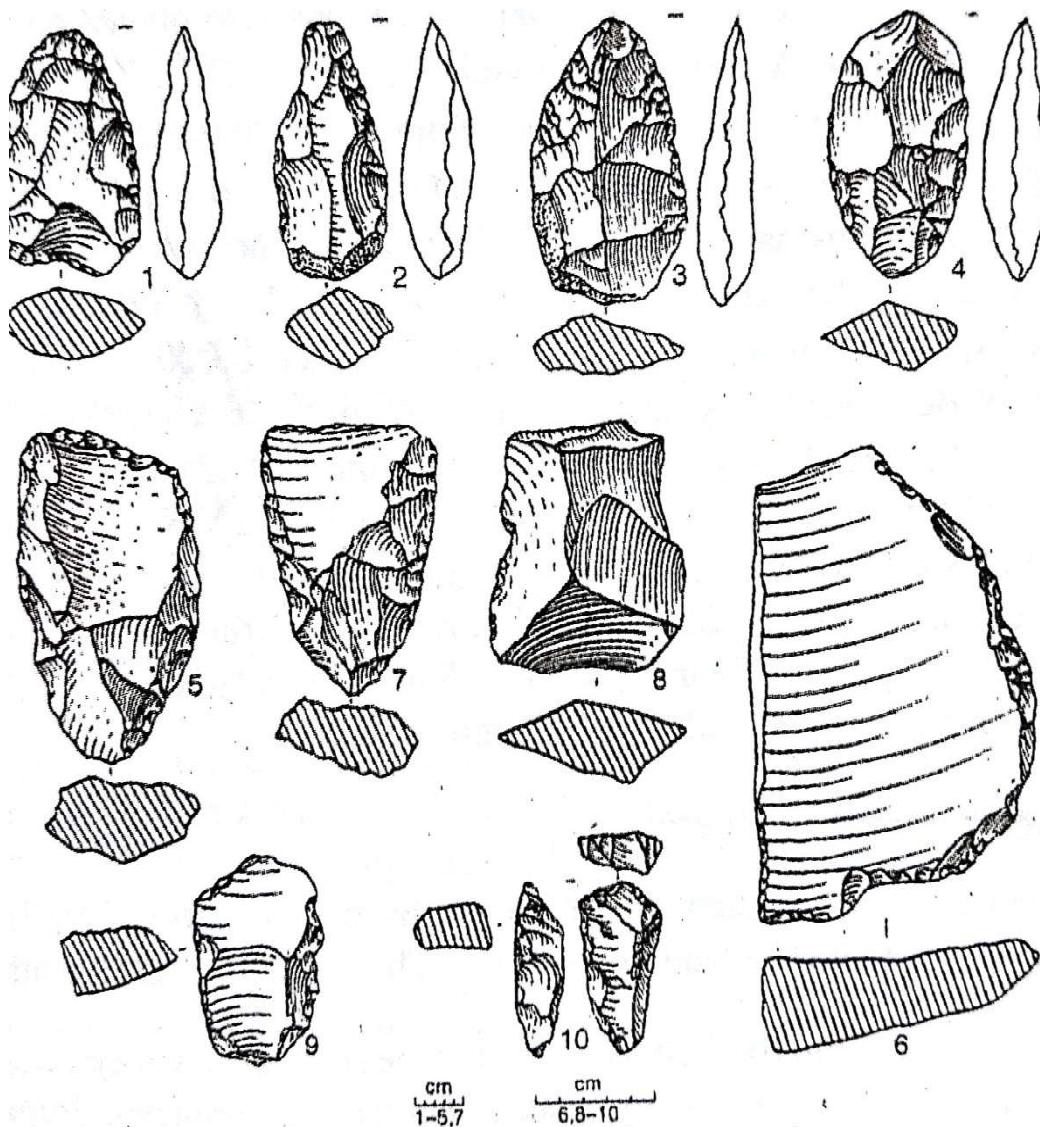


Fig. 2.4: Lower Acheulian Artefacts from Isampur, Karnataka: 1) Core; 2&3) Cleavers; 4 & 5) Handaxes; 6) Perforator; 7) Knife; 8) Hammerstone. Source: MAN-002, Block 5.

- 2) Rock shelter III F-23 (Figure 2.5) at Bhimbetka in Madhya Pradesh has yielded Acheulian, Middle and Upper Palaeolithic and Mesolithic levels.
- 3) Adamgarh in Madhya Pradesh has exposed an Acheulian level below Middle Palaeolithic deposits.
- 4) Lalitpur in Jhansi district of UP produced an early and *in situ* assemblage made up of granite tools

- 5) Paisra in Munger district, Bihar has yielded early Acheulian assemblage. The excavation exposed hut-like dwelling structures in the form of alignments of post-holes and a circular arrangement of stone blocks.
- 6) Chirki-Nevasa in Maharashtra has yielded dolerite artefacts along with fossil bones of wild cattle and other animals. The site was a seasonal camp used for multiple purposes. The artefactual collection included hand-axes, cleavers and knives as well as a small-tool component made up of flake-tools of chert and chalcedony.
- 7) Morgaon, a site from Deccan basalt landscape in the Bhima drainage basin has yielded an assemblage of 162 specimens including cleavers and hand-axes.
- 8) Hunsgi in the Hunsgi valley and Yediapur in the Baichbal valley in north Karnataka have *in situ* cultural levels. They have yielded scores of artifacts.



Developed Acheulian artefacts from III F-23 rock shelter at Bhimbetka, Madhya Pradesh:
1 to 4) handaxes 5 & 7) cleavers; 6) convex scraper; 8) notched tool; 9) denticulate; 10) end-scraper.

Fig. 2.5: Acheulian Artefacts from Bhimbhetka. Source: MAN-002, Block 5.

- 9) Isampur in the Hunsgi valley in North Karnataka is a quarry-cum-camp site. It has yielded cores, flake blanks, finished implements and waste product of limestone (Fig.2.3 & 2.4). Deer and shell fragments of land turtle were also found. Isampur served as a localized hub in this part of the Hunsgi valley, from where the hominins radiated onto surrounding limestone tablelands and valley floor as part of their daily foraging rounds.
- 10) Attirampakkam (Tamil Nadu), an *in situ* Acheulian site has yielded an Acheulian assemblage of quartzite and fossilized bones of wild cattle and other species. The site has recently been dated to 1.5 million years BP by an advanced scientific technique.

2.8 MIDDLE PALAEOLITHIC CULTURES

Middle Palaeolithic culture succeeded the Lower Palaeolithic culture. As stated earlier, Lower Palaeolithic culture is characterized by heavy tools like the hand-axes and cleavers. The Middle Palaeolithic culture, on the other hand, consists of a variety of tools made on flakes; and these flakes are produced by specialized techniques. Therefore, it is widely referred to as flake tool industry. The Middle Palaeolithic culture of Europe, South-west Asia and Africa is called as Mousterian culture, named after the rock shelter of Le Moustier in France. The human species associated with Mousterian culture is the extinct *Homo neanderthalensis*. The popular name of this hominin is Neanderthal man. He lived during the period of Upper Pleistocene.

Hand-axe: generally a core tool. It is a bifacial tool since it is worked on both sides. It is roughly triangular in shape, broad at one end and pointed at the other. It is meant to be held in hand by the butt and sometimes hafted onto handles.

Cleaver: a flattish tool made on a broad rectangular or triangular flake, on one end of which is a broad and straight cutting edge.

Chopper: Large, unifacial tool, i.e. worked on one side only.

Chopping tool: a tool made on a core or a pebble and flaked alternately on both sides to produce a wavy cutting edge.

Source: H. D. Sankalia (1964) 1982: pp. 45-58

Mousterian Industries

The Mousterian industry is a Middle Palaeolithic tradition of tool making used by Neanderthals in Europe, South-west Asia and Africa. The widespread occurrence of stone tool industries in which flakes are predominantly used, in contrast to the hand-axes and cleavers of the previous cultural phase, begins at the close of the Middle Pleistocene period. The production of flakes heralds a technical change in the manufacture of advanced hunting tools. In this new technique, the development is the production of a complete implement, at a single blow, from a core previously prepared so as to ensure that flakes when detached conformed to specific pattern of tools. Moreover, it was possible to strike off a series of flakes by reworking (or rejuvenating) the same core; therefore, the technique was economical both of labour and raw material. Further, the flakes thus detached could easily be shaped by simple retouch into a variety of tools. It was easy to manufacture a range of tools to perform various functions.

The Middle Palaeolithic culture phase in India is characterized by flake tool industries. In 1956, H. D. Sankalia for the first time recorded and demonstrated these flake tools occurring in Pravara at Nevasa (Maharashtra) and then later in the Godavari valley in north Karnataka. He called this industry Nevasian (like Mousterian). Soon, his subsequent surveys revealed that Nevasian was not a local phenomenon but a generalized feature of Indian Stone Age cultures. In the beginning the term Middle Stone Age was adopted for this phase in Indian prehistory. Subsequently, the term Middle Palaeolithic has been accepted.

The Middle Palaeolithic tools are made on flakes and flake-blades produced by flake core, discoid and the specialized Levallois technique. In some regions, there is a continuity of Late Acheulian lithic tradition with refinement in bifacial flaking, and second marginal retouch, and inclusion of small sized hand-axes and cleavers. In many regions there is a switch over in the use of raw material from coarse grained rocks like quartzite of the preceding phase to fine grained rocks like chert, jasper, chalcedony, agate etc.

The tool types of the Indian Middle Palaeolithic are scrapers of various types: single side, double side, side-cum-end, straight, oblique, concave, convex, concavo-convex, notched, and core scrapers; awls; borers; simple unilateral or bilateral points; Levallois points; tanged or shouldered points; miniature hand-axes and cleavers; and utilised flakes. Anvils and Hammers are also found at some of the manufacturing sites (Figure 2.6).

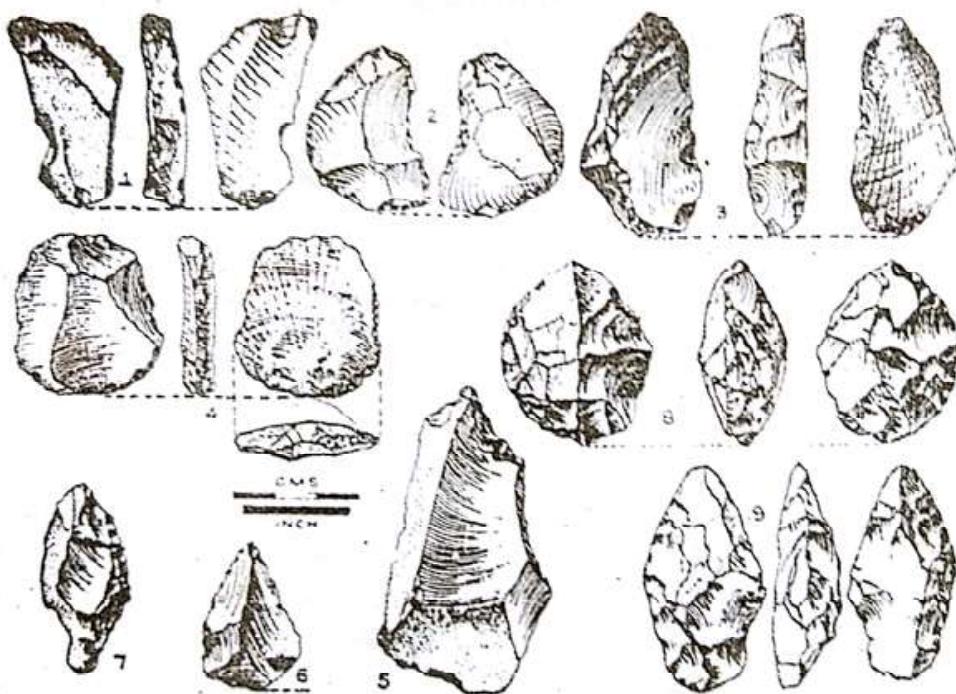
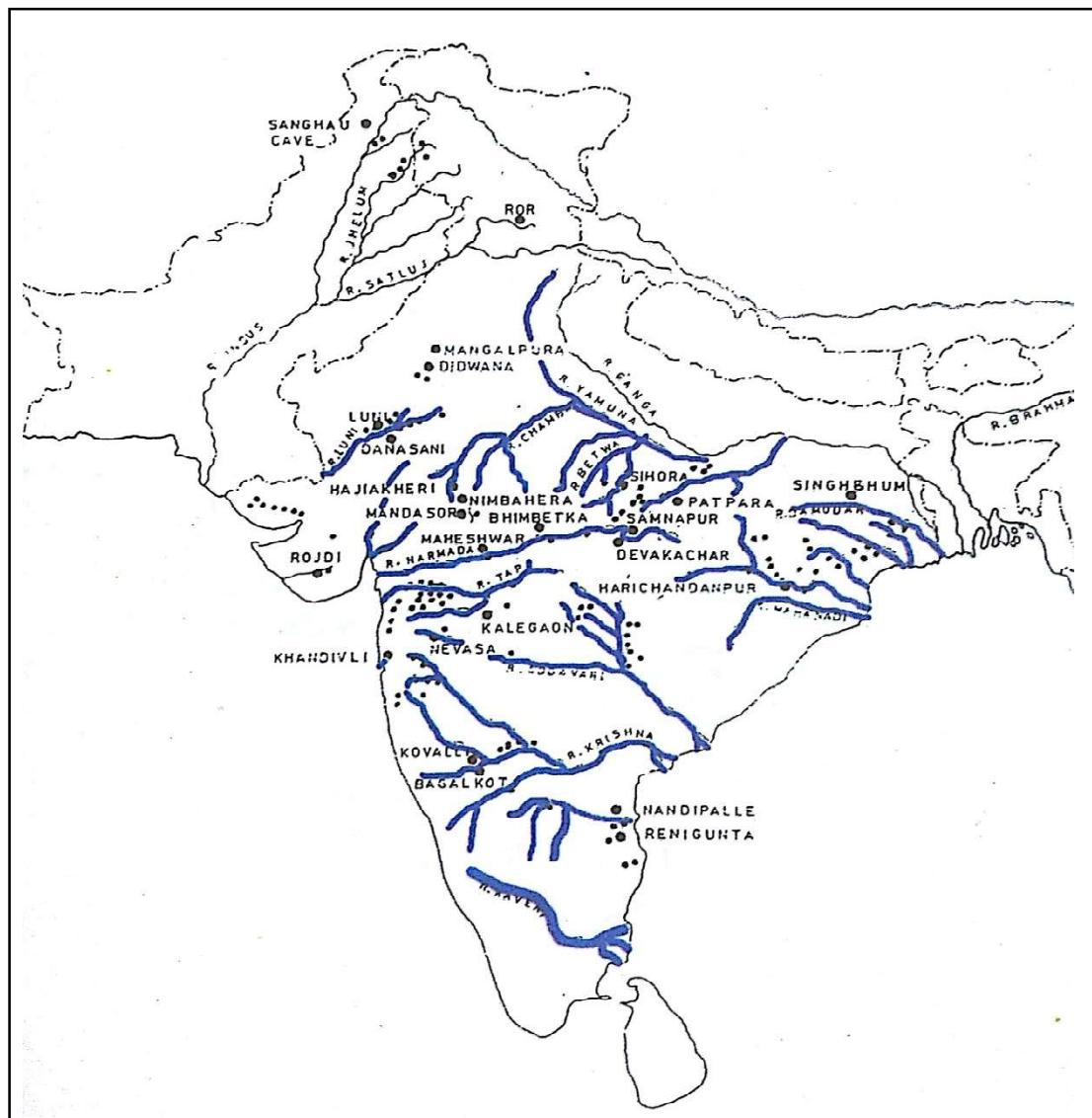


Fig.2.6: Tools of the Indian Middle Palaeolithic. Source: MAN-002, Block 5.

Anvils and hammer stones are also found at some of the manufacturing sites. The techniques used for tool manufacture are stone hammer, cylinder hammer, and Levalloisian. The raw materials used for the manufacture of stone tools are medium to fine grained quartzite, chert, jasper and chalcedony.

Levalloisian technique – Named after the locality of Levallois, a suburb of Paris, from where a particular type of prepared cores were obtained, this technique is recognized from the production of a new mode of making tools from a ‘tortoise shaped core’ from the under-surface of which a flake tool could be struck by a single blow. This is also referred to as “Prepared Core technique”



Map 2.2: Middle Palaeolithic Sites in India (after V.N. Misra, 1989).
Source: MHI-08, Block 2.

Middle Palaeolithic Sites

Middle Palaeolithic sites (see map 2.2) have been found from most parts of the Indian subcontinent. Middle Palaeolithic tools have been found in river gravels and deposits which tell us about the prevailing climatic conditions. Some of these sites are the following:

- 1) Didwana in Rajasthan
- 2) Hiran valley in Gujarat
- 3) Potwar Plateau between the Indus and Jhelum rivers
- 4) Sanghao cave in NWFP of Pakistan

- 5) Budha Pushkar in Rajasthan
- 6) Luni river system denoting tool industries west of the Aravallis
- 7) Chirki Nevasa in Maharashtra
- 8) Kalpi in Uttar Pradesh

Check Your Progress Exercise 1

- 1) Stone Age is divided into how many periods? Write a few lines about the birth of Prehistory.

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- 2) Discuss the main cultural traditions within the Indian Lower Palaeolithic?

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- 3) Discuss any two sites of Indian Middle Palaeolithic?

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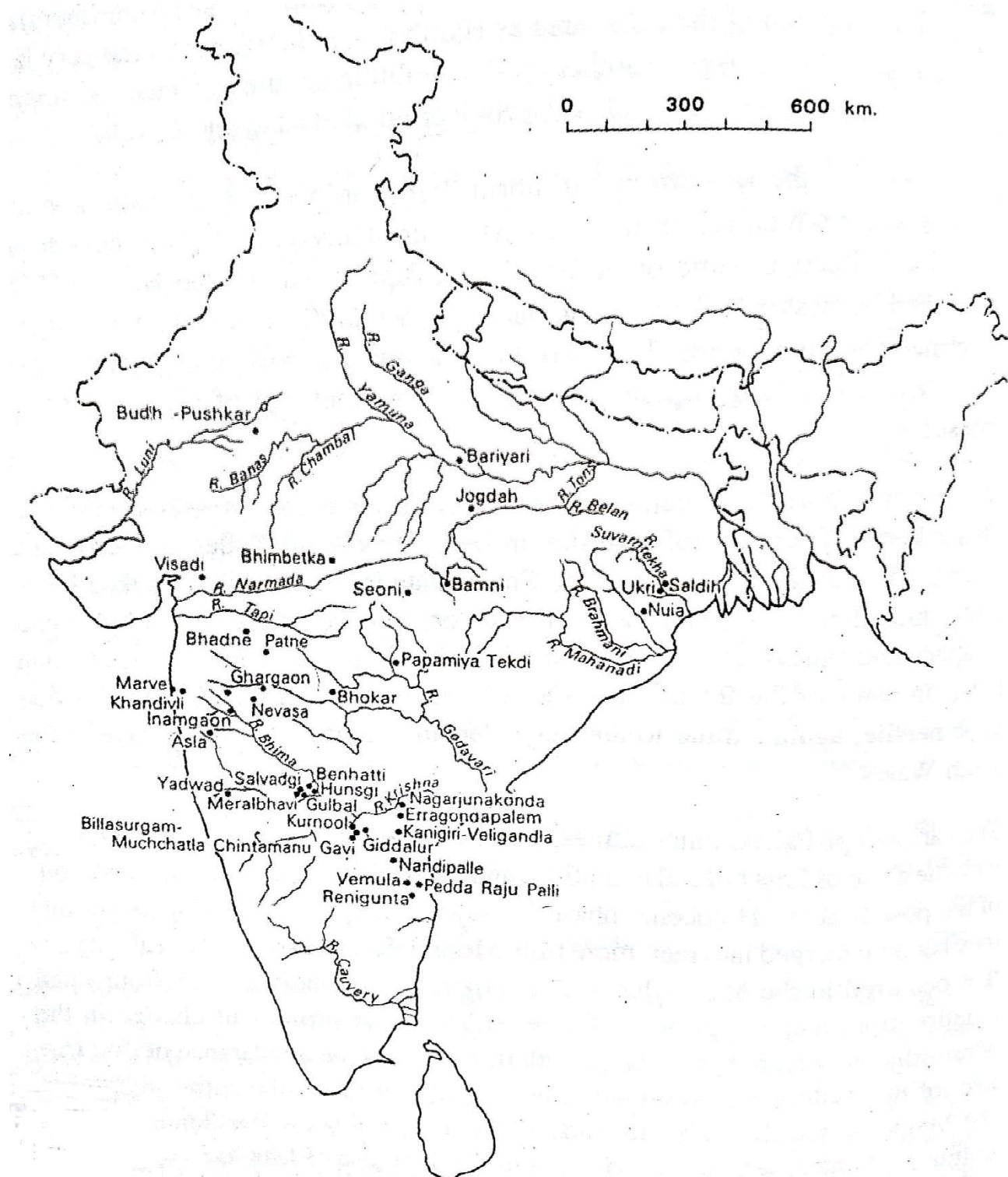
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2.9 THE UPPER PALAEOLITHIC CULTURE

The Upper Palaeolithic is the third and last subdivision of the Palaeolithic and it is characterized by the first great climax of human achievements. Upper Palaeolithic cultures flourished in Europe, South-west Asia, Africa, South Asia and Southeast Asia during the later stages of the Upper Pleistocene, often referred to as Late Pleistocene.

Very broadly, the age of the Upper Palaeolithic falls between 40,000 and 10,000 years ago. The human species associated with this cultural phase is Anatomically Modern Homo *sapiens* (AMHS), the extant and the only surviving human species. We belong to this species. Upper Palaeolithic cultures succeed the Middle Palaeolithic Mousterian or other flake tool cultures in different parts of the Old World.

The Upper Palaeolithic is marked by technological advances in stone tool manufacture by the production of parallel sided blades which are finished into a variety of tools by blunting one side or by backing. Blades are flakes, but very refined flat narrow ones, elongated in shape and having parallel sides. For producing blades, the cores are first trimmed all around to remove the roughness. Then, by striking along the circumference of the core, using a punch, a series of blades are removed. That means blades are produced by indirect percussion but not by direct percussion. After the removal of the first series of blades, a second, third and fourth series and so on are removed, until the core is exhausted. Thus, in this blade production technique, numerous blades are removed from a single



Map 2.3: Distribution of Upper Palaeolithic Sites in India. Source: MAN-002, Block 5.

core. These cores have a prismatic or fluted appearance; hence this technique is called “prismatic-core” technique or “fluted-core” technique. These blades are subsequently further worked and finished, by blunting one side of the blade into various tool forms. This kind of retouch is called backing and these tools are called backed blade tools. The Upper Palaeolithic industries also consist of a variety of flake and core tools like side scrapers, ovate scrapers, notched scrapers, discoid scrapers and unifacial and bifacial flake points. Some of these flakes are produced by the Levallois technique, and the discoid core technique, indicating the persistence of the preceding Middle Palaeolithic traditions. Some of the backed blades could have been used by hafting as barbs to harpoons. The raw material used for the stone tools is fine grained rock.

Upper Palaeolithic in India

The Upper Palaeolithic cultural relics in varied physiographical zones of India (see map 2.3) are stone tools which are based on blade-tool technology. Since most of these are open-air occupations, tools made of organic materials such as bone are not known because organic remains are prone to disintegration in open-air situations. However, bone tools were recovered from the Kurnool caves (Andhra Pradesh) in which conditions for the preservation of organic remains were favourable.

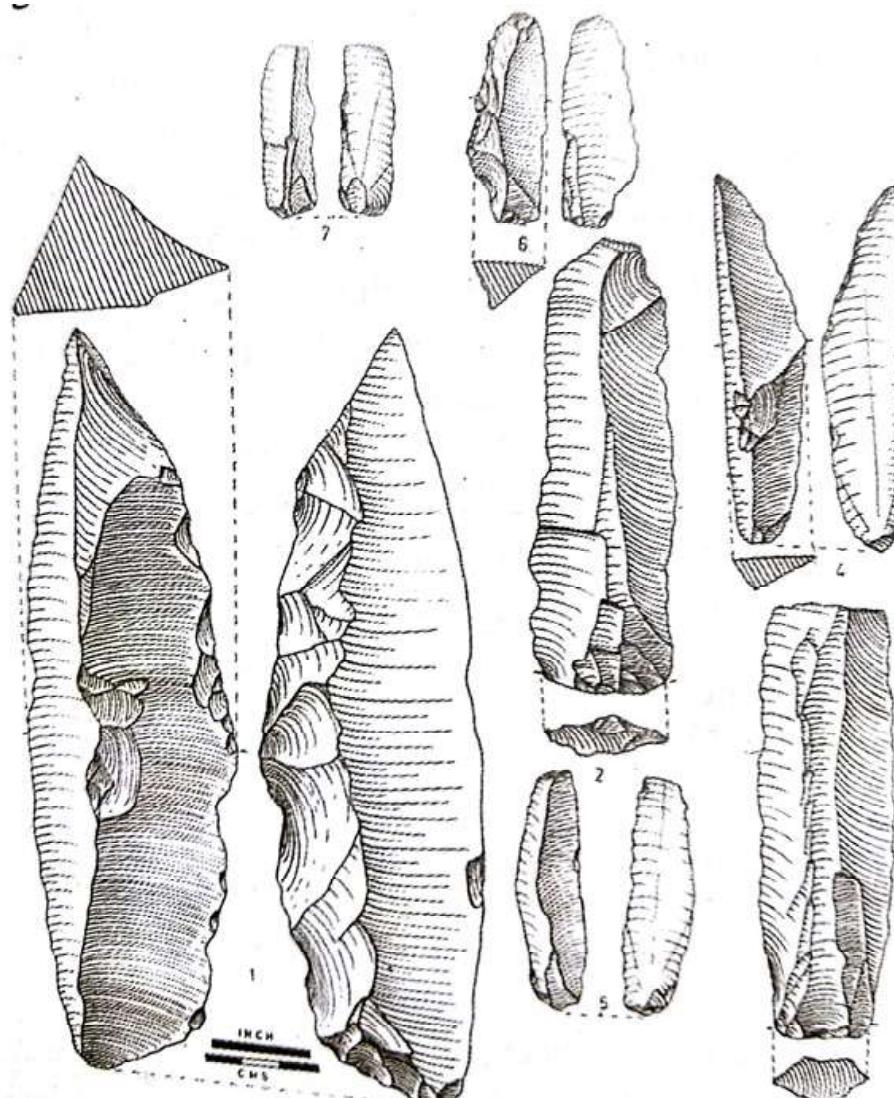


Fig. 2.7: Artifacts of the Blade-and-Burin Industry from the Rallakalava Valley, near Renigunta. 1, 4, 6, Retouched Blades; 2, 3, 5, 7, Simple Blades (After Murty 1979).

Source: MAN-002, Block 5.

The primary occupation sites in the Rallakalava (Vedulacheruvu, Nallagundlu) and Gunjuna (Peddarajupalli; Vodikalu, Bellu) valleys in the southern Eastern Ghats have yielded the best known evidence of the blade-and-burin industries in the country (Figures 2.7 – 2.10).

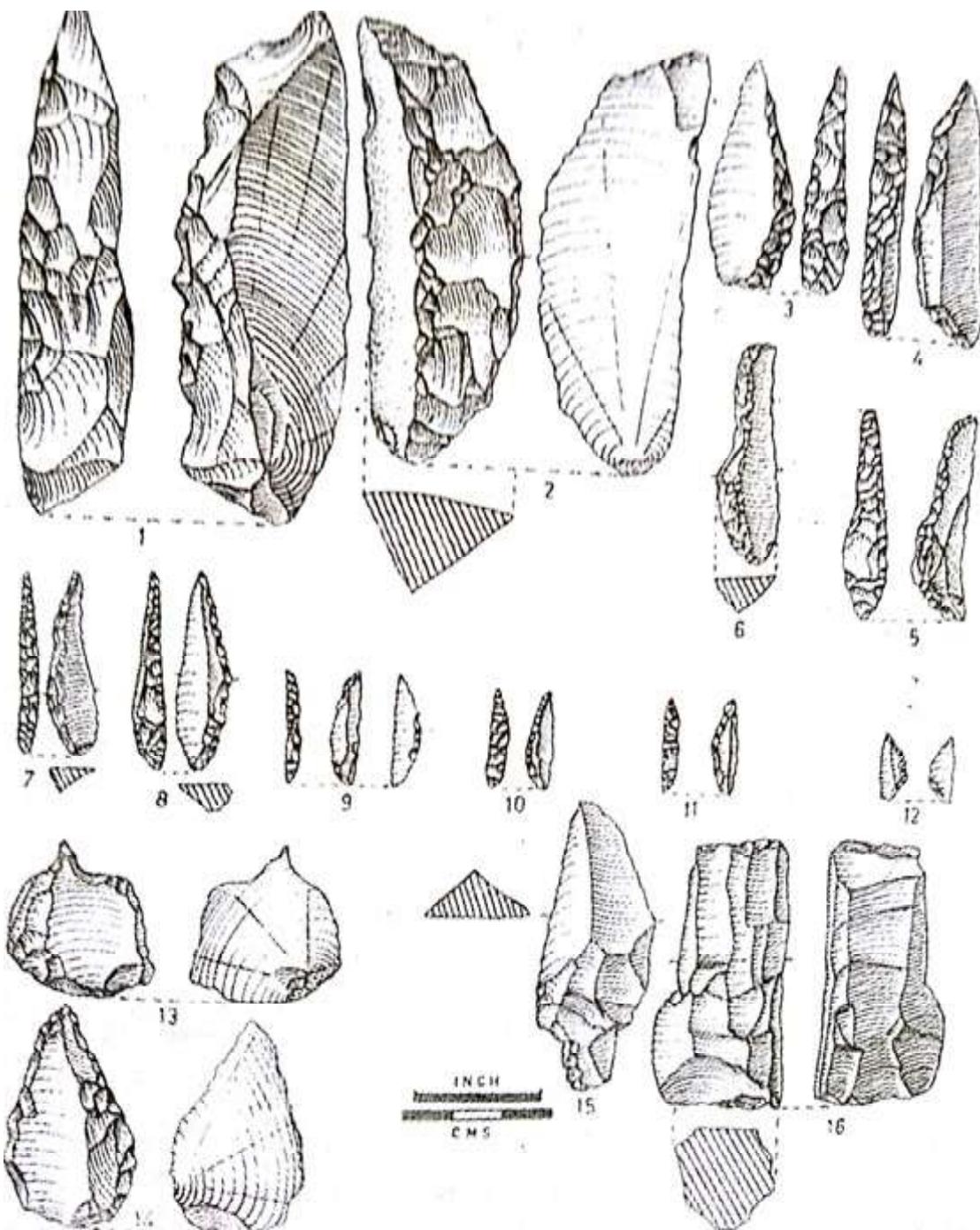


Fig. 2.8: Artifacts of the Blade-and-Burin Industry from the Rallakalava Valley, near Renigunta. 1-2, Backed Knives; 3-12, Backed Blade and Bladelet Tool Variants (5 and 6 are Backed Pen Knives); 13, Awl; 14, Unifacial Point; 15, Tanged Point; 16, Blade Core (After Murty, 1979). Source: MAN-002, Block 5.

Radiocarbon dates for the Upper Palaeolithic obtained from different part of India and the Thermoluminescence (TL) dates from the Kurnool caves indicate a time period falling in the range of 40,000 BCE to 8,000 BCE. The faunal remains from Kurnool caves, found in association with the Upper Palaeolithic also belong to the Late Pleistocene Age.

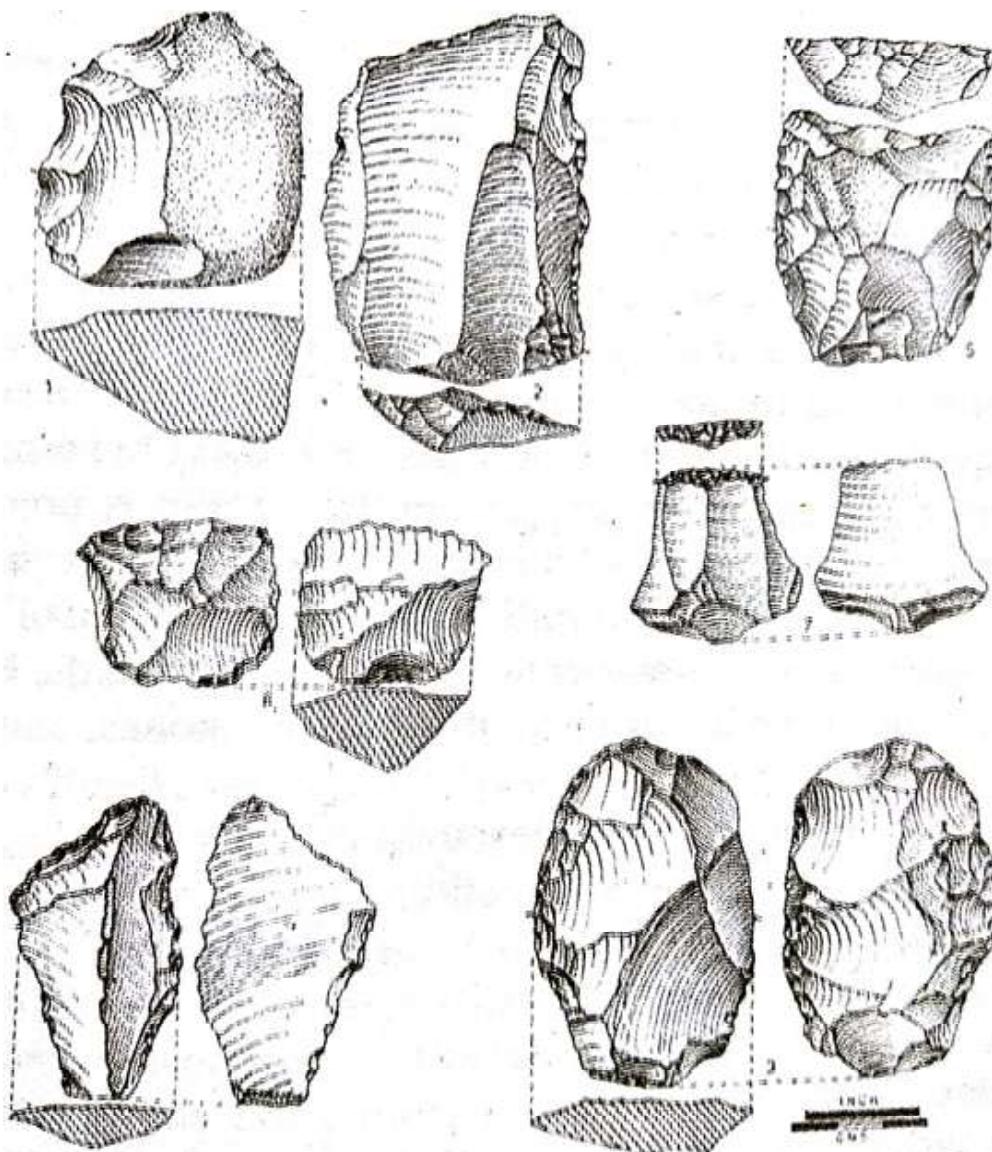


Fig. 2.9: Artifacts of the Blade-and-Burin Industry from the Rallakalava Valley, near Renigunta. 1, Convex Scraper; 2, 4, Side Scrapers; 3, Ovate Scraper; 5, 6, 7, End Scrapers (after Murty 1979). Source: MAN-002, Block 5.

Upper Palaeolithic Sites

The following are some of the prominent Upper Palaeolithic sites in the Indian subcontinent:

- 1) Rohiri hills in upper Sindh
- 2) Milestone 101 in lower Sindh
- 3) Chopani Mando in Belan valley
- 4) Baghor I in Madhya Pradesh
- 5) Paisra in Munger district of Bihar
- 6) Lalmai hills of Bangladesh
- 7) Haora and Khowai river valleys in western Tripura
- 8) Kurnool in Andhra Pradesh
- 9) Muchchatla Chintamanu Gavi in Andhra Pradesh

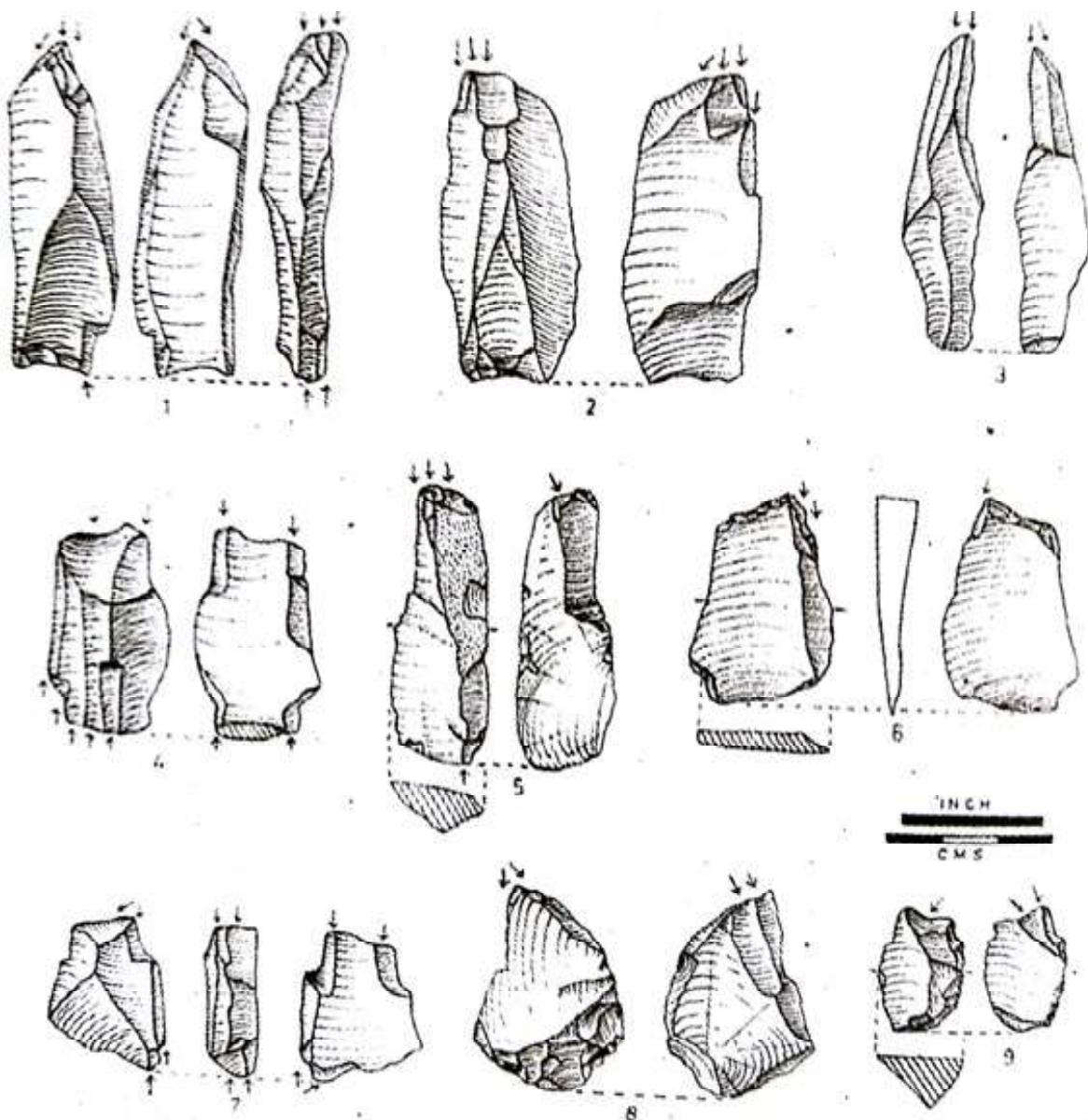


Fig. 2.10: Artifacts of the Blade-and-Burin Industry from the Rallakalava Valley, near Renigunta. 1-9, Different Types of Burins (After Murty 1979). Source: MAN-002, Block 5.

Bone Tool Industries

Upper Palaeolithic bone tools are known from the Kurnool cave sites in Andhra Pradesh. The excavations by Robert Bruce Foote and his son Henry Bruce Foote in the Billa Surgam caves, in the 1880s, yielded bone tools in association with Late Pleistocene fauna. The tools comprised awls, barbed and un-barbed arrowheads, daggers, scraper-knives, scrapers, chisels, gouge, wedges, axe heads, and sockets. Recent excavations conducted in the 1970s confirmed these findings. These cave bone tools display a crude technology. This is because the cave is a short-term occupation and the possibility for complete representation of well-finished artifacts is less likely in short-term occupations than in permanent occupations. Further excavations in the Muchchatla Chintamanu Gavi cave (MCG I and MCG II) have yielded blade tools and bone tools in association with Late Pleistocene Fauna. The bone tools of MCG cave comprise scrapers, perforators, chisels, scoops, shouldered points, awls, barbs, spatulas, worked bones and splinters (Figure 2.11).

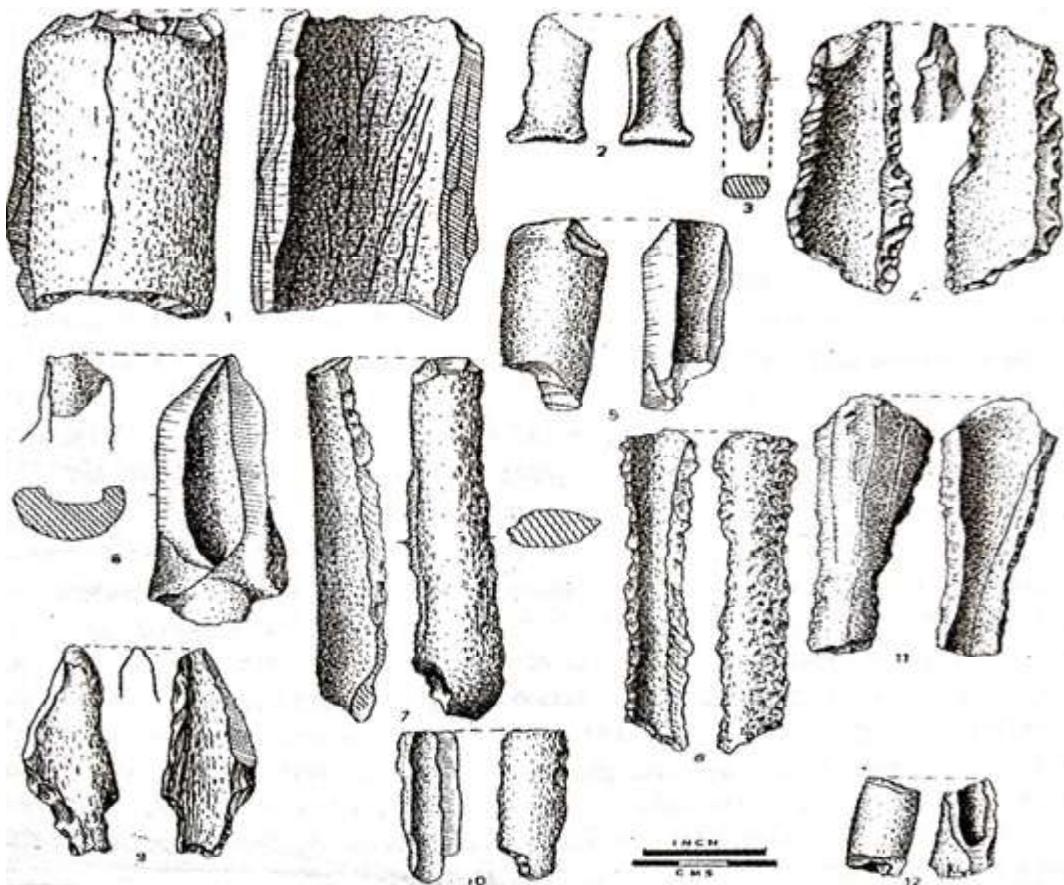


Fig. 2.11: Bone Tools from Muchchatla Chintamanu Gavi Cave I (MCG I), Kurnool Caves.
1) Scraper; 2-3) Perforators; 4-6) Chisels; 7-8) Spatulas; 9) Tanged point; 10) Shouldered Point, broken; 11) Bone Blank; 12) Bone with both ends cut (After Murty, 1979). Source: MAN-002, Block 5.

2.10 MESOLITHIC CULTURE

The Mesolithic Age began around 8000 BCE. It was a transitional phase between the Palaeolithic Age and the Neolithic Age. There was a rise in temperature and the climate became warm and dry. The climatic changes affected human life and brought about changes in fauna and flora. The warmer climate was associated with the onset of the Holocene Age. Holocene followed the Pleistocene. Holocene is known as the Recent or Neo-thermal phase. We are living in the Holocene period. Holocene began around 10,000 BCE.

Geological Ages

Today, geologists divide the history of the earth into four eras or ages related to the evolution of life forms:

- i) Primary (Palaeozoic),
- ii) Secondary (Mesozoic),
- iii) Tertiary, and
- iv) Quaternary.

The Tertiary and Quaternary together form the Cenozoic or the Age of the Mammals which began about 100 million years ago. The Cenozoic is divided into seven epochs of which the last two — The Pleistocene and the

Holocene—are especially important in the story of hominid evolution. The Pleistocene began about 1.6 million years ago, and Holocene (or Recent Period in which we live) about 10,000 years ago.

Source: Upinder Singh, 2008, page 60.

The Mesolithic people, in their subsistence level were much like the Palaeolithic hunter-gatherers, however their mode of hunting-gathering became more intensified. Their long experience and interaction with plants and animals made them species-specific hunters and gatherers. This means that they favoured some species of plants and animals over others. Culture that was produced in Europe during the post Pleistocene period, that is early Holocene, is known as the Mesolithic culture.

Terminology

A. C. Carlyle, an Assistant to Alexander Cunningham, founder Director-General of the Archaeological Survey of India, found a large number of small stone implements from the caves and rock shelters of Vindhyan hill regions of Central India. The assemblage comprised of small stone tools in form of crescents, trapezoids, triangles and delicate knife-lets. No tool was more than 1.6 cms in length. The tools were never found in association with polished or ground implements. Carlyle found enough stratigraphic evidence to suggest that these small implements were lying in an intermediate position between the Palaeolithic and Neolithic stages. The accompanying culture connected with both the ages. Carlyle termed this intermediate stage as the Mesolithic.

The end of Pleistocene is conventionally placed around 10,000 BCE. The date for Mesolithic in Europe is around 9,500 years BCE. Mesolithic is considered to have ended with the introduction of agriculture around 6000 and 5000 BCE (Price, 1991).

Tool Types and Technology

Microliths are the predominating and the most common tool types of this cultural phase. Technologically, this is a continuation of types from the Upper Palaeolithic period. Microliths start occurring in the last phase of the Palaeolithic culture but they predominate in the Mesolithic culture. Three cms. is taken as the limit for the length for determining a microlith. Moreover, the microliths of Mesolithic period were made by highly skilled tool making techniques. This is mainly reflected in retouching of the working edge of the tool or blunting of the hafting edge of the tool.

The technique employed was punch and pressure, which developed during the Upper Palaeolithic period. For this reason, identification of Mesolithic microliths largely depends on the context of its finding and dates.

Microliths are described in terms of geometric and non-geometric shapes. Geometric ones are types such as trapeze, triangle, lunate or crescent. The non-geometric types are named by the nature of blunting of the back, such as partly, fully or obliquely blunted blades or after their functions such as scraper, point, knife, blade, awl, burin and borer (Figure 2.12).

Microliths were used as composite tools for plant gathering and harvesting, slicing, grating, plant-fibre processing; for lines, snares, nets and traps; shell openers;

bow-drill points and awls. The pieces were hafted onto wood, bone and antler. These were set in line to give a straight cutting edge. Very often they were set with slanting blades, micro-blades, broad trapezes, notched and serrated blades. Sometimes lunates and triangles were set vertically to give different kinds of saw edges. This tradition of composite tool making must have extended from the Upper Palaeolithic into the Mesolithic.

The microlith tool technique allowed the regular exploitation of small, nodular pebbles and even large artifacts. Microliths were easy to carry over long distances and even in places, where suitable rock was not available, Mesolithic people could settle down for long periods of time. In this way they exploited extremely sharp and hard materials like flint, chalcedony, agate, carnelian etc. which occur in the form of small nodules.

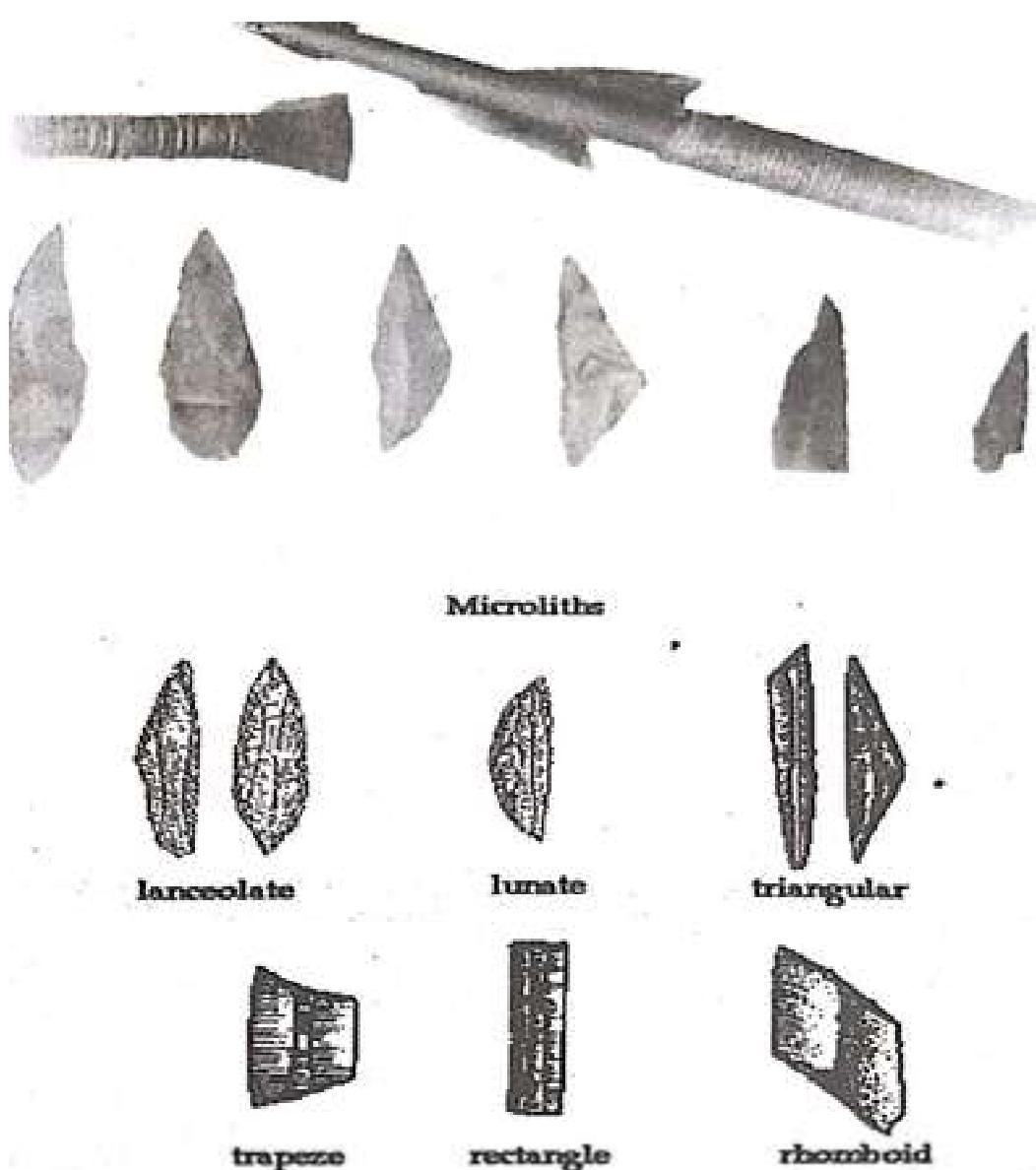


Fig. 2.12: Microliths. Source: MAN-002, Block 6.

Another type of tool used by the Mesolithic people is called the Macrolith (Figure 2.13). These were bigger than the microliths.

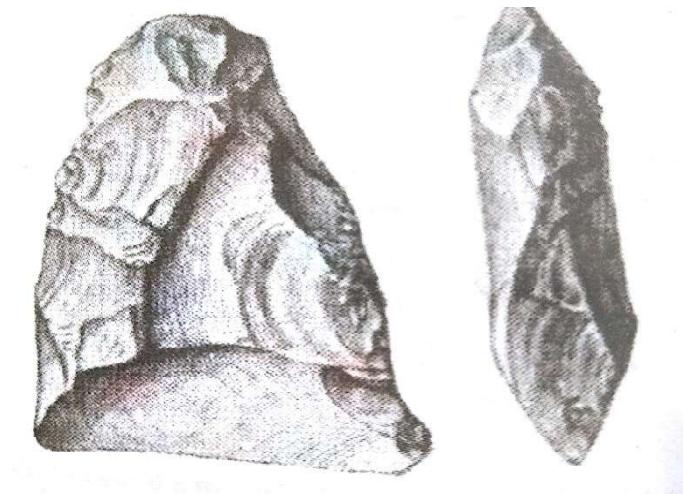


Fig. 2.13: Macroliths (Heavy duty tools). Source: MAN-002, Block 6.

They were a continuation of the Upper Palaeolithic types such as scrapers. New types are axes and picks. These are considered as heavy-duty tools. They are made on stone, mostly flint. The tools are made by flaking and making transverse working edge. According to the nature of the working edge they are termed as axe or adze. They are meant for working on wood. Axe, adze and picks were hafted on wood, bone or antler. These tools helped the users to cope with forested environments.

Bone (Figure 2.14) and antler tools are yet another category of tools used by the Mesolithic people. Bone tools are mainly found in the form of barbed harpoons. Harpoons vary in terms of number of barbs, location of barbs along the shaft and in terms of the nature and shape of barbs. They were used as fish hooks and points. Bones are also used as hafts for making composite tools.



Fig. 2.14: Fishing Hooks, Needles and Shutlasses for Fishing Net made of Bone(Sergiyev-Posadsky District). Mesolithic. Credit: Èññòü. Source: WikimediaCommons (https://commons.wikimedia.org/wiki/File:Fishing_tools_stone_age_SPMZ.jpg).

Mostly shredded antlers are used for making tools. The antler was cut down along the brow region and shaped into axe, adze. Sometimes axes and adzes were found to be hafted into the antler.

Indian Mesolithic Culture

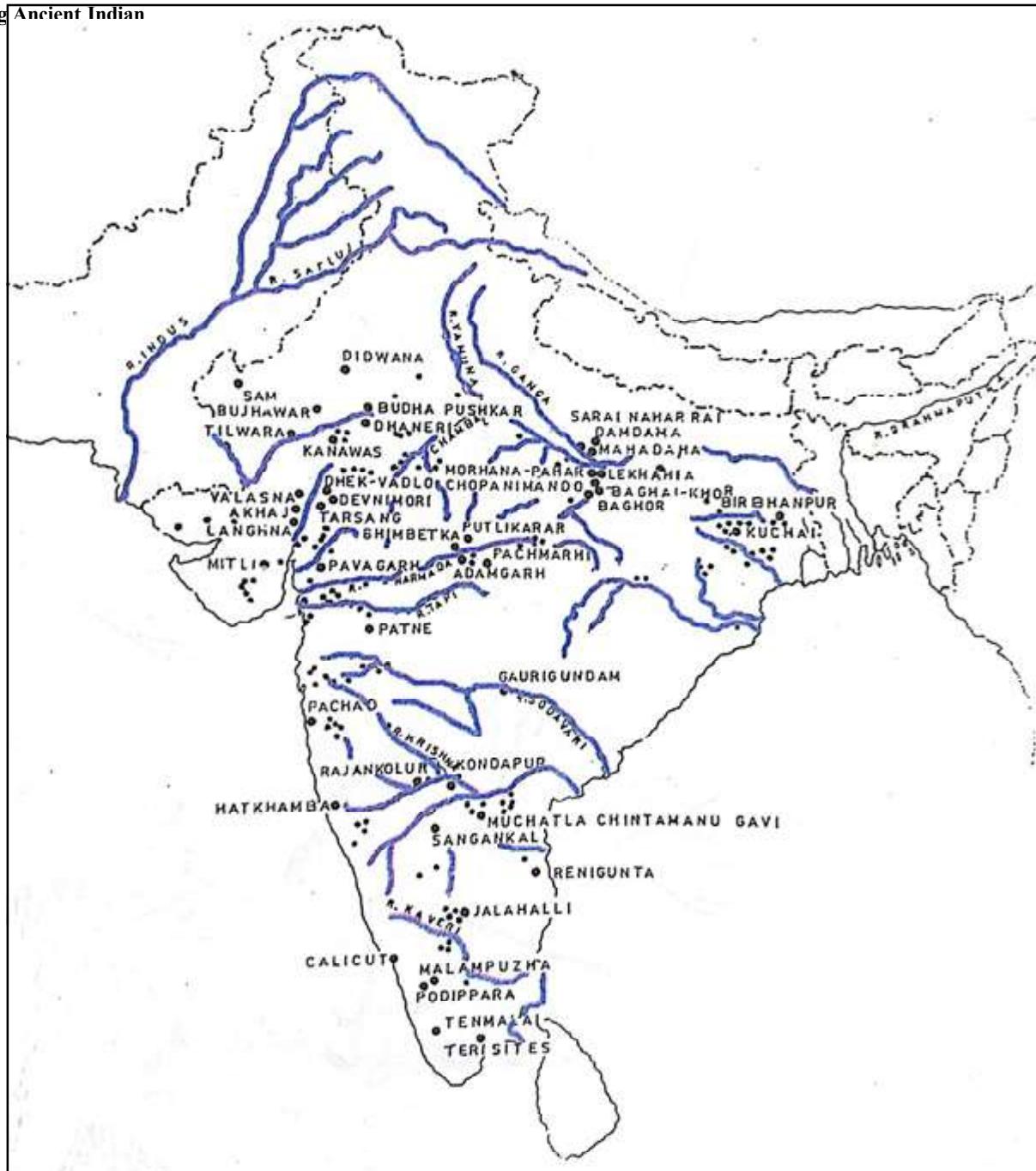
Mesolithic or Middle Stone Age was of a much shorter period than Palaeolithic. It lasted from over thirty thousand years in Sri Lanka and parts of Africa to only about ten thousand years in India and West Asia. Besides the use of microliths, the Mesolithic people made a number of technological innovations like the bow and arrow for hunting, querns, grinders and hammer stones for grinding and pulverising plant foods like roots, tubers etc. They created a large volume of art in the form of several thousand paintings and engravings, which not only tell us about their aesthetic taste but also their capability for innovating new technological elements, modes of subsistence economy, items of material culture, social organization and religion.

Sites of Indian Mesolithic

The earliest discovery of microliths and other Mesolithic tools was made by A.C.L. Carlyle. He discovered microliths, rock paintings, pigment pieces with marks of grinding, human skeletons, animal bones, ash, charcoal pieces in the rock-shelters of Mirzapur district of Uttar Pradesh. He also discovered paintings depicting scenes of wild animals being hunted with spears, bows and arrows and hatchets. This was the first discovery of paintings portraying the Mesolithic way of life. Subsequently, further researches were conducted in Uttar Pradesh, Kurnool caves in Andhra Pradesh and other sites in South India and Gujarat. The Mesolithic sites are found almost all over India except the Northeast (Map 2.4). Even the Indo Gangetic plains, where stone resources are scarce, were also occupied. This shows that Mesolithic hunter-gatherers had colonized the whole country. This had happened for the first time in the entire prehistoric period of two million years.

Major excavated sites in India:

- Tilwara, Bagor , Ganeshwar in Rajasthan
- Langhnaj, Akhaj, Valasana, Hirpura, Amrapur, Devnimori, Dhekavadlo, Tarsang in Gujarat
- Patne, Pachad, Hatkhamba in Maharashtra
- Morkhana, Lekhahia, Baghai Khor, Sarai Nahar Rai, Mahadaha, Damdama, Chopani Mando, Baidha Putpurihwa in Uttar Pradesh
- Pachmarhi, Adamgarh, Putli Karar, Bhimbetka, Baghor II, Baghor III, Ghagharia in Madhya Pradesh
- Paisra in Bihar
- Kuchai in Odisha
- Birbhanpur in West Bengal
- Muchatla Chintamanu Gavi, Gauri Gundam in Andhra Pradesh
- Sanganakallu in Karnataka
- Tenmalai in Kerala.



Map 2.4: Mesolithic Sites of India (After V. N. Misra, 1989). Source: MHI-08, Block 2.

Sites like Bagor, Sarai-Nahar-Rai, Mahadaha and Adamgarh are truly Mesolithic sites because of their early dates and associated material culture.

The above excavated sites have provided us with a vast amount of information regarding technology, material remains, burial practices, anatomical remains, customs associated with burial, art and charcoal for dating of the sites.

We have nearly sixty radiocarbon and eight Thermoluminescence (TL) dates from over twenty sites. These show that the Mesolithic people lived between 10,000 and 2,000 BCE. In the later part of their history they came into contact with many rural and urban cultures. As a result of this interaction, their nomadic and hunting-gathering way of life underwent transformation. The majority of the hunter-gatherers got settled, took up agriculture and other sedentary occupations and were gradually assimilated into the Hindu caste based society.

- 1) Name two sites of the Upper Palaeolithic culture of India? Discuss any one in detail.

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- 2) What are Microliths? Give a few examples.

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2.11 SUMMARY

Indian Palaeolithic is divided into three phases which show development in technology, tool types. These are: Lower Palaeolithic, Middle Palaeolithic and Upper Palaeolithic. The Lower Palaeolithic cultural tradition is characterized by hand-axe and pebble chopper-chopping tool traditions. Limestone, Dolerite, quartzite were the preferred rock material for fashioning tools besides river pebbles. Stone hammer, soft hammer and prepared core techniques were employed for detaching flakes and shaping them into implements. The Middle Palaeolithic culture consists of a variety of tools made on flakes which are produced by specialized techniques. Mousterian and Levallois techniques are the most common. The Upper Palaeolithic culture is based on blade-tool technology. Besides, bone tools have been found from Kurnool caves in Andhra Pradesh. The Mesolithic culture began around 10000 BCE and is a post-Pleistocene culture. It is an intermediate stage between the Palaeolithic and Neolithic Ages. It is characterized by the use of Microliths which are tiny composite stone tools, made with advanced technology by using fine siliceous materials.

2.12 KEY WORDS

Archaeology	: Study of material remains to understand the past.
Artefact	: Any object that has been fashioned or altered by human hands.
Assemblage	: All artefacts of one culture or one time period found within the context of an archaeological site.
Carbon 14 dating	: Also known as radiocarbon dating technique. It is an absolute dating method which measures the radioactivity present in an organic material.

Reconstructing Ancient Indian History	Hominid	: The family of modern and ancient forms of human beings.
	Site	: An area of the landscape that shows evidence of past human activity.
	Stratigraphy	: The sequence of ancient cultural activities that have taken place in a site. They are seen in the form of layers superimposed one above the other.
	Thermoluminescence dating	Absolute dating method that measures the amount of thermoluminescence emitted by a substance, usually pottery, when heated.

2.13 ANSWERS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress Exercise 1

- 1) Old Stone Age or Palaeolithic, Middle Stone Age or Mesolithic, New Stone Age or Neolithic. See Section 2.2 and 2.3
- 2) Soanian and Acheulian. See Section 2.7 for details.
- 3) Didwana in Rajasthan and Budha Pushkar in Rajasthan. See Sub-section 2.8 for details.

Check Your Progress Exercise 2

- 1) Renigunta in Andhra Pradesh and Kurnool in Andhra Pradesh. See Sub-section 2.9 for details.
- 2) Microliths are small stone tools in the form of crescents, trapezoids, triangles, delicate knife-lets etc. which are not more than 3 cms. in length. They are mainly associated with Mesolithic culture. For examples, see under the heading ‘Tool Types and Technology’.

2.14 SUGGESTED READINGS

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UNIT 3 HUNTING GATHERING SOCIETIES*

Structure

- 3.0 Objectives
- 3.1 Introduction
- 3.2 Palaeolithic Lifeways and Settlement Patterns
 - 3.2.1 Hunting and Foraging
 - 3.2.2 Non-Utilitarian Behaviour
 - 3.2.3 Palaeolithic Rock Art and Cults
- 3.3 Mesolithic
 - 3.3.1 Rock Art Sites
 - 3.3.2 Case Study – Bhimbetka
 - 3.3.3 Excavations
 - 3.3.4 Rock Paintings
 - 3.3.5 Why Were Such Paintings Made?
 - 3.3.6 Classification of Bhimbetka Rock Art Complex
- 3.4 Summary
- 3.5 Key Words
- 3.6 Answers to Check Your Progress Exercises
- 3.7 Suggested Readings

3.0 OBJECTIVES

In this Unit, you will learn about:

- prehistoric lifeways, settlement patterns and tools;
- the kind of archaeological and art evidence available to us for reconstructing the culture of Palaeolithic people;
- Upper Palaeolithic art and Mesolithic art; and
- regional variations of Palaeolithic and Mesolithic cultures of India.

3.1 INTRODUCTION

Man, by his tool making ability, emerges from an animal background and assumes higher status than any other animal. He makes tools on stone, wood, bone and antler and obtains his food by hunting. This capacity of tool making is the harbinger of culture. He learns to build shelters, to use fire, to clothe himself, and to transmit ideas through signs or symbols and presumably even by speech, though not in writing. This period of man's history belongs to the realm of **prehistory**. And the evidences for reconstructing the lifeways of prehistoric man are the tools, which are, predominantly, the stone tools that survived the ravages of time. The long period of human development, before the advent of agriculture and use of metal is the epoch of Palaeolithic and Mesolithic cultures. Both are hunting-gathering cultures. These cultures are distinguished by their respective tool types which are called industries.

* This Unit has been adopted from MAN-002, Block 5 and 6

In this Unit, we will be studying the sites, settlement patterns, art evidence, tools and implements, subsistence patterns of the Palaeolithic and Mesolithic people of the Indian subcontinent

3.2 PALAEOLITHIC LIFEWAYS AND SETTLEMENT PATTERNS

The Palaeolithic cultures flourished in the geological era called the Pleistocene. The Pleistocene era climatically is characterized by glacial (extreme cold conditions and extensive ice caps) and interglacial (warm period) conditions in the temperate zones and pluvial (heavy rainy or wet period) and inter-pluvial (dry period) conditions in the tropical belt. Early human populations (i.e. Palaeolithic) lived in major parts of the temperate zones (Europe) and tropical zone (Africa and Asia), successfully adapting to these climatic events and environments.

In the Palaeolithic period, evidence indicates that the people lived close to water bodies, sources of food and stone. These were small hunting-gathering communities who exploited the rich flora or fauna for subsistence needs. The stone tools were important elements in their daily life. They were used for chopping, cutting, boring, scraping, cutting, slicing, piercing and whittling. Some of these activities were related to craft work and others to subsistence. Microwear analysis conducted on the tools indicates different types of activities with which the tools were associated. For example, wear and tear traces on the tool edges have been examined under the microscope and the scientists can clearly identify their use on vegetal matter, non-vegetal matter or on wood or bamboo. Some tools showed wear marks that indicated that they were hafted onto handles.

The Palaeolithic hunter-gatherers occupied different environmental niches in the Indian subcontinent and adapted to it. Palaeolithic people lived in rock shelters as at Bhimbhetka in Madhya Pradesh, caves at Sanghao (north-west Pakistan) or in caves such as in Kurnool in Andhra Pradesh. They also camped in the open, in shelters made of branches, grass, leaves or reeds. Evidence for the latter is not much since shelters made out of foliage have not survived. However, evidence in the form of stone tools point to the signs of settlement. A team led by V. D. Mishra and J. N. Pal found 17 Acheulian sites on the slopes of the hillocks and rocky outcrops marking the fringe of the Kaimur range and overlooking the Belan river. In this area, quartzite was easily available and workshop sites were identified. Locally available rocks were used for tool making. The locations were suitable for the hominin groups to observe the movement of game.

Many sites were located near water sources. Professor K. Paddayya's research since the 1970s in the Hunsgi and Baichbal valley in north Karnataka has brought to light over 400 Stone Age sites. The Acheulian site excavated at Hunsgi is an open-air site. An oval-shaped open space flanked by granite boulders was selected by man for his activities. Professor Paddayya concluded that while the boulders would already serve as a windbreak and render the task of making artificial shelters much easier, the location of this spot along a water course must have ensured a perennial supply of water. The springs in the bed of Devapur stream must have been active in earlier times also. The drainage pattern of the valley was not yet fully organized and the Hunsgi stream itself comprised several shallow, braided channels flowing at a much higher level. The valley, as also the plateaus, must

have been covered with a thicker cover of thorn, scrub forest kind of vegetation; such vegetation would allow a free movement of people in their hunting and gathering expeditions. There is, as yet, no direct evidence for knowing the natural food resources available in the area at the time of the Acheulian occupation. Data from later periods suggests that the area possessed game animals as well as wild vegetable foods fit for human consumption. Moreover, the valley contains a plentiful supply of raw material in the form of limestone breccia and gravel accumulations. We can, therefore, confidently conclude that the valley formed a very favourable settlement location for the Acheulian bands.

Types of Sites: Ordinarily, sites represent a palimpsest of activities. At **habitation sites**, people lived, cooked, and spent time in leisure activities like painting and engraving. For example, sites like Bhimbhetka and Hunsgi were occupied for a longer period of time as compared to **temporary camp sites**. The latter category represents a site which was occupied for a short duration in a year, after which people moved on. Specific activity sites are also present, for example **butchery sites** – the predominant activity being skinning of animals and butchering for meat. Similarly, **factory sites** are those where people in the past flint- knapped and made tools.

The organization of early societies would have been in the form of bands of people. These were small communities of less than 100 people, moving from one place to another in search for game and plant foods. The frequent roaming would have restricted the size of the group as children would have been an impediment to movement. Thus, population sizes would have been by necessity small.

It is generally thought that hunter-gatherer groups lived a hand-to-mouth existence without much time for leisure activities. This is a misnomer. The Palaeolithic hunter-gatherers probably did not store food beyond a point as they lacked suitable technology, and their material desires and wants were limited. It naturally follows that once they had obtained sufficient amount of food, their subsistence-related activities would cease and they would have ample time to sleep, play, chat, draw and relax.

Prudent use of natural resources enabled hunting-gathering to become an efficient mode of subsistence. This is the reason why, even in some modern communities, hunting-gathering has continued to be the dominant mode, albeit at a reduced scale. Ethnographic studies conducted on modern hunter-gatherers have shown how gathering part of the activity contributes more to the dietary needs of such people. It is usually the women who assume the gathering role and men hunt. If this was so in the Palaeolithic times too, then women must have played an important role by contributing in a major way to the subsistence base of the Palaeolithic people.

3.2.1 Hunting and Foraging

The entire Palaeolithic stage was characterized by a simple economic organization consisting of hunting of wild animals and gathering of wild plant foods. Based upon the widely accepted premise that the various ecological or geographical zones of India supported rich animal life and vegetation in the Pleistocene periods, we can safely infer that a wide spectrum of animal and plant foods was available for exploitation by the Stone Age groups. The archaeological record does give us some interesting clues in this regard.

Since the middle of the last century, large collections of fossil fauna of mammals have been obtained along with stone tools from the Narmada, Godavari, Krishna and other rivers. These findings gave rise to interpretations that early Humans were exploiting wild cattle, deer and other mammals for food purposes. This interpretation is now supported by the recovery of bone and dental remains of wild cattle and deer species, wild horse and tusk pieces of wild elephant from primary Acheulian sites at Isampur, Teggihalli, Hebbal Buzurg and Fatehpur in the Hunsgi and Baichbal valleys, Chirki-Nevasa in Maharashtra, Attirampakkam in Tamil Nadu and other sites. Cut marks found on these bones indicate that these pieces formed part of food processing and consumption. These skeletal remains either belonged to hunted prey or else were partly scavenged from kill-sites of carnivorous animals. Further, the occurrence of turtle shell pieces at sites like Isampur suggests that the Stone Age groups also exploited a variety of small fauna comprising insects, birds, fish, rodents, amphibians by adopting simple collection strategies.

Now there is a world-wide realization that plant foods also played an important role in the diet of Stone Age groups. D. D. Kosambi had pointed out in 1965 that Stone Age communities of tropical zones like India would have extensively made use of wild plant foods like fruits, berries, seeds and roots. Prehistorians have now realized the importance of looking for plant remains from Stone Age sites. M. D. Kajale recovered remains of wild bread fruit and two species of banana from the Mesolithic levels (*c.* 10000 to 8000 BCE) of the cave site of Beli-lena Kitulgala in Sri Lanka. Besides, ethno-archaeological studies conducted on tribal groups and other under-privileged sections of Andhra Pradesh, Karnataka and Madhya Pradesh indicate that a wide variety of leafy greens, tubers, root crops, fruits and berries, seeds and gum were routinely exploited by them.

3.2.2 Non-Utilitarian Behaviour

Archaeological record has also preserved some strands of evidence regarding non-utilitarian aspects of the behaviour of the Lower Palaeolithic groups such as cognitive and artistic abilities and personal ornamentation. It has been pointed out that the preparation of hand-axes and cleavers reflects the employment of developed cognitive principles of reversibility and whole-part relations. Developed cognitive abilities are also reflected in many aspects of land use. These include the selection of valley-like topographic settings as habitats for occupation, recognition of seasonal availability of water sources and food resources, and identification of certain rocky-outcrops as suitable spots for workshop-cum-camp sites.

Some of the hand-axes in the Acheulian assemblages, particularly the thin, fine specimens belonging to the pointed, ovate and cordate forms, are very symmetric in shape and aesthetically pleasing. So, the possibility cannot be ruled out that these specimens were valued as such by their makers. The cupules (small cup-like depressions) and simple engravings found on rock slabs from Bhimbetka, Daraki-Chatan and other caves in Central India have been interpreted by archaeologists as artistic creations of the Acheulian groups.

There is some evidence of body decoration too. A few red ochre-like pieces were found at the Acheulian sites of Hunsgi and Baichbal valleys. These were probably procured from the vicinity and used for body smearing.

Case Study- Hunsgi

Four Acheulian localities were excavated by K. Paddayya in the Hunsgi and Baichbal valleys of North Karnataka. Locality V and VI at **Hunsgi** in the Hunsgi valley preserved 20-30 cms. thick *in situ* cultural levels on weathered bedrock (granite); these were covered by silt deposit measuring up to 50 cm in thickness. Rocky eminences or ridges above the beds of local streams were selected for camping and the open spaces found on these ridges were used for erection of temporary shelters consisting of a framework of wooden posts and branches covered with grasses. The main trench (63m square) at Hunsgi Locality VI yielded an assemblage of 291 artefacts of limestone.

The two major clusters of sites – one near Hunsgi valley and the second one near Yediyapur in the Baichbal valley – consisted of 15 to 20 localities spread over a stretch of two or three km. and both clusters were associated with perennial water sources resulting from seep springs. The remaining sites were found in a scattered way all over the basin floor. Considering this differential distribution in conjunction with seasonal availability of water sources as well as wild plant and animal foods, Paddayya inferred that the Acheulian settlement system in this area hinged upon two main seasonal resource management strategies. These are: (1) dry season aggregation of all Acheulian groups near perennial water pools (fed by seep springs) in the two basins and probable reliance on large game hunting, and (2) wet season dispersal of the population in the form of small bands across the basin floor; dependence on shallow rainwater pools, and exploitation of a variety of seasonally abundant plant foods consisting of leafy greens, fruits, berries and seeds and small fauna. It was further inferred that for short-term and day-to-day purposes the Acheulian population organized itself into eight or nine groups or home ranges and occupied different parts of the basin.

Source: Paddayya et. al., 1999-2000

3.2.3 Palaeolithic Rock Art and Cults

Prehistoric art as it is known today, was executed either on stones or bones. At times, mud, charcoal, shell, teeth and horn have also been used. Art work executed on such movable materials is designated as “home art” or “*Art Mobilier*”. Art executed on walls and ceilings of caves and rock shelters is called “cave art” or “*Art Parietal*”.

Besides engraving and painting, there were also numerous examples of modelling done with simple mud or bone ash mixed with it. These latter examples throw significant light on the additional ability of the prehistoric artist. It is important to appreciate that the skill required to represent an object by modelling is not of the same kind required to either paint or engrave.

Indian Palaeolithic has examples of portable art in the form of ostrich egg shell beads and engraved fragments. The well-known sites are Bhimbetka III A-28, Ramnagar (Chambal valley) and Khaparkheda (Narmada valley) in Madhya Pradesh; Chandresal and Kota (Chambal valley) in Rajasthan; and Patne in Maharashtra. A few of the egg shell pieces have been dated. Patne – 25,000 B.P.; Chandresal (Rajasthan) gave two dates – 38,900 and 36,500 B.P.; Ramnagar (Madhya Pradesh) – 31,000 years B.P. Fragment found at Patne has patterns on

them as it is engraved with criss-cross designs made long ago by humans. Ostrich eggshell was also used to make beads and ornaments. Some of them had a hole through which they could be strung. Forty-one Indian sites have given evidence of such beads in the Pleistocene context ranging from 39000 to 25000 B. P. Ostrich eggshell beads occur in the Upper Palaeolithic context at Bhimbetka and Patne. The Patne beads have a diameter of 10 mm. and the Bhimbetka ones of 5 mm. Upinder Singh has made observations regarding the discovery of ostrich eggshell beads in an Upper Palaeolithic burial context at Bhimbetka rock shelter, found on the neck of the skull of a buried man. He must have been wearing a necklace with different kinds of beads; the others had decayed, but the two ostrich eggshell beads have survived.

Petroglyphs: When some substance of a rock surface is removed through engraving, bruising, hammering, chiselling or scooping.

Source: Upinder Singh, 2008

Examples of mural art are best known from the caves and rock shelters of Bhimbetka. The rock paintings here, assigned to Period I, are ascribed to the

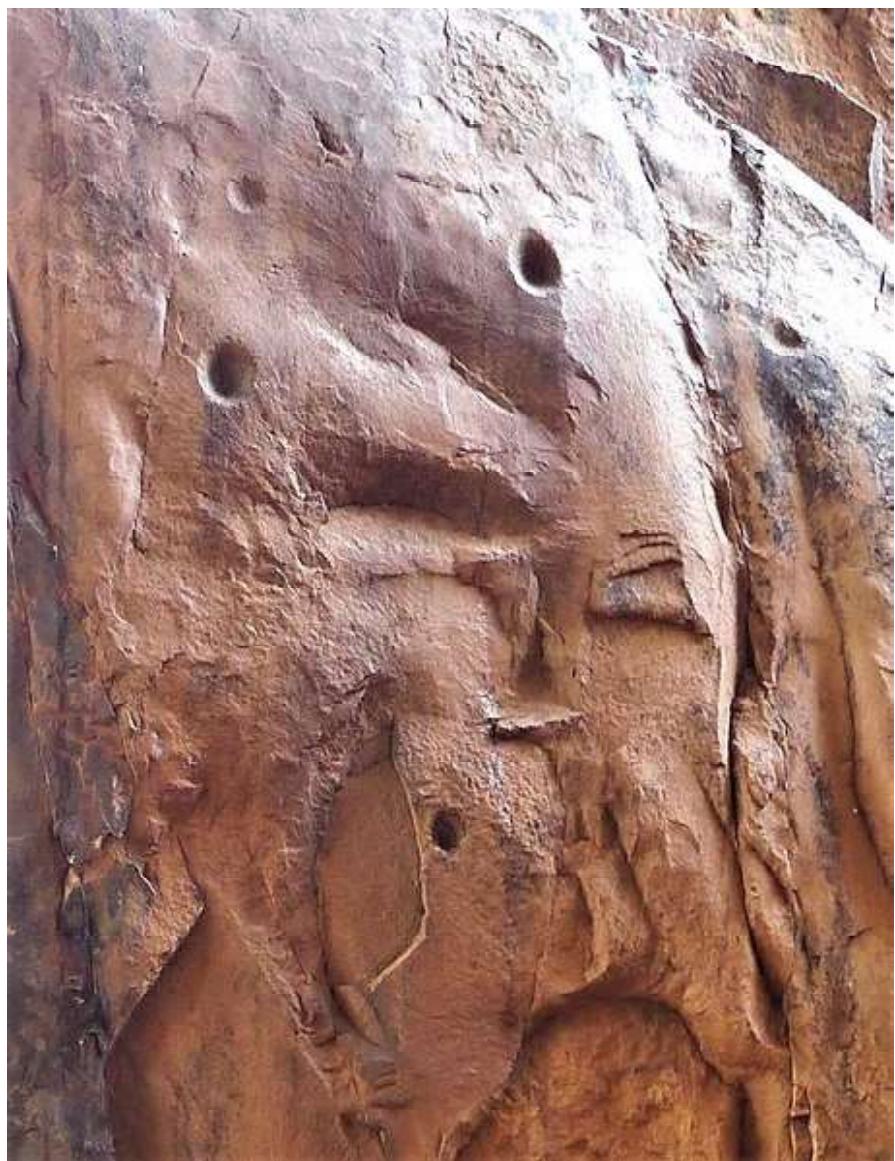


Fig.3.1: Auditorium Cave, Cupules. Bhimbetka. Credit: Dinesh Valke.

Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Bhimbetka_-_Auditorium_Cave_-_The_cupules_1.jpg).

Upper Palaeolithic. These include linear representations in green and dark red colours of herds of huge animals like the rhinoceroses, bison, wild buffaloes, mammoths and boars. There are also stick like human figures.

Regarding Palaeolithic art, it is difficult to ascertain whether it had a utilitarian function or was cultic in nature. Upinder Singh discusses some objects which may have had ritual function. There was a damaged Upper Palaeolithic carved bone object found at Lohanda Nala in the Belan valley in Uttar Pradesh which had been identified as a mother goddess figurine by some and as a harpoon by others. Animal teeth have been found in one of the Kurnool caves which had grooves which suggests that they may have been attached to a string and worn as ornaments. A chalcedony disc from Bhimbetka and a soft sandstone disc from Maihar (south-west of Prayagraj) belong to Acheulian contexts and seem to have had some cultic significance. Cave III-F 23 at Bhimbetka has given evidence of what has been called an ‘Auditorium Cave’ (Figure 3.1) (Upinder Singh, 2008). Belonging to a period between the Lower and Middle Palaeolithic, it has a tunnel of about 25 m. long which leads into a hall having three entrances. There is a large rock in the middle of the cave. The flat and vertical surface of the rock that faces the tunnel has seven cupules (cup like depressions) up to 16.8 mm deep. At some distance away from this rock, at the bottom of a pit is another rock which has one large cup mark along with a meandering line carved on its surface. Scholars believe that the rock with multiple cupules functioned as a gong and cupules were the marks made on it when hit repeatedly. Probably, the whole paraphernalia had some ritual connotations.

The site of Baghor I in Madhya Pradesh has given evidence of an Upper Palaeolithic ‘shrine’ dated to 9000-8000 BCE. A circular platform has been found here. It is made of sandstone rubble, about 85 cms. in diameter which has a piece of natural stone kept on it and has a pattern of concentric triangular laminations in colours ranging from a light yellowish red to a dark reddish brown. Nine other fragments of this stone were found near the platform. When the ten pieces were joined together, it formed a triangle 15 cms. high, 6.5 cms. wide and 6.5 cms. thick. This triangular stone was evidently placed atop the platform. Ethnographic studies of Kol and Baiga tribes of this part of Kaimur hills show that they make such a platform even today and worship similar triangular stones as a symbol of the Female Principle.

Check Your Progress Exercise 1

- 1) What was the main subsistence activity of the Palaeolithic people?

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- 2) Write a note on Palaeolithic art.

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3.3 MESOLITHIC

Mesolithic is a cultural stage belonging to human beings who were completely modern in their biological characteristics and are known as *Homosapien sapiens*. There is development in tool technology as microliths were extensively made and used. These were composite tools and were meant to be hafted or glued to form a serrated edge. Indian Mesolithic is also known for its world-famous rock art. The Mesolithic economy, like the Palaeolithic, was dependent on hunting and foraging, but some sites have given evidence of domestication of animals. During the Mesolithic period, population increased, and people spread to occupy new ecological niches. Evidence of house floors, human burials, ring stones, pottery made their appearance. Interaction and movement among communities is also suggested.

Rock Art: Rock art or Palaeo-art of our ancestors is the earliest signatures drawn on rock surfaces either on the open cliffs or inside the rock shelters and caves where they lived. It can be seen in the form of rock paintings (petrographs) and/or in the form of engravings, cupules (petroglyphs). They provide a unique opportunity to understand the origins of human mind and serve as source for studying the material culture of the society in its ecological setting.

It is not yet clear whether *Homo erectus*, the species which preceded ours, had developed art during the Lower Palaeolithic times, though he had made beautiful well-refined stone implements seen in the Narmada valley collections which ought to be more than utilitarian in nature and definitely of great aesthetic value. It is widely observed and understood that with the emergence of modern human species, *Homo sapiens*, during the Upper Palaeolithic time over 1,50,000 years ago, fast brain or neurobiological evolution of man occurred and the higher faculty of abstraction of ideas and their expressions was achieved by our species. This faculty heralded fast development in the next Stone Age known as the Mesolithic which witnessed behavioural, social and cultural modernity manifested in the creativity of visual representations, various kinds of art and artistic skills- the Mesolithic art.

3.3.1 Rock Art Sites

Rock art is widely distributed in Northern, Western, Eastern and Southern part of India right from Laddakh, Jammu and Kashmir, Manipur, Himachal Pradesh to Tamil Nadu and Kerala. But, most of the rock art sites are in Central India, notably in the Chhattisgarh, Jharkhand, Madhya Pradesh and Odisha. This is primarily due to its unique geo-environmental setting which favoured the evolution of early human culture in the Central Indian plateau. The mountainous region of the Vindhyan and Satpura ranges which confine the Central Narmada valley where Stone Age humans flourished, have the largest number of rock art sites. The Vindhyan and Satpura ranges are fractured and elevated in such a way that it produced natural shelters and caves (Figure 3.2) of the Block Mountains.

These shelters could easily be occupied by early hunter-gatherers and pastoralists whose descendants, such as Gond, Muria, Korku, Bhilala etc. tribal communities still thrive on incipient or marginal farming and continue with their traditional lifestyles. Bhimbetka rock shelters in the Vindhyan range and the Adamgarh and Pachmarhi in the Satpura are among the most important rock art sites in India,

beside the Daraki Chattan in Chattisgarh and numerous others in the Hazaribagh, Giridih and Kodarmada, Chatra region of Jharkhand, several of which have become fairly known in recent years through the efforts of Dr. (Colonel) A. K. Prasad. The rock art of Bhimbetka, Pachmarhi and Adamgarh have greater antiquity from the Upper Palaeolithic through the Mesolithic, Neolithic, Chalcolithic and early Historic periods.

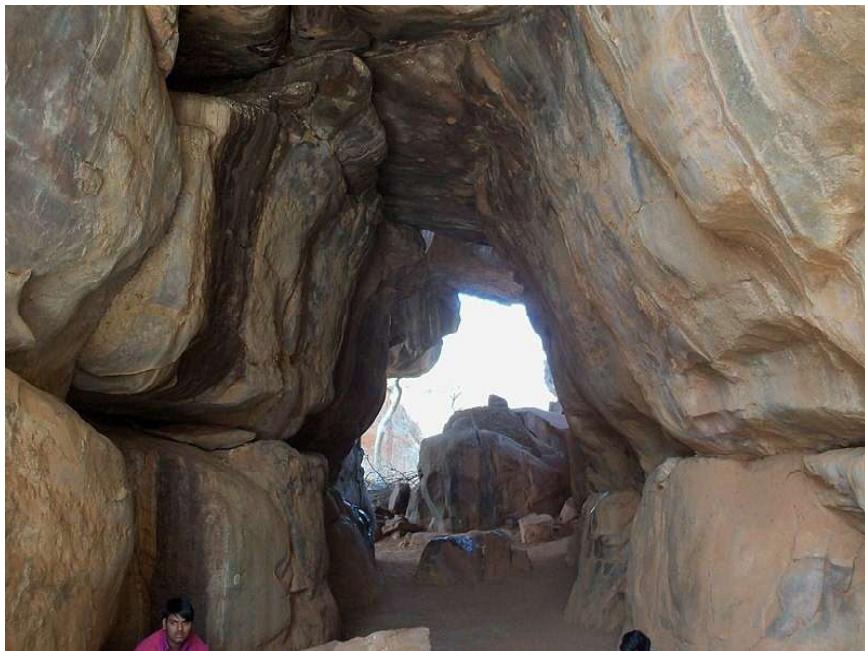


Fig. 3.2: Pre-Historic Rock Shelter. ASI Monument no. N-Mp-225. Credit: Nupur.

Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/Category:Rock_shelters_of_Bhimbetka#/media/File:Bhimbetka_caves.jpg).

3.3.2 Case Study – Bhimbetka

Bhimbetka rock art site is in the Raisen district of Madhya Pradesh, located at 22° 56' N, 77° 36'E, 45 kms. south of Bhopal or 30 kms. north-west of Hoshangabad. Bhimbetka is a name of a large hill, located near the tribal village of Bhiyanpur. The hill is a part of the deciduous woodland-covered Vindhyan hills of Central India. The hill, with an area of one square kilometre, is topped by disjointed monolithic rocks, which contain at their bases and sides a complex of nearly 800 prehistoric rock shelters and caves. While almost all the shelters contain paintings of prehistoric to medieval periods, a few of them also contain evidence of past human occupation in the form of stone tools, pottery, copper and iron tools, beads of stone, steatite, faience and terracotta and other objects, animal remains and human burials. The site looks like a huge fortified segmented ridge from a short distance. About half of the painted rock-shelters of Bhimbetka are accessible but the rest are in dense forested area infested with wildlife.

Why the name Bhimbetka?

The gigantic rocks of Bhimbetka owe its name to Bhima, literally the seat of Bhima (Bhimbethak), the mighty character of *Mahabharata*, who along with the other Pandavas is said to have stayed in these caves.

Bhimbetka first finds mention in Indian Archaeological Records (1888) as a Buddhist site. However, its painted rock shelters were first discovered in 1957-58 by an archaeologist Dr. Vishnu Wakankar of Ujjain.

The hills at Bhimbetka are of sandstone and quartzite. Bhimbetka and its surroundings receive annual rainfall of about 1000 mm. Because of this the hills are covered with dense vegetation. Besides the presence of perennial springs nearby, there are other water bodies which were used in the past. The locality hosts a rich variety of plants even today. At least thirty species of plant types are found that form a rich source of edible tubers, fruits and roots. Animals like deer, boar, *nilgai*, leopard, wolf, hare and fox are commonly found animals today. Abundant fish is available in the streams. In prehistoric period, though the conditions would have differed slightly, there is a strong possibility for the presence of a richer variety of flora and fauna. The hills have an inexhaustible supply of fine-grained quartzite for making tools. A few kilometres south of Bhimbetka there are exposures of Deccan Lavas which contain veins of quartz and siliceous minerals which were used by the Mesolithic people to make tools and weapons. This is the reason why this locality was so attractive to hunter-gatherers in the past. Resources for shelter, food, water and raw materials were easily available. Most of the tools at the site were made of yellowish quartzite. However, some tools were made of grey quartzite not available locally, probably sourced from afar.

Five floors paved with flat stone slabs belonging to the Lower Palaeolithic were identified (Upinder Singh, 2008, p.71). Due to the presence of acidic soils, no bone remains have survived. In 1970s Jerome Jacobson identified as many as 90 Late Acheulian sites in a small valley enclosed by sandstone hills in the Raisen district of Madhya Pradesh. These probably represented winter-season occupation and the hunting groups moved to caves and rock-shelters of the adjacent Bhimbetka hills in the rainy season.

3.3.3 Excavations

V. S. Wakankar excavated seven shelters and V. N. Misra excavated three. In one shelter, IIIF-24 or Auditorium Cave, Wakankar found evidence of early Acheulian culture and pre-Acheulian chopper-chopping tools. In another shelter, IIIA-28, he found a boundary wall made of large boulders to enclose the Acheulian habitation area. In several other shelters, he came across evidence of Middle Palaeolithic, Upper Palaeolithic, Mesolithic, Early Historic and Medieval period occupations. In some shelters he found human bones which he believed were fossilized.

V. N. Misra excavated three shelters: IIIF-15, IIIF-23, and IIB-33. Of these IIIF-23 is mostly Mesolithic. The Mesolithic habitation was partitioned into two by a wall of stone slabs and boulders. While pre-Mesolithic industries were all made of quartzite, Mesolithic assemblage was entirely made of crypto-crystalline siliceous material. Bones collected from a secondary burial were placed on the floor of the shelter. Shelter IIIF-23 produced a lot of ash from a fireplace, small pieces of wheel-made pottery, microliths and other stone tools.

Shelter IIB-33 had the thickest habitation deposit of 1.5 m, and it belonged exclusively to the Mesolithic. The deposit yielded a highly developed geometric microlithic industry, many grinding stones, a few ground bone and antler pieces, and some pieces of ground red ochre. All these were associated with several primary burials found one above the other. The deposit also produced plenty of charcoal which was used for dating by PRL and BSIP laboratories. A number of dates ranging from 2000 to 8000 BP were obtained from this charcoal.

All the shelters yielded evidence of contact between the Mesolithic hunter-gatherers and settled farmers. This evidence consists of copper tools, painted pottery, stone, steatite, faience, terracotta, agate and carnelian beads, and bangles of shell, porcelain and glass.

3.3.4 Rock Paintings

Out of 642 rock shelters in Bhimbetka, 400 have paintings, engravings and bruising. They exhibit the earliest pictorial traces of human life in the Indian subcontinent. Bhimbetka rock shelters were also inhabited by the Middle to Upper Palaeolithic man as is evident from stone tools. Primitive tribes still inhabit the surroundings. It had been declared as an important World Heritage Site by UNESCO in the year 2003.

According to Yashodhar Mathpal and Somnath Chakravarty, there are about estimated 6214 rock art motifs in Bhimbetka. A few shelters like the Zoo Rock, Wild Boar and Crab, IIIC-9, and Rangmahal are particularly rich in paintings.

The paintings occur on the walls and ceilings and in the niches or hollows of rock walls. They are made in red, white, yellow, green and rarely, black colours (Figure 3.3, 3.4, 3.5, 3.6 and 3.7). The paintings at Bhimbetka are dominated by zoomorphs (animal art) and a combination of animals with human figures (anthropomorphs). They depict a large variety of wild animals which comprise oxen, *gaur*, buffalo, antelopes like *nilgai*, blackbuck, deer like *barasingha*, *sambhar*, *chital*, hog deer, barking deer, elephant, rhinoceros, tiger, leopard, hyena, wolf, jackal, fox, porcupine, monkey and rat. They are portrayed as sitting, standing, walking and running individually or in groups. The animals are realistically drawn and are characterized by vitality and dynamism.

A series of hunting scenes of archers are remarkable at Bhimbetka representing inter-group conflicts and probably within-the-group clashes as well. Scenes of hunting show weapons such as spears, sticks, bows and arrows, traps and snares as also fishing and digging of tubers and roots and collection of honey. Small animals were collected in bags or baskets and carried to camps with the bag slung over the shoulder or back. There are also scenes of sanctified animals like the wild boar which is depicted in several shelters.

The paintings of the later period have human figures and designs in geometric patterns as well as ritualistic/religious symbols and conch-shell inscriptions. There are paintings of dance scenes and horse-riding warriors with umbrella-

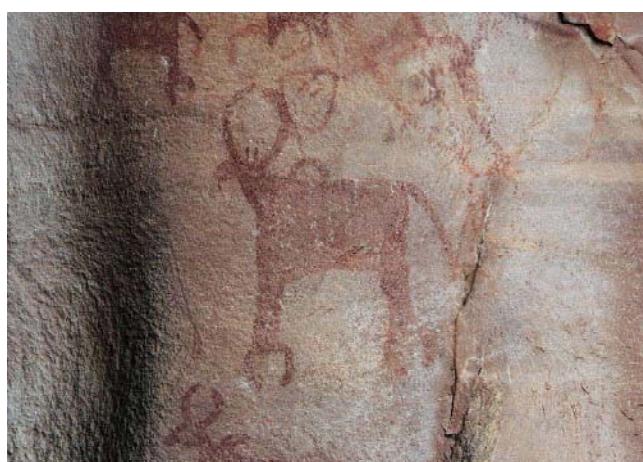


Fig.3.3: Paintings in Rock Shelter 3, Bhimbetka. Credit: Vijay Tiwari.

Source: Wikimedia Commons ([https://commons.wikimedia.org/wiki/File:Cave_Paintings_Bhembetka_\(23\)e.jpg](https://commons.wikimedia.org/wiki/File:Cave_Paintings_Bhembetka_(23)e.jpg)).



Fig. 3.4: Paintings in Rock Shelter 9, Bhimbetka. Credit: Bernard Gagnon.

Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Rock_Shelter_9,_Bhimbetka_03.jpg).

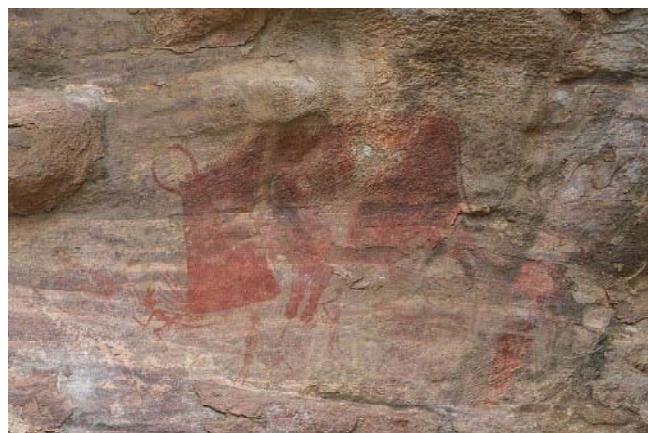


Fig. 3.5: Horned Boar in Rock Shelter 15. Bhimbetka. Credit: Bernard Gagnon.

Source: Wikimedia Commons (https://en.wikipedia.org/wiki/Bhimbetka_rock_shelters#/media/File:Rock_Shelter_15,_Bhimbetka_02.jpg).

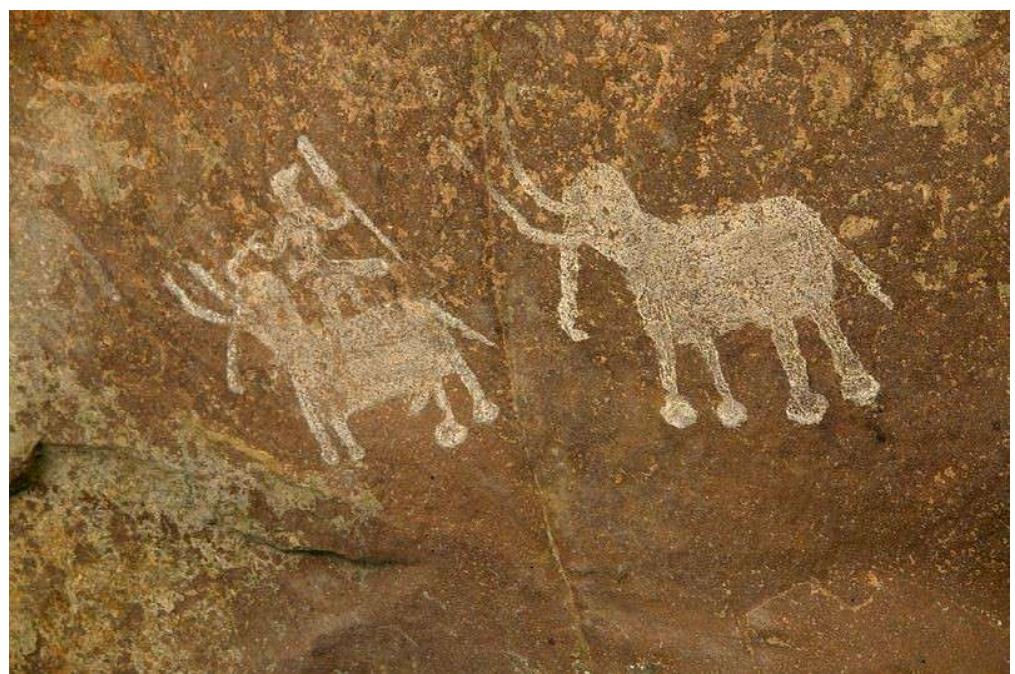


Fig. 3.6: Mesolithic Rock Painting at Bhimbetka. Credit: Yann Forget.

Source: Wikimedia Commons (https://mr.wikipedia.org/wiki/%E0%A4%9A%E0%A4%BF%E0%A4%A4%E0%A5%8D%E0%A4%B0:Rock_painting,_Bhimbetka,_Raisen_district,_MP.jpg).



Fig.3.7: Mesolithic Rock Painting. Bhimbetka. Credit: w:User:LRBurda.

Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Bhimbetka_rock_painting1.jpg).

like head gears, scenes of honey collection, fishing, hunting of wild boar etc. There are depiction of musical instruments of horns, pipes, drums and tom-toms. We can also notice palm prints, thumb impressions, hand stencils and finger markings. On the whole, they bear similarities with the subsistence patterns of the surrounding contemporary marginal cultivators and food-gatherers.

The paintings show different overlapping layers in red and white. The paintings in green are considered the earliest, though the use of haematite (red ochre) was also quite common. The earliest layer mostly represents large figures of wild animals either depicted in red ochre or in white/grey colour. The black colour from charcoal or manganese was, most likely, used later.

3.3.5 Why Were Such Paintings Made?

It is easy to assume that these paintings were executed to decorate caves and for pleasure. K. L. Kamat observed that many of them were not planned or organized nicely. The paintings show that not much trouble was taken even to erase the older paintings and drawings. There are several overlaps of layers of sketches on one another. We can separate them by colour and style differences. Most probably, these were created as a means of escape from suffering and as devotion to supernatural entity since red, green and white colours in all hues and varieties were used to decorate the dead. Some paintings appear to have been made with finger, some with brushes or feathers, wood or peacock-feather stems or porcupine needles as per style and texture. With full freedom of expression, the prehistoric people expressed life in a simplified way, drawing the animals and birds in just two or three strokes, and then using symbols. Some are single line sketches whereas some are finished with a fair stroke. Interestingly, the engraved figures in Bhimbetka are almost non-existent unlike Pachmarhi and several other sites in Central India.

Importance of Bhimbetka

Bhimbetka is an archaeological site of exceptional importance in terms of the record of prehistoric technology, economy, biology and art. The complex of more than 800 rock shelters and caves makes it the largest concentration at one site in the world. It has produced one of the richest and most beautiful corpuses of prehistoric art in the world. The paintings can be divided into two chronological stages: prehistoric and historic. The chief subject of the prehistoric paintings is scenes of wild animals, hunting, trapping and fishing. Less common are depictions of daily life, dancing, singing, playing musical instruments, celebrating birth and grieving, sickness and death. The scenes in historic paintings comprise processions of caparisoned elephants and horses and fighting with swords, shields, spears, bows and arrows.

3.3.6 Classification of Bhimbetka Rock Art Complex

In paintings different colours have been used. The colours were made by grinding naturally occurring pigment nodules into a powder form with which plant sap or animal blood were mixed to form a pigment for creating the paintings. The red colour was made out of iron oxide (*geru*), white from limestone and green from green chalcedony. Some paintings are in one colour (monochrome) while others are in more than one colour (polychrome). There is a lot of movement in the scenes. The paintings show a division of labour based on gender. Men are shown hunting and women gathering and preparing food. Yashodar Mathpal and other scholars consider about nine successive developmental phases in Bhimbetka rock art. They are as follows:

Prehistoric

- Phase I : Large sized animals (buffaloes, elephants, wild bovids and big cats), outlined and partially in-filled with geometric and maze patterns; no humans.
- Phase 2 : Diminutive figures of animals and humans, full of life and naturalistic; hunters mostly in groups; deer dominant; colours red, white and emerald green, humans in dancing, S-shaped bodies.
- Phase 3 : Large sized animals with vertical stripes and humans.
- Phase 4 : Schematic and simplified figures.
- Phase 5 : Decorative. “Large horned animals” drawn “in fine thin lines with body decoration in honey-comb, zigzag and concentric square pattern”.

Transitional (Beginning of Agricultural life)

- Phase 6 : Quite different from the previous ones; conventional and schematic; body of animals in a rectangle with stiff legs; humps on bovines, sometimes, horns adorned at the tip; chariots and carts with yoked oxen.

Historic

- Phase 7 : Riders on horses and elephants; group dancers; thick white and red colour; decline in artistic merit.
- Phase 8 : Bands of marching and facing soldiers, their chiefs riding elephants and horses equipped with long spears, swords, bows and arrows;

rectangular shields, a little curved; horses elaborately decorated and caparisoned; white infilling and outlining.

Phase 9 : Geometric human figures, designs; known religious symbols and inscriptions.

Check Your Progress Exercise 2

- a) Discuss two most well-known rock art sites in India?

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- b) Which types of motifs dominate the Bhimbetka rock art? What are the other kinds of motifs?

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3.4 SUMMARY

The Prehistoric societies of hunter-gatherers are studied on the basis of archaeological remains with the help of anthropological theories. The Palaeolithic and Mesolithic Ages represent the hunting-gathering stage of social evolution. Faunal remains give us a considerable idea about the subsistence pattern of Palaeolithic and Mesolithic people. During the Palaeolithic Age people were primarily in the hunting and gathering stage. People seem to have hunted large and middle-sized animals such as elephant, ox, *nilgai*, deer, wild boar and variety of birds. At the same time, they also exploited plant foods like fruits, seeds etc. The hunting-gathering pattern continued during the Mesolithic phase. During the Mesolithic period there seems to have been a shift to hunting of small animals and fishing.

Bhimbetka paintings are a remarkable example of Mesolithic cave art. A variety of animals are depicted such as deer, leopard, panther, tiger, elephant, rhinoceros, antelope, *chital* and squirrel. Different kinds of birds, fish, lizards, frogs, crabs and scorpions and small centipedes are also present. No snakes have been depicted. Rock art is invaluable evidence which tells us about their life and activities. Mesolithic people occupied more varied ecological niches as compared to earlier periods. Some bones of domesticated animals like sheep/goat and cattle have been reported from some Mesolithic sites in India like Bagor in Rajasthan and Adamgarh hill near Hoshangabad. Though this evidence has been questioned, we may assume that beginnings of animal domestication can be traced to this period.

3.5 KEY WORDS

Cupules	: Hemispherical, cup-shaped, non-utilitarian, cultural marks that were pounded into rock surface by human hand.
Ethno-archaeology	: A branch of archaeology that studies the behaviour and practices of living communities in order to interpret archaeological evidence related to communities who lived in the past.
Fauna	: Animals of a given region or period considered as a whole.
Formation Processes	: it refers to the events both natural and cultural, that created and affected an archaeological site during and after its occupation.
Game hunting	: wild animals, including birds and fishes, such as are hunted for food.
Hominin	: any member of the group consisting of all modern and extinct humans and all their immediate ancestors, specifically species more closely related to modern humans than to chimpanzees.
<i>In situ</i>	: in its original place.
Microwear study	: The study of wear marks or use marks on tools in order to understand their function.
Perennial	: lasting or continuing throughout the year, as a stream.
Rectangle	: A quadrilateral with right angles between all four sides.

3.6 ANSWERS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress Exercise 1

- 1) Hunting and Foraging. See Sub-section 3.2.1
- 2) For details see Sub-section 3.2.3

Check Your Progress Exercise 2

- 1) Bhimbetka in Madhya Pradesh and Pachmarhi in Satpura. See Sub-section 3.3.1
- 2) Animal art (zoomorphs). See Sub-section 3.3.4

3.7 SUGGESTED READINGS

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