UNIT 18 ARCHAEOLOGICAL SITES - I (EARLY HARAPPA AND HARAPPA)

Structure

18.0 OBJECTIVES

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

- how the Harappan Civilization was discovered and why it was named so,
- what an archaeological site is,
- where the Early Harappan and Harappan sites are located,
- about the characteristic features of the Harappan civilization, and
- how this civilization was connected with other contemporary civilizations in the world.

18.1 INTRODUCTION

You may have heard the names of Mohenjodaro and Harappa in your middle-class history books. What do these signify to you? Scholars tell us that they were the cities existing four-and-a- half thousand years ago and were parts of a forgotten civilization. Although they were the most important, these cities were not the only ones existing during those times within the boundaries of what is called the Harappan civilisation. There were a large number of other urban settlements about which you will learn in the course of this Unit. At its peak, this civilization covered a very wide area measuring around 1.8 million square kilometres. Its mature phase lasted for about 800 years and it maintained trade contacts with far-flung areas such as Mesopotamia (ancient Iraq) and Egypt. This Unit discusses the various aspects of Harappan Civilization.

18.2 WHAT IS AN ARCHAEOLOGICAL SITE

You should see the videos Unearthing the Past and Reconstruction of the Past made in our history course EHI-02 to know more about excavation and archaeological sites.

Archaeology, simply stated, is the study of human antiquities. An archaeologist is one who is involved in such studies. An archaeological site is a place where the remains of an old civilization exist, sometimes visibly but mostly under the cover of the earth. It needs a lot of careful digging and sifting which in archaeological terms is called "excavation". After excavation the site reveals the existence of a human settlement with houses, streets, potteries, tools and other implements, sculpture, painting, writing etc. This ancient human settlement discovered or unearthed during the modern times is called an archaeological site.

Knowledge about archaeology and archaeological sites adds to the expertise of those tourism professinals who package tour or work as guides and escorts. There has been an increased interest in cultural and heritage tourism. In some countries tour operators package archaeological sites as tourism products and offer arhaeological tours as special interest tours.

18.3 DISCOVERY AND NAMING OF THE HARAPPAN CIVILIZATION

Nothing definitive was known about this civilization until in 1921an archaeologist, Daya Ram Sahni visited a village named Harappa in Western Punjab (now in Pakistan). It was believed by the villagers and some earlier archaeologists that it was a one- thousnad year-old city which was ruined because of the wickedness of the king. After excavation it was established that it was a long-forgotten civilization almost five thousand years old and contemporary with the ancient civilizations of Mesopotamia and Egypt.

Unlike in Mesopotamia and Egypt, the script in which the Harappan people wrote is still not deciphered. So we do not know what those people called themselves and their civilization. We also do not know the ancient names of the various Harappan cities discovered so far. We are, therefore, forced to name them after the names of the modern places where these sites are located. Since Harappa was the first site to be discovered, the entire epoch was termed as the "Harappan Civilization" following a convention among the archaeologist to name it after the first- discovered site.

18.4 GEOGRAPHICAL SPREAD

As stated earlier, this civilization, at its peak, covered an area as wide as 1.8 million square kilometres. Its northern border reached Shortughai in northern Afghanistan, while the southern limits dipped down to Bhagatrar in Gujarat; Suktagendor in Baluchistan formed the western border and the eastern zone spread out to Bargaon, Manpur and Alamgirpur in U.P. But the main concentration of Harappan settlements are to be found along the Harappa - Ghaggar - Mohenjodaro axis. Most of the Harappan sites are to be found in the present-day Pakistan including the two most important sites – Harappa and Mohenjodaro.

This civilization also covered a wide variety of land and climate. While the settlements in Baluchistan developed and survived in inhospitable dry climates and unapproachable hilly terrains, the settlements in the Ganga-Yamuna doab enjoyed all the bounties of the nature. Hundreds of kilometres of desert- land separated the Harappan settlements in Rajasthan and Gujarat. The premier Harappan settlements in the Ghaggar - Hakra - Indus region, however, were situated in the flood plains and the land was fertile making it possible for the cities to procure food from the adjoining villages.

18.5 THE PERIOD OF THE HARAPPAN CIVILIZATION

So far as the timing of the Harappan civilization is concerned, there is no unanimity of opinion among various archaeologists and scholars. In this Section, you will find the different viewpoints of some of the archaeologists.

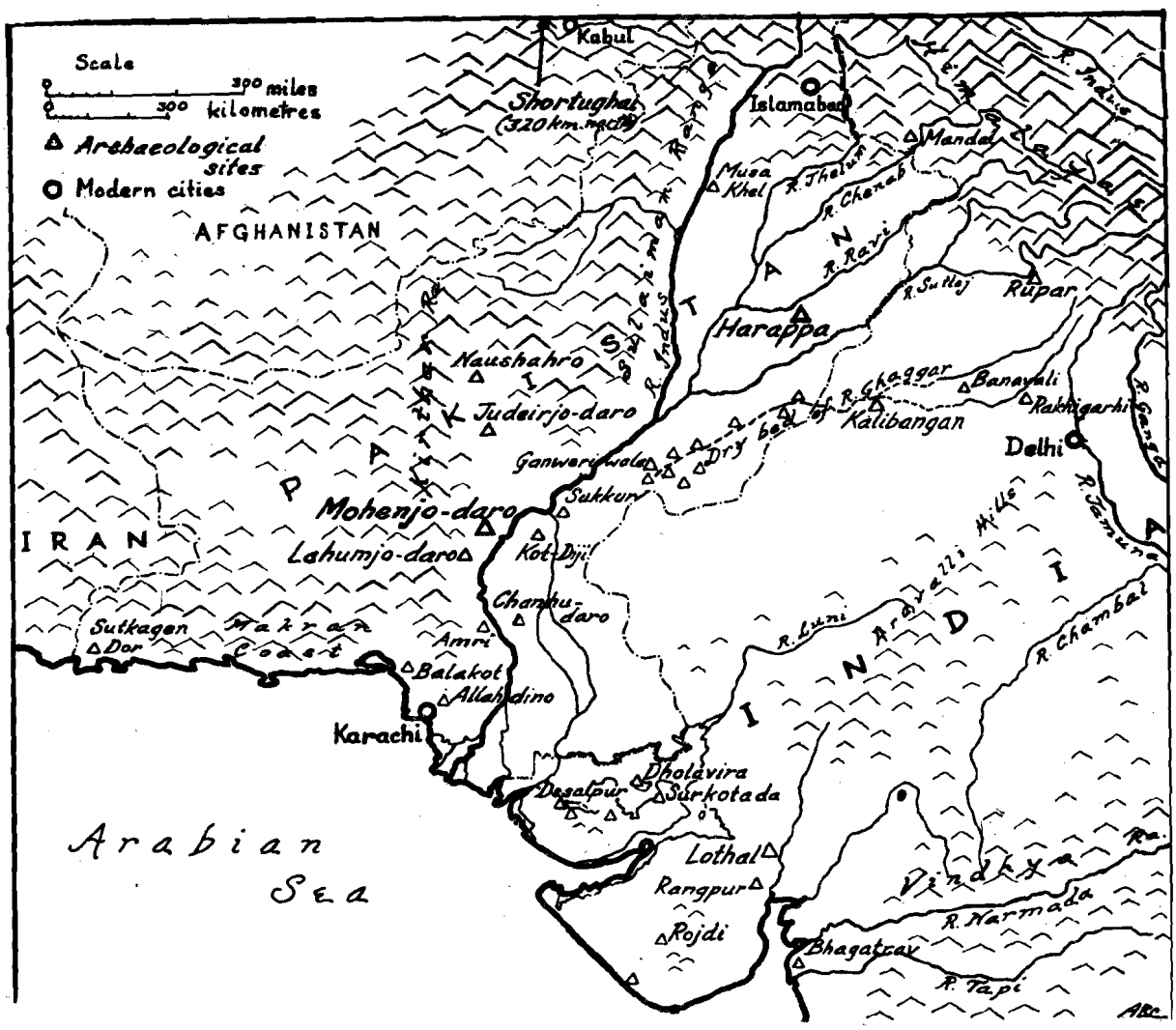
John Marshall placed Mohenjodaro, one of the most important sites, between 3250 and 2750 B.C.

Mackay, in 1938, thought that Mohenjodaro existed between 2800 and 2500 B.C

Martimer Wheeler, in 1947, put the age of Harappan civilization between 2500 and 1500 B.C.

In the early 1960s, D.P. Agrawal used the radio-carbon dating and chronologically situated this civilization between 2300 and 1700 B.C. After calibrating these dates for possible errors, some scholars have now put the dates of the rise and fall of the Harappan civilization between 2700 B.C. and 1400 B.C respectively.

This shows that the Harappan civilization was spread widely both in terms of space as well as time.



Main Sites of the Harappan Civilization

Check Your Progress-1

1) Why is this Civilization called Harappan?

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2) Write in about 50 words on the periodization of the Harappan Civilization.

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3) What is an archaeological site?

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18.6 THE EARLY HARAPPAN SETTLEMENTS

The Early Harappan period was, to some extent, a distinct phase leading towards the mature Harappan period. In this Section we will discuss the origins and various characteristics of this period where there was progression towards cultural homogeneity.

18.6.1 Origins

There is an increasing homogeneity of opinion among the scholars that the Harappan Civilization had indigenous roots. By this we mean to say that although trade and commerce might have played some role, this civilization originated in the Indian sub-continent and evolved out of a long process of development. The first phase of this process was the transformation of the hunting-gathering tribes into settled agriculturists. The following sites show how the Early Harappan phase originated and took shape.

Mehrgarh

The earliest evidence for this development comes from a place called Mehrgarh in Baluchistan. In its earliest phase the people in Mehrgarh used stone tools but no potteries are found. During the second phase, stone tools were refined and potteries were made. During the third phase, there was greater use of pottery and copper tools were introduced. The villages were getting larger, the houses bigger and agriculture more developed.

Similar settlements are reported from Mundigak in Afghanistan and Cholistan desert in the Ghaggar-Hakra valley. It was from these settled agricultural communities that the early phase of the Harappan civilization developed, which was marked by incipient urbanism.

Mundigak

One of the important early Harappan sites, Mundigak is situated in southern Afghanistan. Located on the distance trade route the place seemed to have passed through **four phases** of development. Phase I was marked by incipient urbanism. The township was more firmly established during phase II. The houses were larger, well-constructed and many rooms had hearth in the centre. During Phase III, the use of both copper and bronze increased. Terracotta figurines of humped bulls and women are also found.

During Phase IV, Mundigak became a developed township with defensive walls and square bastions of sun-dried bricks. A palace and a temple are also found. Potteries were more refined and decorated with a red slip and black paint showing birds, bulls and **pipal** trees. All these developments took place during the middle of the fourth and the beginning of the third millennium B.C.

Damb sadaat

Situated in the Quetta valley of Baluchistan Province, this place shows parallel developments witnessed at Mundigak. During the end of the fourth and the beginning of the third millennia B.C., the houses were getting increasingly larger and bricks were used for their construction. Clay button-seals, copper dagger- blades, bone tools and varieties of painted potteries have been discovered from this site.

18.6.2 Ghaggar/Hakra-Indus Axis

It was in this region that the Harappan civilization developed full blown. The Early Harappan settlements played a major role in these future developments. Around 40 Early Harappan sites have been discovered in this region, some of which are given below.

Amri

It was the first Early Harappan site discovered in 1929. It was located near the Indus river on the fertile alluvial land. In various phases Amri shows the development of Indus pottery tradition from hand - made, monochrome potteries to nicely painted, wheel-made potteries decorated with humped Indian bulls. The use of copper and bronze also increased. The houses also showed improvement and were made of stone and mudbricks in the later phase. Small granaries have also been found in these houses. The later period also reveals the existence of a walled enclosure which might have been used as a means of defence.

Kot Diji

This was a very important Early Harappan site. It is located on the left bank of river Indus opposite Mohenjodaro and about 160 kilometres to the north-east of Amri. Two features of this site are important in relation to the future developments. One is the existence of a massive and solid defensive wall of mud resting on stone and supported with mud bricks revetment at some place from outside. The second important feature is the diverse forms of wheel-made potteries decorated with plain dark brown stripes. The paintings are of fish-scales, pipal leaves and sometimes horned deity. This kind of pottery has been named as the **Kot Dijian Pottery** and was widely spread in the Indus area. It has also been reported from far-flung areas like Kalibangan in Rajasthan and Mehrgarh in Baluchistan. The motifs such as horned bull, scaled fish and **pipal** leaves, used in the Amri and Kot Diji potteries, have been found extensively even during the mature Harappan period.

Gumla

Situated in Gomal valley, this Early Harappan site reveals the existence of Kot Dijian pottery in its later stages. Semi- precious stoneleaves, bangles and terracotta female figurines have also been reported from this site.

Rehman Dheri

It is a large Early Harappan site (1700 ft. X 1500 ft. X 15ft.) It had a walled enclosure 4 ft. wide resting on 6 ft. wide foundation. It was constructed by packed mud, brick-shaped clay slabs and dressed clay blocks. The houses were mud-built with fire-places and grain silos of different sizes. Kot Diji-type potteries with red paints and fish-scale, **pipal** leaves and peacock figures were made. Precious stones like turquoise and lapis lazuli have also been found. Some scholars think that the graffiti found on the pots could be considered as the forerunners of the Harappan script.

Lewan and Tarakai Qila

Situated in the Bannu area of north west frontier province the sites at Lewan and Tarakai Qila reveal the existence of mud- brick structures and a large number of stone tools. Tarkai Qila also shows the evidence of fortification. Precious stoness like turquoise and lapis lazuli are also found. Grains such as wheat, barley, lentil and field-pea have also been found.

18.6.3 Punjab, Rajasthan and Haryana

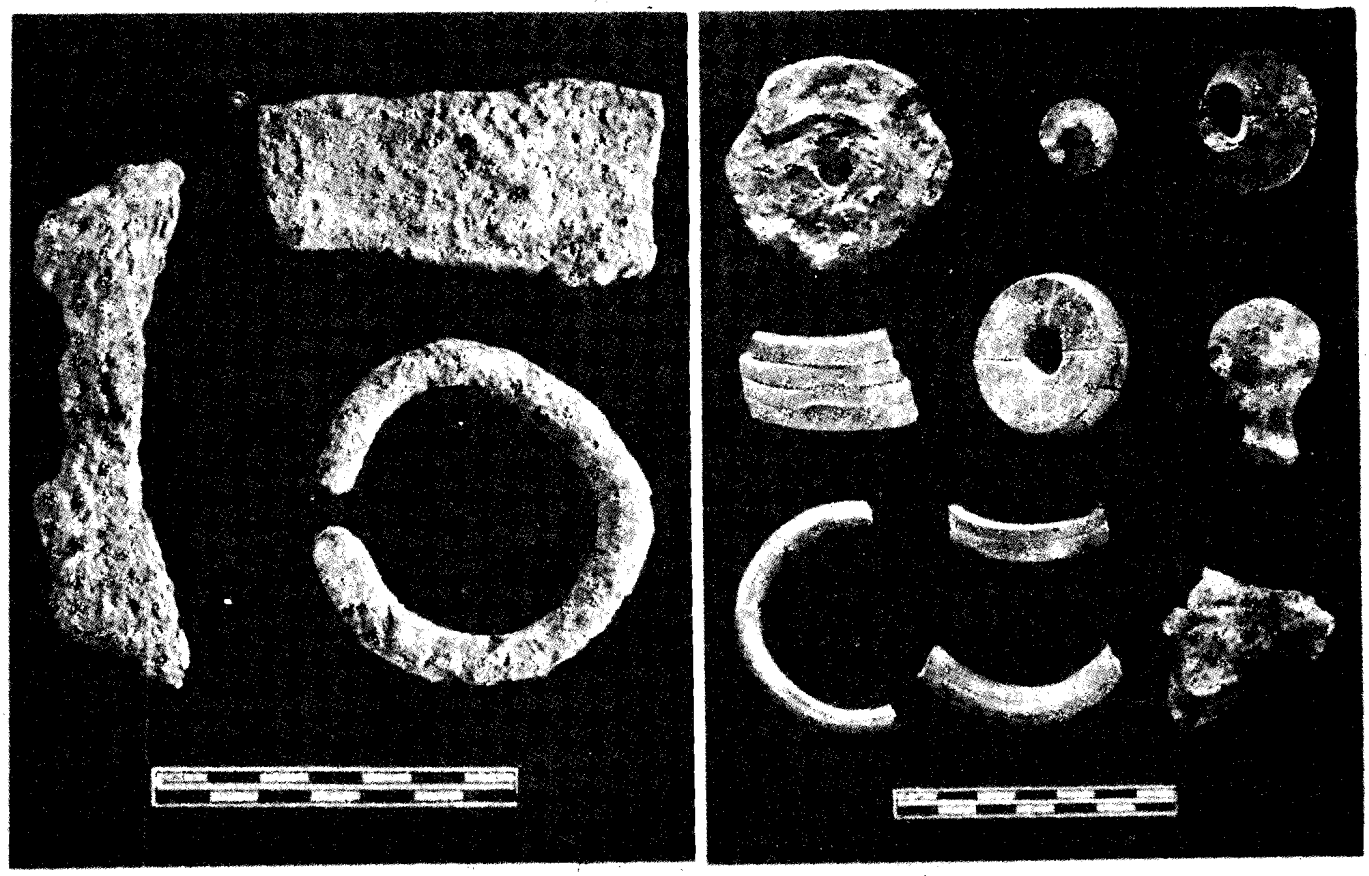
Harappa

This site reveals the existence of a Early Harappan phase. Kot Diji-type of potteries have been found. Lapis lazuli, steatite, carmelion and terracotta human figurines are reported from these levels.

Apart from Harappa, Khadinwala is another Early Harappansite discovered in western Punjab.

Kalibangan

Situated in north Rajasthan on the now dried-up Ghaggar bank, Kalibangan shows evidences of both the Early Harappan and Harappan cultures. During its Early Harappan period, people lived in houses made of mud bricks of standard sizes. The township was fortified with a 3 - 4 metre-thick wall. Copper axes, terracotta bangles shell, carnelian etc. have been found. Existence of Kot Dijian pottery is also reported. Evidences about the use of plough for agricultural purposes are found.



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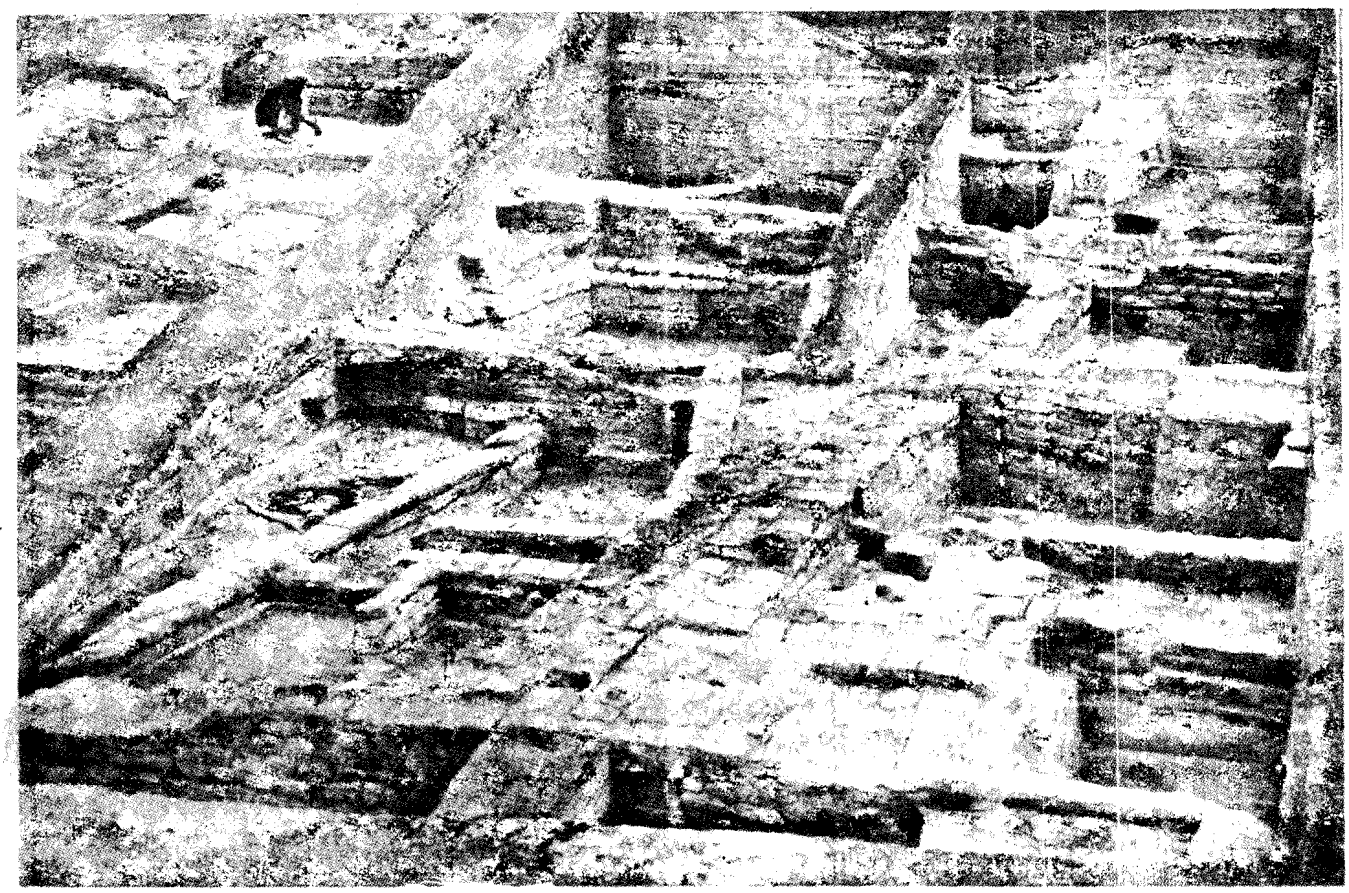
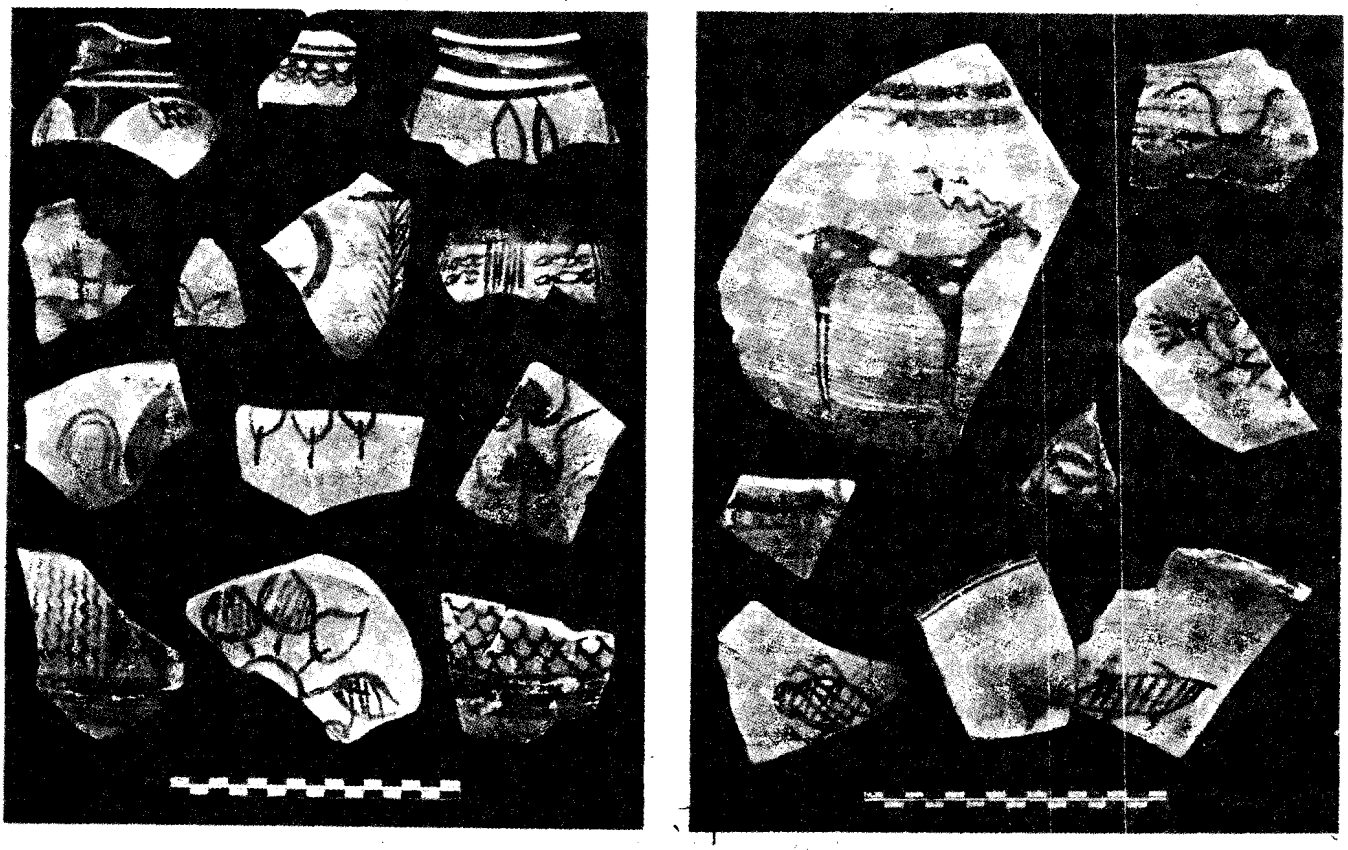
Kalibangan: A) Early Harappan copper objects and B) Early Harappan terracota objects



Kalibangan: Early Harappan structures



Kalibangan: Early Harappan painted pottery

Banawali

This Early Harappan site was located at the now dried-up course of Ghaggar and Saraswati in the Hissar district of Haryana. Material objects found at the site comprise potteries, terracotta bangles, terracotta animal figurines, shell etc. Potteries were marked by graffiti and at one place a depiction of a covered cart with spoked wheels had been found. Houses were made of mud bricks.

Kunal

This site is found at the dried-up course of the Ghaggar - Saraswati in the Hissar district of Haryana. The houses were made of mud bricks of standard sizes. Unpainted black-and-red ware, terracotta beads, lapis lazuli etc. are found.

Other Early Harappan sites in Haryana are Siswal, Balu, Sothi Bara etc. From these sites also similar potteries as those found at Kalibangan are reported.

Check Your Progress-2

1) List the archaeological sites where the Early Harappan Civilization originated

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2) Write five lines on the Characteristic features of the potteries found in Amri and Kot Diji.

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18.7 MATURE HARAPPAN SITES

Although the trade and outside influences seem to have played a part, the Harappan Civilization developed mostly indigenously. This development was not confined to any particular date but was a long process which may have taken centuries to give shape to the cities which were the hallmarks of the mature Harappan Civilization.

Movements of population and settlements in the flood plains of the Ghaggar-Hakra valley seemed to have heralded the process of this development. Growing technological sophistication and the cultivation of fertile plains created more surplus and led to an increase in population. The increasing surplus liberated a section of the population from farming activities and turned them towards crafts. Specialisation in pottery-making, metallurgy etc. were achieved during the Early Harappan period and these skills were communicated through various channels to faraway places. That is why the Kot Dijian potteries are discovered in the entire Indus area and even to places as distant as Kalibangan.

Trade links with far-flung areas were established by the groups interested in acquiring precious commmodities such as lapis lazuli, silver, gold etc. which were not locally available. Organised groups of priests also emerged who indulged in religious activities. The growth of elite groups like traders, priests and statesmen led towards increasing distinction among the population leading ultimately to class-division. The need to communicate with distant lands as well as for continuation of specialised knowledge may have led to the invention of a writing script and hence the birth of civilization.

18.7.1 Shortughai

Situated in North Afghanistan, it represented the northernmost boundary of the Harappan civilization. Both dry and wet farming was done in this region. Houses and other structures were built with bricks of Harappan size (32 X 16 X 8 Cms). The discovery of precious stones, ceramic designs and other objects put it firmly within the orbit of Harappan civilization.

18.7.2 Sutkagendor

Located near the Makran coast close to Pakistan-Iran border in Baluchistan, this Harappan town was surrounded by a defensive walled enclosure. Its position was that of a trading post near sea-port.

18.7.3 Mohenjodaro

This was, according to some scholars, the most representative and the largest of all the cities in Harappan Civilization. In modern times, it is located in the Larkana district of Sind Province in Pakistan. In the beginning of the 20th Century this area was considered to be the most fertile and one of the biggest grain marts in the entire region. During pre-historic times, it was situated on the bank of river Indus which now flows three miles to the east of the site.

According to Jansen,a leading archaeologist, Mohenjodaro was built "according to a highly sophisticated planning concept most probably based on cosmological principles". But we do not know who these planners and architects were.

The city was divided into two parts: a citadel on the western side and the lower city on the eastern one. The citadel was built on a massive man-made platform measuring 400 X 200 metres and was seven metres high. A six-metre thick brick wall was filled with sand and silt in order to make this platform. The area surrounding the citadel was dug and filled with water providing it further protection.

On this platform other smaller platforms were constructed for making structures of special importance. The famous 'Great Bath' of Mohenjodaro is one of them. It measures 12 X 7 metres and is 3 metres deep. It was constructed very carefully with bricks covered with gypsum mortar, a binding material, and a thin layer of bitumen, a water proofing compound being applied to make it water tight. A well in the adjoining room is supposed to have supplied it with water. Scholars believe that it was used for ritual bath.

On one side of the Great Bath is a long building (70.31 X 23.92 metres) which some scholars believe to have been the residence of a very high official, possibly the high priest.

Another large structure on the citadel was the granary. It consisted of twenty seven rectangular blocks measuring 45.72 metres from east to west and 22.36 metres from north to south.

Assembly hall was another important structure. Square built, it has twenty rectangular brick-pillars arranged in four rows of five each.

In fact the entire structure of the citadel was so imposing that the highest building must have been at a height of 20 metres above the ground level and could be seen from a long distance.

Another important feature of Mohenjodaro was the existence of a well developed drainage system. The water from the houses passed through chutes into the covered drains on the sides of the streets.

Trinkets made of beads of cornelian shell, etc. found at Mohenjadaro

Potteries found at Mohenjodaro

18.7.4 Harappa

It was the second largest city of the Harappan civilization covering an area of 370 acres compared to Mohenjodaro's 500 acres. Located on the bank of Ravi in Western Punjab (now in Pakistan), it was the first site to be discovered. It, therefore, lends its name to the entire civilization.

The city, like Mohenjodaro, was divided into citadel and the lower city. The citadel was a raised structure surrounded by a brick wall. On the platform of the citadel other high rise structures were erected.

An important structure identified as the "Great Granary" by the scholars is found below the citadel and consists of two blocks each 150 X 56 ft. in size. Each of the blocks is made of six halls divided by five corridors. The structure also suggests that water-transport was used for carrying grains to the granary.

To the south of the granary there is a row of circular brick platforms for threshing grains.

Just below the citadel there are two rows of barrack - like structures possibly for accommodating the poorer people or even slaves.

18.7.5 Kalibangan

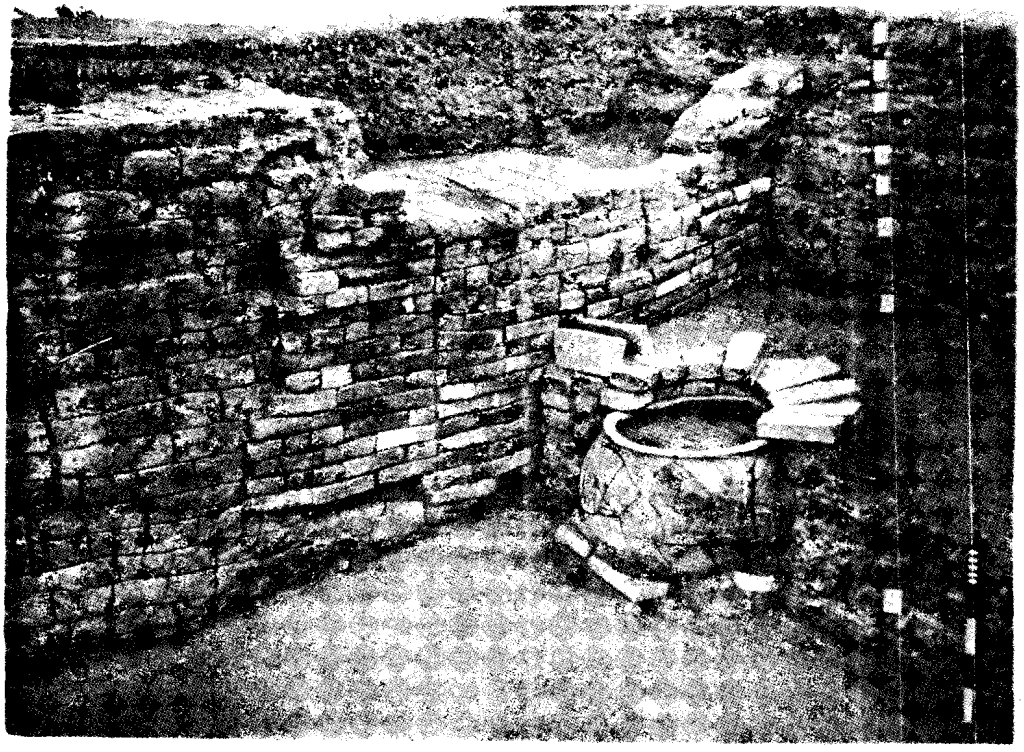
Situated in Rajasthan, this site is on the south bank of the dried-up Ghaggar. It is a smaller site compared to Mohenjodaro and Harappa and covers an area of one square kilometre. It also consists of two separate mounds signifying the citadel and the lower city. The entire city was fortified with a wall of mud bricks. The houses were also constructed with mud bricks and not baked bricks as was the case in Mohenjodaro and Harappa. The construction was poorer in quality, although the planning was similar.

A significant aspect of this site is the discovery of fire-altars with remains of animals in its ashes. These altars were made of burnt bricks and were situated on the top of five or six differently sized mud brick platforms and could be approached by flight of steps.

The eastern sector represents the habitation of the lower order of people. The houses were smaller in size and most of them had fire-altars. It seems that they served a major religious purpose. The system of street drainage,so conspicuous in Mohenjodaro. is absent here, but soakage jars were used occasionally to collect the waste water from the wooden house drains.

Kalibangan is an extensively excavated Harappan site in India and a view of the fire-altars, defensive walls and the citadel is of tourist interest.

Kalibangan: Entrance of a house showing the corridor and flanking room.



Kalibangan: House drain discharging into a soakage jar in the street.

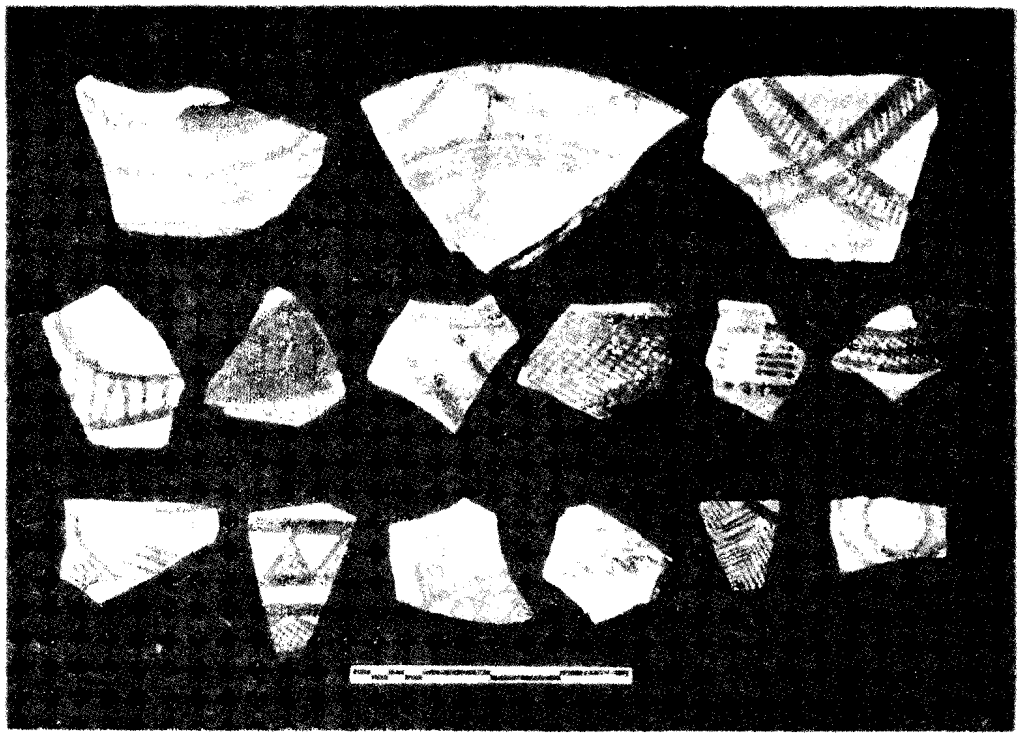
18.7.6 Banawali

This site is in the Hissar district of Haryana and is situated on the dried - up course of Saraswati river. This city had an enclosure wall measuring 300 X 150 metres. Although it was divided into the citadel and the lower city, the citadel was not placed on a raised platform. It was, however, separated from the lower city by a 5 - 7 metre thick wall. This settlement also does not seem to have a regular drainage system and, like Kalibangan, soakage jars were used to collect the waste water.

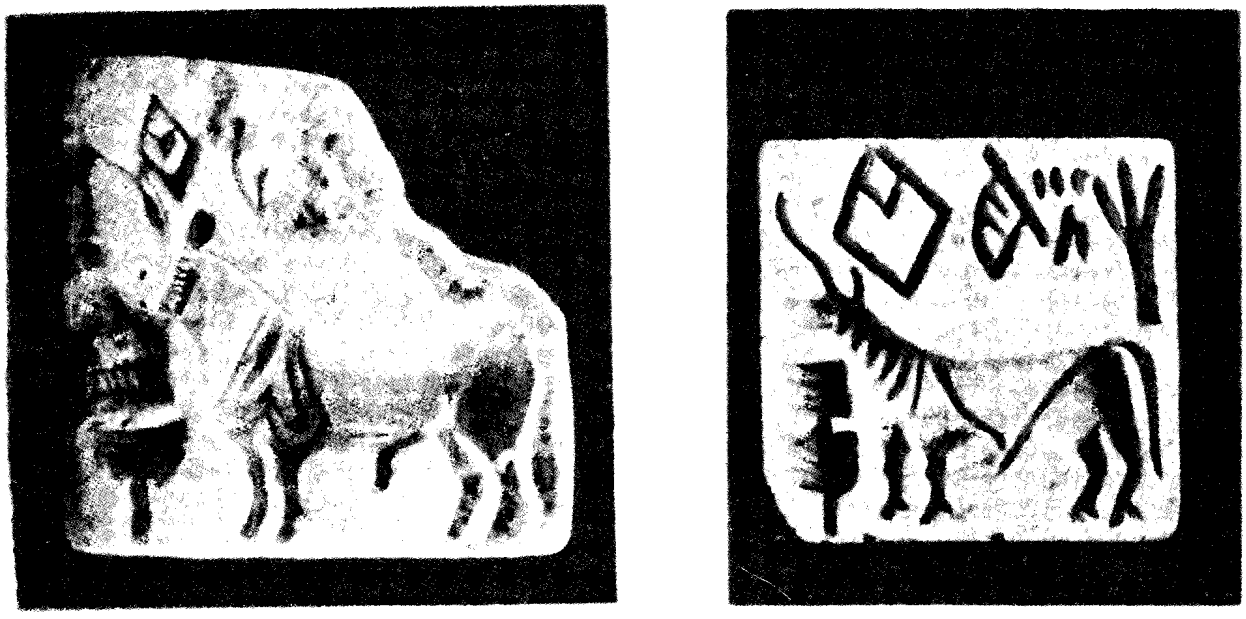
18.7.7 Lothal

This Harappan site is found in the rich wheat and cotton growing area of Gujarat. It could have played the role of a sea-port for establishing trade contacts with the contemporary west Asian civilizations like Mesopotamia and Egypt.

This city, unlike Mohenjodaro, Harappa, Kalibangan and Banawali, was not divided into the citadel and the lower city, although the entire city had a walled enclosure. It had a rectangular design and burnt bricks were used more than at Kalibangan, though mud bricks were also extensively used. A dock yard - like structure has also been discovered by the excavators.



Lothal: Painted Pottery



Lothal: Steatite seals

18.8 SOME COMMON FEATURES

The Harappans lived in an age when long-distance communication took months, if not years. The road-transport could only be used for covering short distances and even that took a long

time because the slow-moving bullock-carts were the only means of land transport. The water-transport was faster but even then it was not possible to govern the distant areas. Thus any idea of a centralized Harappan government has to be discounted completely.

The ideas, however, did travel and were manifested in various common features of town-planning, pottery-production, tool designs and craftsmanship. It means that various Harappan cities must have evolved at differrent times borrowing ideas but transforming them to suit the local conditions. Thus, we find that the division of the city into the citadel and the lower city was found in Harappa, Mohenjodaro, Kalibangan and Banawali besides other settlements but the use of baked bricks and regular drainage system were not to be found in Kalibangan and Banawali. On the other hand, while Lothal used the baked bricks, it does not show evidences of internal division of the city into the citadel and the lower city. Similarly, while the idea of fortification was a common one, Kalibangan, Lothal and Banawali reveal the existence of a common city enclosure, whereas in Mohenjodaro and Harappa the fortification was mainly around the citadel.

The potteries, tools and other products of craftsmanship show more evidences of a unified cultural pattern, though again with regional variations. The red-and-black potteries showing motifs of bulls, **pipal** leaves, fishes, horned deities and birds etc. have been found in almost all the settlements. The Harappan seals wearing the pictographic script, are also discoverred at many places. Tools made of copper, bronze and stone show uniformity in design and technique of production.

All these facts show that the Harappan civilization, though distributed over a wide area, manifested certain common cultural traits.

Check Your Progress-3

1) How is the town planning of Mohenjodaro and Harappa different from that of Kalibangan or Banawali?

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2) How did the transition from Early Harappan to mature Harappan civilization take place?

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18.9 LET US SUM UP

The Harappan Civilization evolved out of a long process of development spread over hundreds of years. In the beginning of this process, the nomadic tribes settled down to agricultural life. Slowly, the agricultural communities formed villages which became larger with the development of agriculture. The harnessing of flood water increased the agricultural surplus thereby freeing a section of population from farming activities. The accumulation of surplus and development of various skills and craftsmanship led towards differentiation in

population and towards incipient urbanism. Slowly the local character of craftsmanship gave way to a more homogeneous style, particularly in pottery-making. This style was called Kot Dijian style and was found at most Early Harppan sites. This homogeneity was also witnessed in the realm of religious ideology. Painted horned bull deities, terracotta mother goddesses and representations of various other artistic motifs point towards this process. Internal and long-distance trade flourished and trade and cultural contacts were established with faraway regions. The mature Harappan civilization arose out of these developments, particularly in the Indus region and grew out to spread its wings far and wide. In terms of territory, this seems to be the largest civilization among its contemporaries.

18.10 KEY WORDS

Citadel : The fortress in the city

Dry Farming : A system of tillage in which the surface soil is kept loose so as to retain scanty rain and reduce evaporation.

Graffiti : Decorative scribbling found on the earthen pots.

Granary : The store house for grain

Mound : Remains left by the people of the past which look like heaped-up embankment.

Seal : A piece of wax or stone or some other material in which some design is carved. It was used as a means of authentication.

Terracotta : A composition of clay and sand used for making statues. It is baked in fire.

Wet Farming : Farming which is done with the help of artificial watering.

18.11 ANSWERS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress-1

1) See Section 18.3.

2) See Section 18.5.

3) See Section 18.2.

Check Your Progress-2

1) See sub-section 18.6.1.

2) See sub-section 18.6.2.

Check Your Progress-3

1) See sub-section 18.7.3, 18.7.4, 18.7.5 and 18.7.6.

2) Your answer should include the generation of surplus, increase in population and the diversion of a section of the population for farming activities towards other non-agricultural activities. See section 18.7.

UNIT 19 ARCHAEOLOGICAL SITES-II (POST HARAPPA)

Structure

19.0 OBJECTIVES

After reading this Unit you should be able to:

- understand why the study of the archaeology of the Gangetic Civilization is important,
- know how the settlements in the Ganga Valley were different from those in other parts of India,
- learn about the various kinds of potteries which distinguish the different phases of settlements,
- know about the crops which the farmers raised in these settlements, and
- learn about some of the major cities which came up during the period under study.

19.1 INTRODUCTION

We have already explained the term archaeology in the preceding Unit. In the following sections we shall be dealing with the archaeology of the period between the end of the Harappan civilization and the beginning of the Vedic civilization in the Indian sub-continent. This period can be roughly dated from around 1500 B.C. to 300 B.C. This period has been called the formative phase of the classical Indian civilization. This is called the classical Indian civilization because scholars have attributed the origins of many modern institutions to the first flowering of civilization in the Ganga valley about 2500 years ago.

19.2 THE IMPORTANCE OF THE ARCHAEOLOGY OF THE GANGETIC CIVILIZATION

The study of the archaeological finds of the formative phase of the Indian civilization is important because the historians have unduly emphasised the information found in the literature of this period. This Vedic literature has been extensively used for recreating the history of this period. This has led to a belief that the classical Indian civilization was the exclusive creation of the Vedic Aryans. The study of archaeology will correct this error because we shall be able to understand contributions made by people of different regions and

cultures in India in developing this civilization. The Aryans were confined to Punjab in the early Vedic period. This period is roughly dated to 1500 B.C. to 1000 B.C. If we find archaeological evidence for the presence of villages in other parts of the sub continent in the same time bracket we can safely call them non-Aryan communities. Thus, the study of archaeology will help us redress the imbalance in the understanding of the classical civilization which is believed to be the handiwork of the Aryans by many.

19.2.1 Gangetic Civilization and the Ganga Valley

We need to differentiate between the Gangetic civilization and the Ganga valley. The Gangetic civilization refers to the civilization which emerged in the Ganga valley around the sixth century B.C. and spread to other parts of the Indian sub- continent. In the process of expansion in to areas outside the Ganga valley the Gangetic civilization picked up several elements from Central India and South India. So, what is called the Gangetic civilization is an amalgam of developments in the entire sub-continent. The Ganga valley refers to the area watered by the river Ganga and its tributaries like the Yamuna, Sarayu and Kosi. Ganga descends from the Himalayas in the famous Hindu pilgrim centre of Haridwar and after a long journey through the provinces of Uttar Pradesh, Bihar and Bengal goes in to the Bay of Bengal. In the course of its long journey it is joined by many tributary streams. The plains formed by the alluvial soil of the Ganga river system is home to some of the densest clusters of agriculturists in the world. In this valley are located famous cities like Delhi, Allahabad, Banaras, Patna and Calcutta.

The Ganga valley has a very special place in the Indian tradition. It was in this area that the imperial dynasties of the Mauryas and Guptas emerged. It was also in this area that the great religious teachers like the Buddha and Mahavira delivered their message of non violence and love. This happened after the sixth century B.C.

19.2.2 The Archaelogy of Ganga Valley

The Archaeology of the Ganga Valley is still in its infancy and corelation between its material culture and linguistic and literary factors may be deferred for the moment. No part of India has been changed as drastically as the Ganga valley by the encroachment of tillage on the forest. To be able to visualise the situation about 3000 years ago we shall have to imagine the dense forests in which the Pandavas roamed or the forests not very far away from Delhi where the Mughals hunted rhinoceroses. This is by no means an easy task, because it requires mapping out the history of settlements in the entire region. This has not been possible as yet because of the lack of resources and commitment for the past. So any amateur can discover an unknown settlement or a city in the wide expanse of the Ganga valley. There are thousands of such settlements waiting to be discovered, explored and excavated.

19.2.3 A History of Settlements in the Ganga Valley

In the post Harappan period what were the settlers of the Ganga valley doing? The evidence, though limited provides us some clues. Remains of many villages and towns have been found in this area. Villages of agriculturists dating back to the second millennium B.C. have been found in palaces like Mahagara and Koldihawa (near Allahabad on the banks of the Belan river). What is interesting is that the inhabitants show a clear continuity from the preceding hunting gathering mode of life. This very clearly indicates that these settlers were not Vedic Aryans who are believed to have come to the upper Gangetic valley in the first millennium B.C. Evidences for the presence of agriculturists have also been found in Purana Qila (Delhi), Atranjikhera (Etah district, upper Ganga valley) and Chirand (district Saran, middle Ganga valley).

Check Your Progress-1

1) Write in 100 words the importance of the archaeology in the study of the Gangetic Civilization.

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2) Name three places in Ganga valley where archeologists have found evidence regarding the presence of agriculturists.

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19.3 THE IMPORTANCE OF POTTERY

Archaeologists seemingly devote a lot of time collecting pieces of broken pots long discarded by its users. This dialogue with the broken sherds of the past has mystified many people. Let us try to understand why archaeologists are obsessed with pots. In ancient societies metal was in short supply. So, most of the people used utensils made of clay. It was convenient, cheap and virtually non-repairable when broken. So people discarded them. The shapes and sizes, the technique of manufacture and the designs on the pots kept changing. When historians discover them in old settlements they study the designs and shapes of pots. It gives them an idea of the food habits and the changes in the design. This helps them arrive at the relative dating of the period of the use of pottery. This in turn gives them a clue to the period of the settlement. Pottery is also the most visible sign of the presence of old settlement in an area. After the rains mud is washed and sherds of pots are visible on the surface. Any amateur can look for them while passing through some old town or village.

19.4 POTTERY IN THE GANGA VALLEY

The settlements in the Ganga valley have primarily been dated on the basis of the kind of pottery found. The pottery could be dated on the basis of thermoluminiscent dating. Also their location in well-stratified contexts helped archaeologists arrive at relative dating for the pottery and the settlement. This means that when a pottery is found at the lowest level of occupation it is believed to have been used by the earliest settlers. That is why it is primarily on the basis of the finds of distinct kinds of potteries that archaeologists have dated the settlements in the Ganga valley. These potteries used as time markers are as follows.

19.4.1 The Ochre Coloured Pottery

The Ochre Coloured Pottery has been found at the earliest level of settlement in upper Gangetic valley. This pottery is made of medium grained clay, underfired and has a orange - red colour. The Orchre Coloured Pottery has been found at places like Hastinapur (in the Meerut district Uttar Pradesh). At Hastinapur, the legendary capital of the Kurus, the Ochre

Coloured Pottery is associated with the earliest evidence for habitation. It has been dated to 1800 B.C. This pottery has been reported from several other sites like Bahadurabad eight miles west of Haridwar on the upper Ganges and at Saipai in the Etawah district.

The people using the Ochre Coloured Pottery did not know the use of iron. Some of these settlements also yielded hoards of copper tools. The copper tools found in the hoards are axes, chisels, rings, harpoons, spearheads and strange anthropomorphic objects. Axes upto a foot in length were excellent woodmen's tools. The barbed harpoons proclaim extensive food gathering near the fishful rivers near which they have been found. The rings were probably used as ornaments. The evidence from the Ochre Coloured Pottery levels found in several sites indicates that the settlements were occupied for short durations. People lived in mud houses. They survived by a combination of farming and hunting. They cultivated rice, barley, gram and Khesari (a pulse).

Most of the scholars believe that the people who used the Ochre Coloured Pottery were not Aryans.

19.4.2 The Painted Grey Ware and the Black and Red Ware

The Painted Grey Ware (called the P.G.W. in abbreviation) refers to a pottery grey to ash grey in colour. It is painted in black and sometimes in a deep chocolate colour. It is found in many shapes and sizes but the most common types are bowls and dishes. This pottery came in use at time when the Ochre Coloured Pottery had already gone out of use. The P.G.W. has been provisionally dated between the 10th - 7th centuries B.C. Some of the well known settlements belonging to this period are Hastinapur (Meerut district in Uttar Pradesh), Purana Qila (Delhi), Ropar (Punjab), Bhagwanpur (Haryana) and Mathura. The Black and Red Ware (called the B.R.W. in short) pottery refers to a pottery black in colour inside and on the rim. The rest of its body was red in colour. It has been found in association with the P.G.W. in the Upper Ganga Valley. In the sites of the middle and lower Ganga Valley this pottery was more popular.

Many of the people using the P.G.W. and the B.R.W. were the first settlers of those sites. This proves that they succeeded in creating village settlements in many new areas. They lived in small villages. The houses were made of wattle and daub. This is indicated by the finds of mud platforms and mud plaster pieces with reed and bamboo impressions. One reason why they were able to settle agricultural villages was possibly the use of iron. Iron spearheads, sickle and hoe have been reported from excavations. However, most of the tools continued to be made of copper and bone.

19.4.3 The Northern Black Polished Ware

The Northern Black Polished Ware (called N.B.P.W. in short) refers to a pottery with glossy surface. The core of the pottery is extremely thin. In addition to black colour it is also found golden, silver, white, pinkish, steel blue, chocolate and brown colours. The discovery of some pots made by joining broken pieces indicates that it was an expensive pottery. This use of this pottery has been dated to the period between the sixth century B.C. to the early centuries of the Christian era.

The pottery of the earlier period was confined to some well defined geographical region. **The N.B.P.W. was the first pan Indian pottery.** It has been discovered in more than 1500 sites. The find spots include Taxila in Pakistan, Tamluk in Bengal and Amravati in the Andhra Pradesh. In the later phases of its use it was associated with the use of coins, houses of burnt brick and fortified settlements. It is called the pottery of the rich people.

With regard to the growing of new crops subsistence base no significant changes took place. Only urad was added to the list of cultivated crops. These people used iron on a larger scale. In fact if we compare their range of tools with that of the modern day farmers there does not seem to be much difference between the two. The nature of agricultural implements did not change much until the beginning of the 20th century. The presence of coinage and the use of many kinds of semi precious stones like lapis lazuli brought from as far as Badakshan in Afghanistan indicates long distance trade.

19.4.4 The North Indian Menu 3000 Years ago

What is significant from our point of view is that already in the beginning of the 1st millennium B.C. today's principal crops were grown. Remains of rice, barley, wheat, gram, sesame and cotton were found in various sites. We may infer crop rotation with wheat and barley dominating the winter harvest and rice the rainy season as today. The presence of cattle, sheep, goat, dog, horse and pig likewise indicate that only few additions were made in the menu in subsequent periods. In fact the evidence of the bones of deer, turtle, fish, leopard, fowl hippopotamus and elephant might indicate that the farmers of those times had a richer variety of non Vegetarian diet than that of their modern day counterparts.

The time bracket for the P.G.W. - and the B.R.W. - using village settlements is the same as the one for the later Vedic tradition. Scholars believe that the P.G.W. and the B.R.W. using people represented a mixture of the farming population of the previous period and the Aryans of the Vedic literature.

Check Your Progress-2

1) Why is the study of potteries important?

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2) Write a note on the Ochre Coloured Pottery in 50 words.

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3) Why is the N.B.P.W. important? Write a description of this pottery in 50 words.

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19.5 SOME OF THE IMPORTANT CITIES OF NORTH INDIA IN THE 6TH CENTURY B.C.

In this section we shall survey the archaeology of some of the great urban sites which came into being in the first millenium B.C. we shall also try to find out whether the evidences found form a sufficiently homogeneous whole to justify the name the Ganges civilization.

Main Urban Centres in India (600 B.C.)

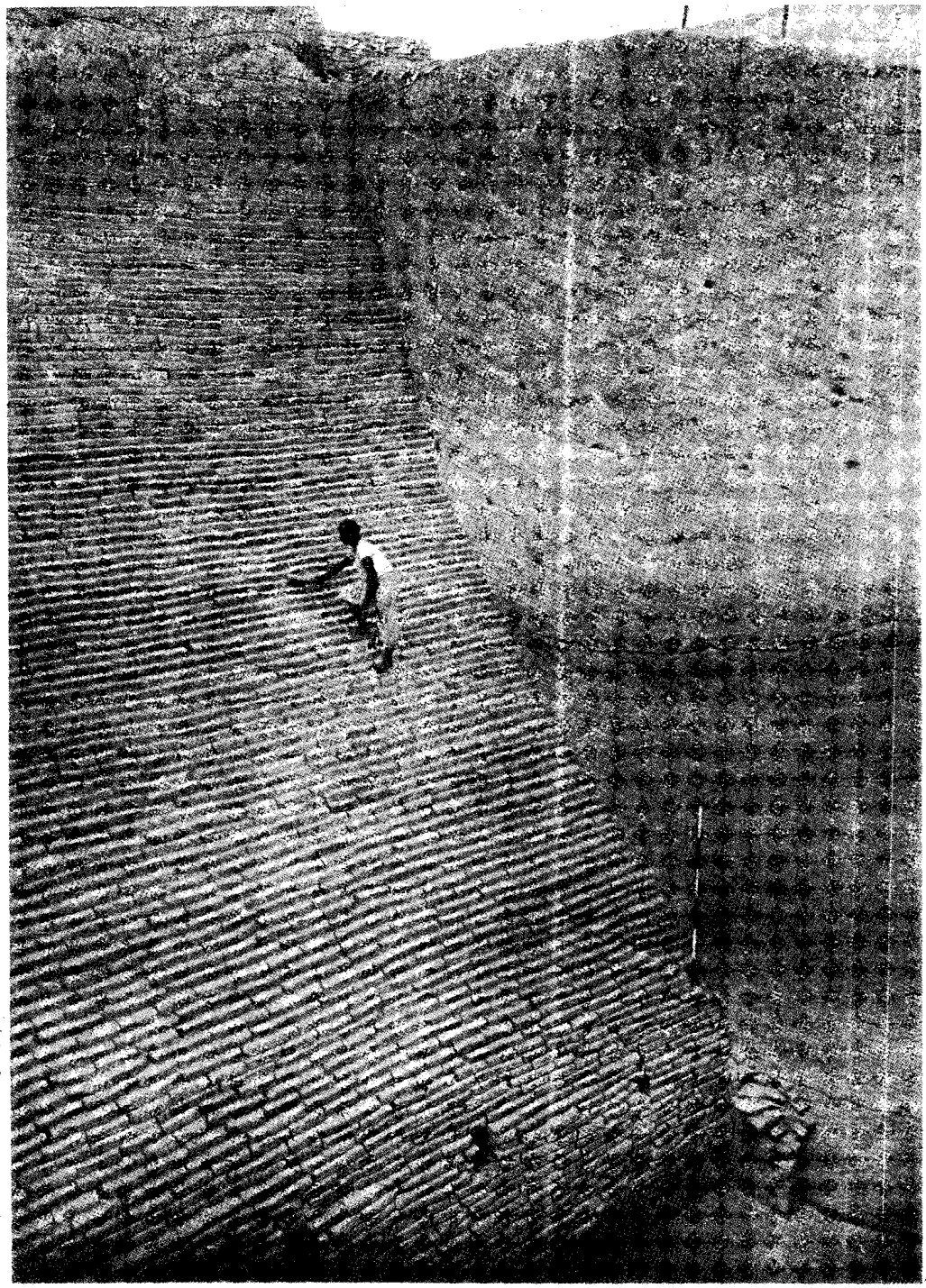
Hastinapur

This famed capital of the ancient dynasty of the Kurus, the famous dynasty described in the epic **Mahabharata**, started of as an small settlement in about 1800 B.C. This settlement in the Mawana tehsil of the Meerut district is now about five miles away from the Ganga. The literary references mention it as being located on the bank of the river. The earliest settlers seem to have used the Ochre Coloured Pottery. The area of settlement was very small. The succeeding period is characterised by the use of the Painted Grey Ware Pottery (P.G.W.). This pottery is important because people living in a large number of settlements in the Upper Gangetic valley were using the P.G.W. It is interesting to know that the bowls and plates used by modern Indians are similar in shape to the ones found in the P.G.W. pottery. So, although the modern Indians would be using metal utensils they are shaping their pots and pans in the

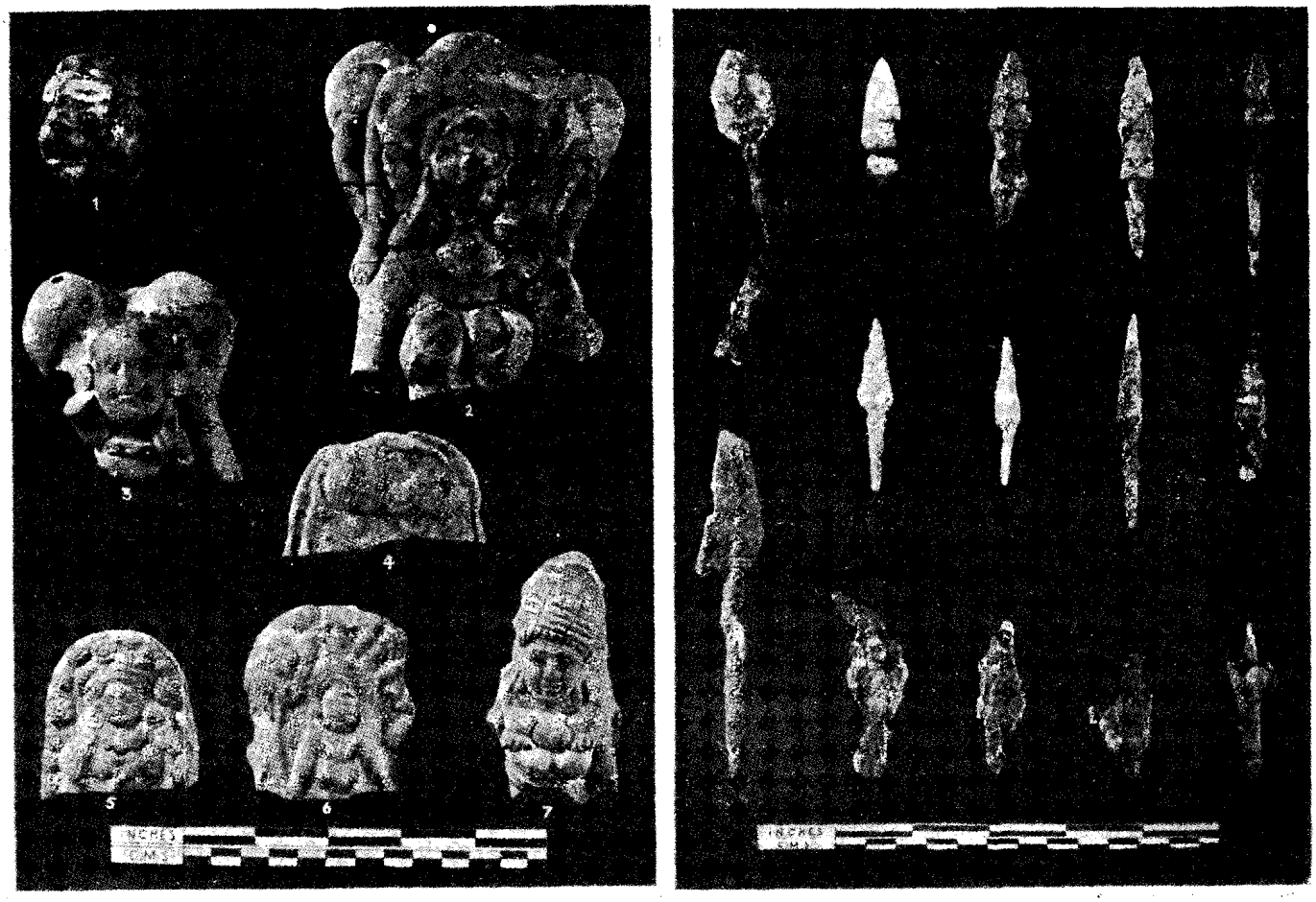
way determined by our ancestors almost three thousand years ago. The people of Hastinapur lived in houses made with mud or mud bricks. They were unfamiliar with the use of iron. Many copper arrowheads, nail parers, antimony rods have been found. To a modern day visitor Hastinapur a thousand years ago would have looked like a small backward village of upper Gangetic valley.

Kausambi

Kausambi the famed capital of the Vatsas whose king Udayana is famous for his romances and escapedes, is now a small settlement called Kosam. But in the sixth Century B.C. it was a very large city. It had ramparts over 30 feet high. They were armed with bastions at regular intervals. After the original construction rectangular towers of baked bricks were imposed upon bastions. The remains of a large palace have been discovered. The most interesting find is that of the Ghositarama monastery. The Buddhist literature tells us that it was the favourite haunt of the Buddha and his disciple Anand.



Kausambi: A Defensive Wall



A B

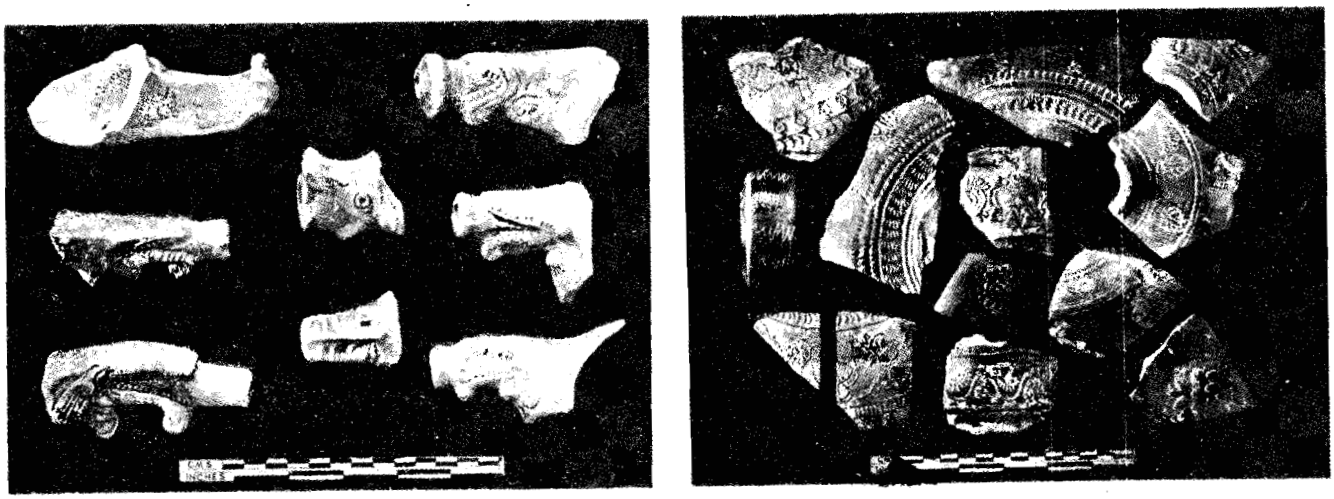
Kausambi: A) Terracotta figurines and b) Iron objects

Rajghat

Rajghat, the earliest settlement in the city of Varanasi, has been excavated by archaeologists. It is an extensive table land rising about sixty feet above the surrounding ground level. It is located on the north eastern outskirts of modern Banaras. The place was first settled by a group of agriculturists somewhere in the 9th-8th century B.C. By the sixth century B.C. it had evolved into a settlement defended by a mud rampart measuring 20 metres at the base and 6 metres in height. It was protected by a moat on the western side where the city was not protected by the Ganga and Varuna streams. The defences protected a space of 40 hectares, while another 100 hectares was outside the fortification. However, the magnificence of the fortification is not matched by the other finds. This might be related to the limited scale of excavation. The excavated evidence seems to indicate that people were living in wattle and daub hutments. They used many iron tools supplemented by tools made of bone. Their luxury objects consisted of beads and bangles of terracotta, copper, glass and semi-precious stones. The city of Rajghat supported the monastic community of Sarnatha where the Buddha preached his first sermon.

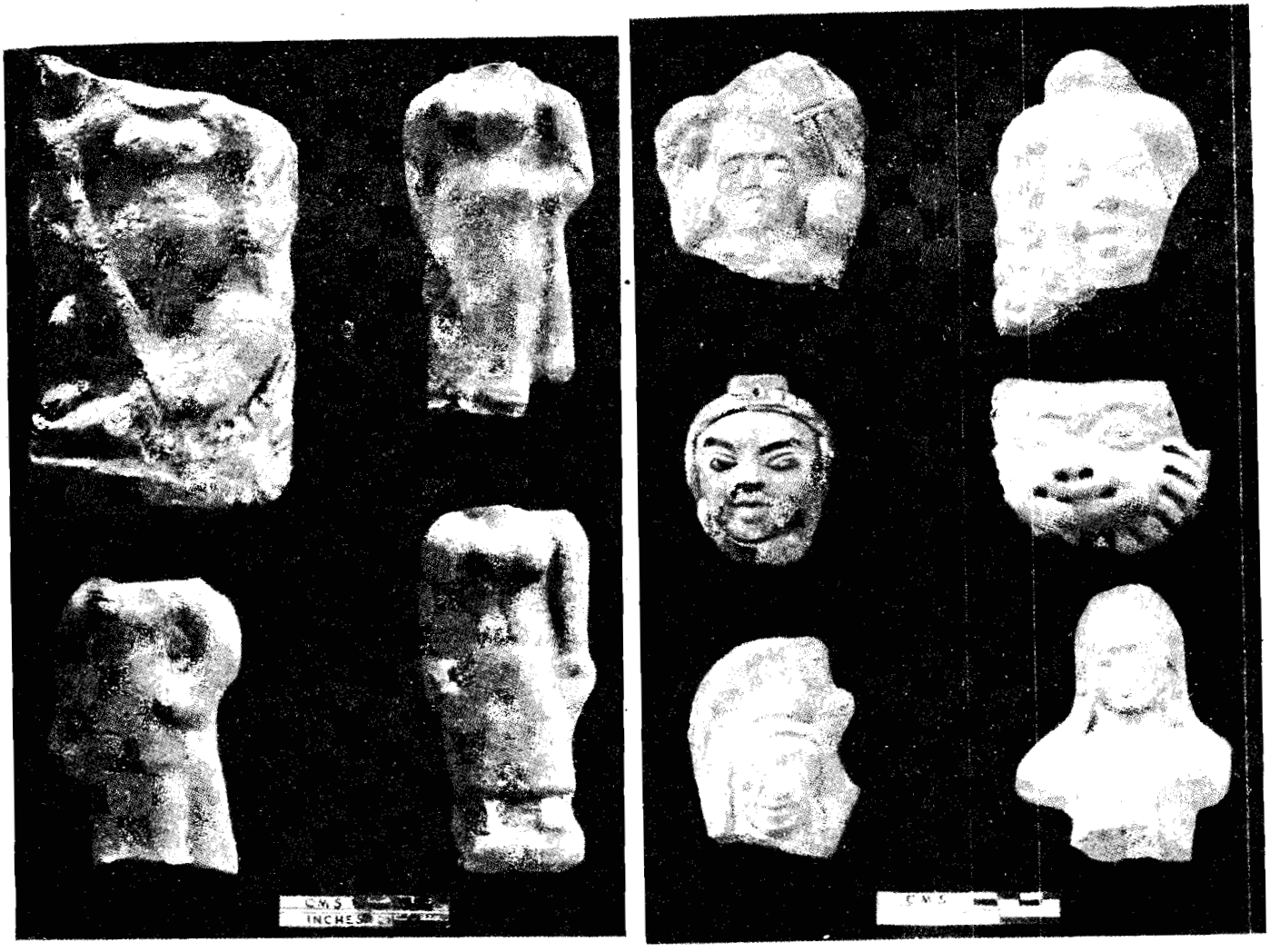
Rajgir

The site of Rajgir south east of Patna was the largest of all the early historic cities. It was the capital of Magadha until superseded by Pataliputra in the 4th century B.C. Rajgriha is ensconsed in a beautiful hill girt valley. It was enclosed by a high wall girding the hills which provided an excellent natural defence. The walls extend upto a length of 40 Kms. It is 5 metres broad at the base and reaches a height of 3 metres. The inner line of the mud rampart extending over a length of 4.5 miles represents the heart of old Rajgir. One interesting find of the inner fortification is the monastery of Jivakadrmanravana. It consisted of four large



A B

Rajghat: A) Pottery Spouts and b) Sherds of Decorated Pottery



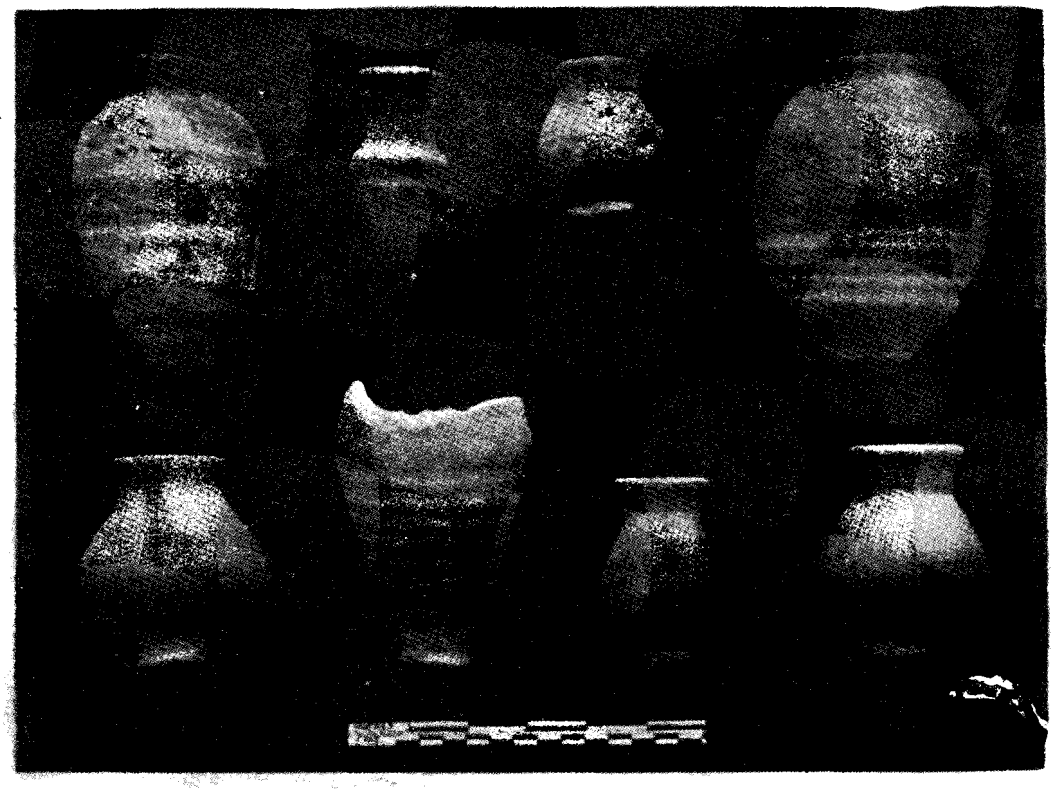
A B

Rajghat: Terracotta Figurines

elliptical halls within a large ellipitical enclosure. This was the monastery which had been donated to the Buddha. It is believed to be one of the earliest preserved monastic complexes because of its design, shared facilities and the finds of a coarse red pottery which is believed to be earlier than the N.B.P.W.

Pataliputra

Pataliputra, the imperial capital of Ashoka and many other famous kings, emerged on the historical scene later than other famous historic cities described here. According to the literary sources it succeeded Rajgir as the capital of the powerful Magadhan empire in the 4th century B.C. Its magnificence has been described by Megasthenese, the famous Greek ambassador in the court of the Mauryan king Chandragupta in 302 B.C. Unfortunately the ancient city could not be explored properly because the modern city is right on top of the early historic settlement. Archaeological explorations suggest that the fortification of the city might have enclosed 1350 hectares.



Pottery found at Pataliputra

Kapilvastu

Kapilvastu, the birth place of Gautam Buddha, has been identified only recently. Earlier it was believed to have been located in the Himalayan foothills of Nepal. Now it has been conclusively identified with Ganwaria and Piparahwa in the Basti district of Uttar Pradesh. The discovery of a monastic sealing of Kapilvastu at Piparahwa has convincingly established the identity of Kapilvastu. The mound of the town site has accumulated ruins 21 feet in height. Its occupation went back to the period before the 6th century B.C. The coming of the N.B.P.W. saw the use of burnt bricks here. Remains of many monasteries have been found here.

Mathura

Mathura was one of the most important cities of ancient India. Apart from its association with Krishna it has been associated with Buddhism and Jainism too. The sculptures of Mathura school are famous. Despite intermittent explorations spread over a century Mathura remains one of the least explored cities of ancient India. The reason is that most of Modern Mathura is built over the ancient city. There are at least nine separate mounds. Each of them has been a treasure hunter's delight. Mathura seems to have begun as an humble settlement in the 8th century B.C. By about 600 B.C. it had grown into a city of massive proportions. It covered an area of about 360 hectares. It was fortified with a mud wall which in turn seems to have been ringed by a moat. Many houses were made of baked bricks. The presence of soakage pits shows some kind of planning for the disposal of waste.

Conclusion

Our survey of some of the settlements of the Ganga valley is by no means comprehensive. What it does indicate is that the period of the emergence of the cities was the same as that of the Buddha and large kingdoms. Most of these places remain unexcavated and unexplored.

19.6 CENTRAL INDIA

The archeaology of Central India broadly comprising the areas of Madhya Pradesh and Maharastra presents a pattern different in many ways from the Ganga valley. Central India has a prehistory of agriculture which was generally unclear in the Ganga valley.

In their long history of development, the inhabitants of this region used many kinds of pottery. Some of them invented Lota shaped pottery which remains popular to this day. The farmers of Central India used whole range of tools made of stone. A few of their tools were made of copper. They did not know the use of iron.

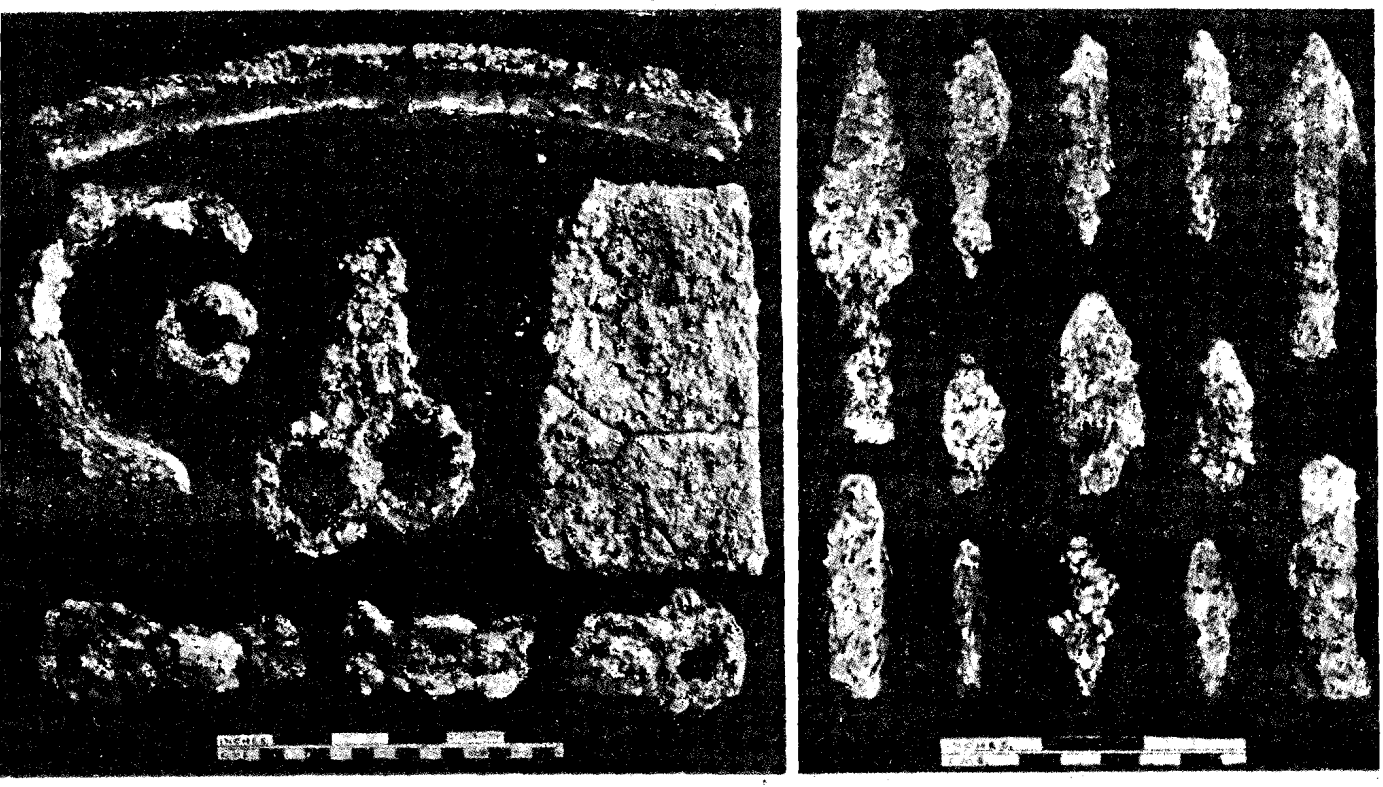
The Menu of a Central Indian 3500 Years Ago

The farmers grew crops like barley, wheat, rice, bajra, jowar, lentil, horsegram, hyacinth, grass pea, pea, black gram and green gram. They were also consuming Jamun, Behada, wild Date, Ber and myrobalan. The finds of bones cattle, sheep, goat, dog, pig, etc. indicate the range of domesticated animals. The cut and chop marks on the bones of these animals indicate that they were slaughtered for food. The bones of wild animals like black buck, Nilgai, Barasinga, Chital, buffalo and rhinoceros indicate that they supplemented their diet with wild animals too.

Ujjain

In the period around 1000 B.C. iron tools were found in the places like Ujjain, Eran, Nagda, etc. The people also used weapons of iron. The evolution of the cities in this period was based on the discovery of iron. The premier city of this area in the historic period was Ujjain. Located on the bank of river Shipra it was surrounded by a very large rampart in the 6th century B.C. The rampart had a height of 15 metres which enclosed an area of 190 hectares. Iron smelting and the manufacture of iron tools seems to have been one of the important activities of the craftsmen in the city. Houses were brick built. Some kind of planning is evident from the presence of metalled roads, brick tank, wells and drains. According to one estimate building the fort in Ujjain would have required a manpower of 20,000 people. Organising such a large labour force would have required a developed state apparatus. Since those who would build the rampart would require food and wages. If the king forced people to work he would require an army to control such a large work force. That is why the evidence of fortification is taken as proof of the fact that a society based on coercion and concentration of wealth had come into being. This was also the period when evidences from Ujjain indicate that it had established active links with the Ganga valley. This is proved by the presence of the Northern Black Polished Ware. This pottery came in use in the Ujjain area too, in the sixth century B.C. This is a clear case of the Ganga valley influences coming to this area. The early historic period as documented in ancient Indian literature shows that the area around Ujjain was called Avanti. Its powerful king Pradyota is believed to have conquered Kausambi. All this indicates that central India had become part of the ambit of the Gangetic civilization.

Evidences for the presence of large townships have been found in places like Nagda in the Ujjain district. Located on the river Chambal, the uppermost part of a partially natural mound 90 feet high represents three periods. In the early half of the first millennium the place was surrounded by a rampart. Maheshwar 70 miles south of Ujjain is the famous Mahishmati of the ancient texts. Located on the bank of the Narmada the historic mound rises to a height of 100 feet. Except for some exploratory excavations the site still awaits the spade of a discerning archaeologist.



Ujjain: Iron objects

19.7 SOUTH INDIA

By the term South India we refer to the states of Andhra Pradesh, Karnataka, Tamil Nadu and Kerala. These areas are watered by the Godavari, Krishna, Tungbhadra, Penneru and Kaveri river systems.

Farming Communities in the South

Farming communities emerged in this area in the third millennium B.C. In the post Harappan period evidences have been found for the presence of strong farming communities. Nagarjunakonda (on the mouth of the river Krishna) Piklihal, Brahmagiri, Sangankallu, Tekkalakota, Hallur (on the Tungbhadra) and T. Narsipur (at the confluence of the Kaveri and Kapila) show the presence of farmers from very early times. On the basis of parallels with Central Indian pottery and Radio Carbon dates these settlements have been dated to 1800 - 1050 B.C.

What did the farmers eat

Millets and pulses were the main cultivated crops. Various kinds of millet, horse gram, green gram and black gram have been found in the remains. Hyacinth bean and barley too have been discovered in some of these sites. These farmers had domesticated cattle, buffalo, sheep, goat, pig and dog. In addition to the domesticated species, these settlements have also yielded the remains of wild game like porcupine, black naped hare, Nilgai, Chinkara, blackbuck, Sambar and Chital. This would indicate that the villagers hunted and ate these animals.

Pottery and Tools In the Southern Village 3500 years ago

People in these villages used various kinds of pottery. What is interesting is that they were using vessels with spouts. In the subsequent phases of evolution they showed use of pottery similar to those of Central India. The range in the shapes and sizes of pots had increased.

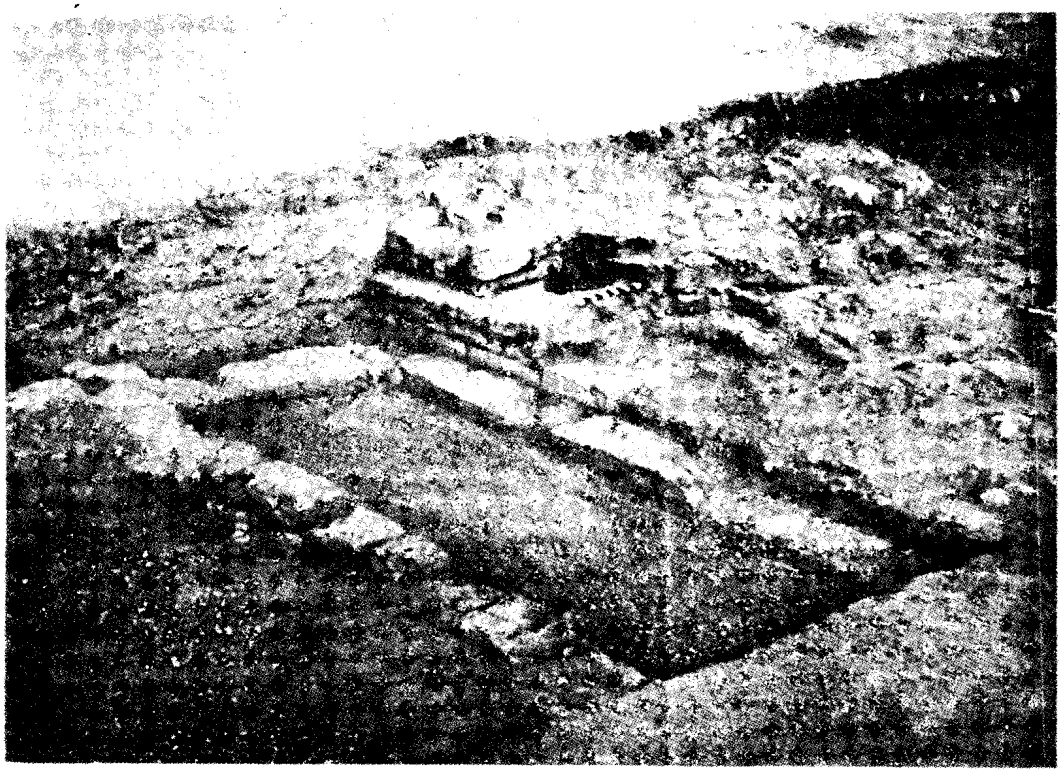
They were using bowls with lips lugs and spouts, handled and hollow footed bowls, jars, dishes on stand and perforated vessels. What is interesting is the fact that the shapes of their pots virtually anticipate all the shapes of the pots used by the modern day villagers in South India. These villagers used a large number of tools made of stone. They used copper bangles and ear rings.

Emergence of Cities in the South

Although they started using iron tools earlier than the Ganga valley, cities emerged in South almost four to five centuries later. The core region for the emergence of civilization in the South was the modern Tamilnadu area. In the centuries preceding the Christian era the Tamils composed their most beautiful poems to date. These are called the Sangam poems. In these poems they refer to prosperous towns and cities. Unfortunately, the lack of proper exploration and excavation in this area leaves many gaps in our knowledge about the process of the emergence of the urban centres in this area. Excavations have been conducted in places like Urayur (modern Tiruchanapally in Tamilnadu), Kaveripattinam (mouth of the river Kaveri) and Korkai (on the bank of the Tamraparni river near Madras), Arikamedu (in Pondicherry), Amaravati (60 miles from the mouth of the river Krishna), Nagarjunakonda in the Guntur district in Andhra. The urban centres seem to have emerged in the beginning of the Christian era.

Amaravati and Nagarjunakonda

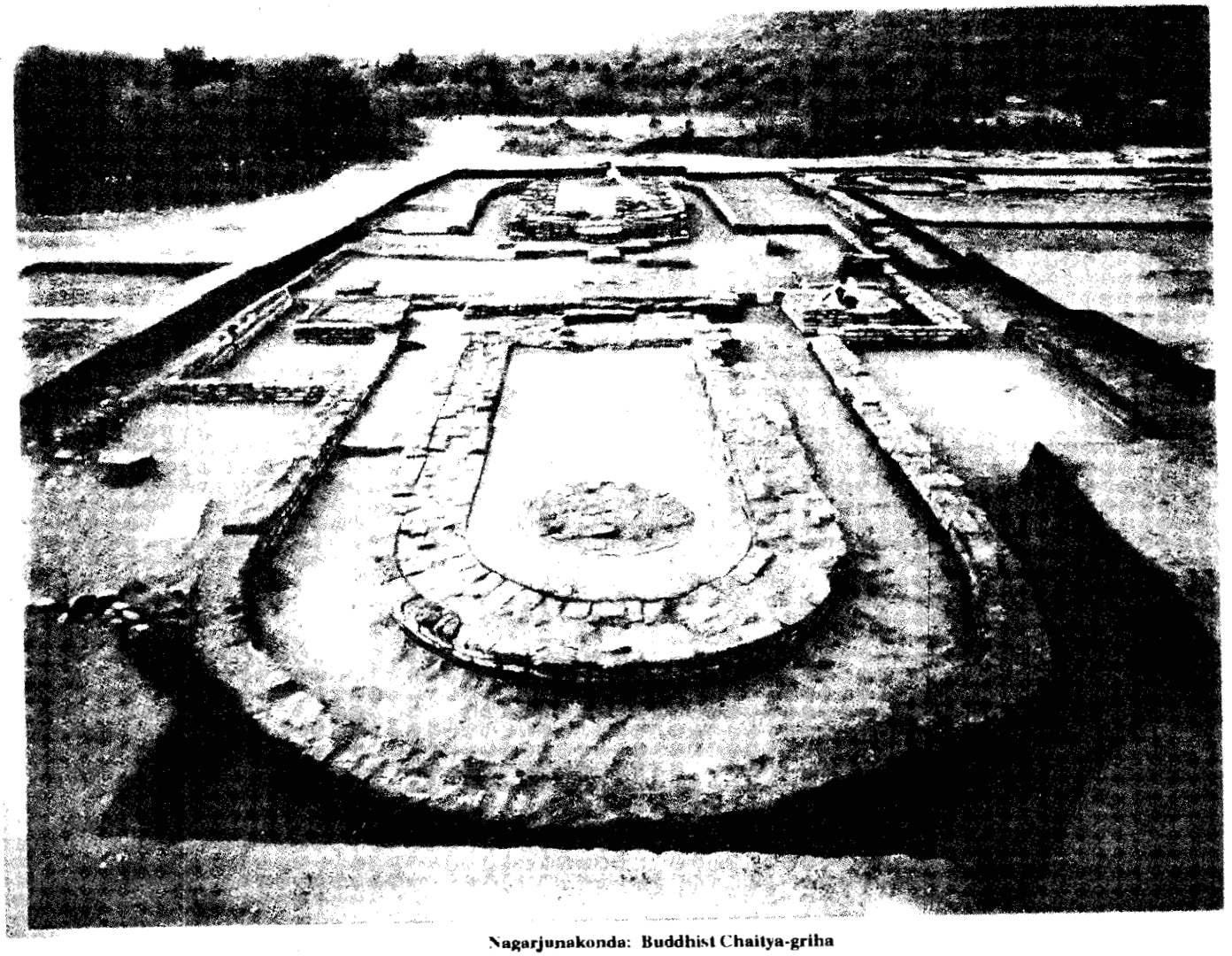
Amaravati and Nagarjunakonda have yielded ruins of a large number of Buddhist monasteries. The magnificent bas reliefs found on the Stupas is perhaps the most brilliant exposition of the art of contemporary India. Excavations have also yielded the N.B.P.W. Thus the finds from Nagarjunakonda and Amaravati indicate that the influences from the Ganga valley reached this area in the centuries preceding the Christian era.



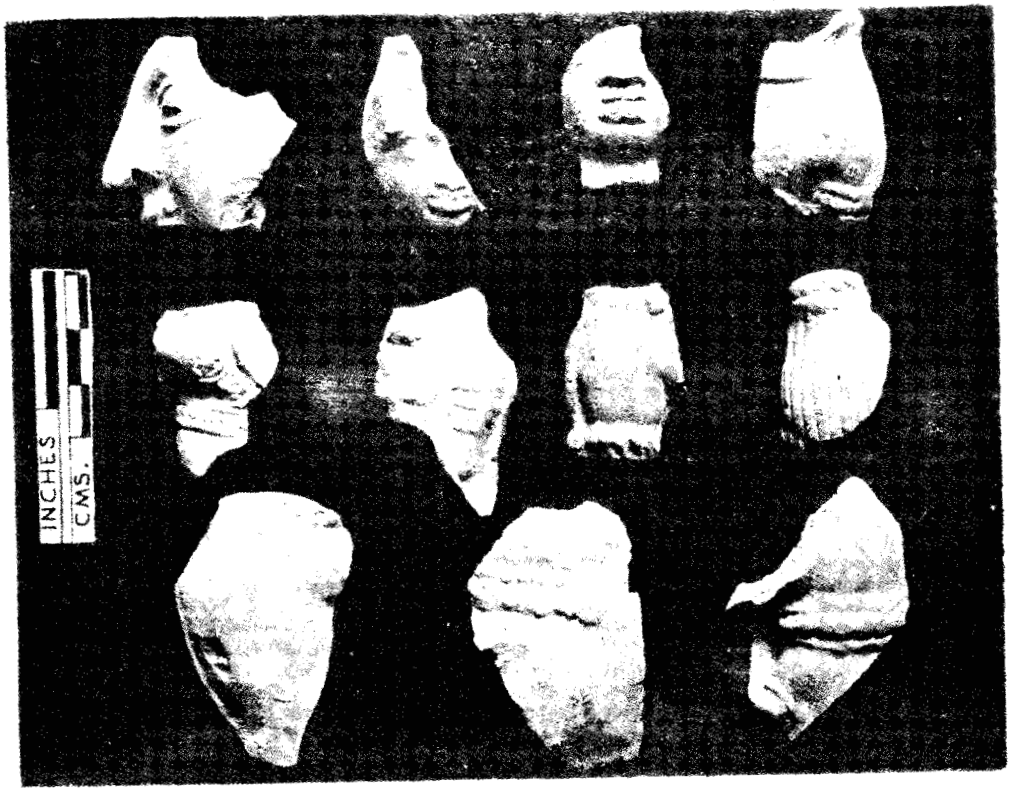
Amaravati: Satavahana Structures

Korkai, Urayur and Kaveripattinam

The ancient site of Urayur, the capital of the Colas is believed to be located within the city limits of modern Trichinapally. The earliest occupation of the site dates back to 300 B.C. - 100 A.D. It is marked by the use of Black and Red pottery. Along with this has been found the Roman pottery known as Rouletted and Arretine wares. A few potsherds bear Tamil

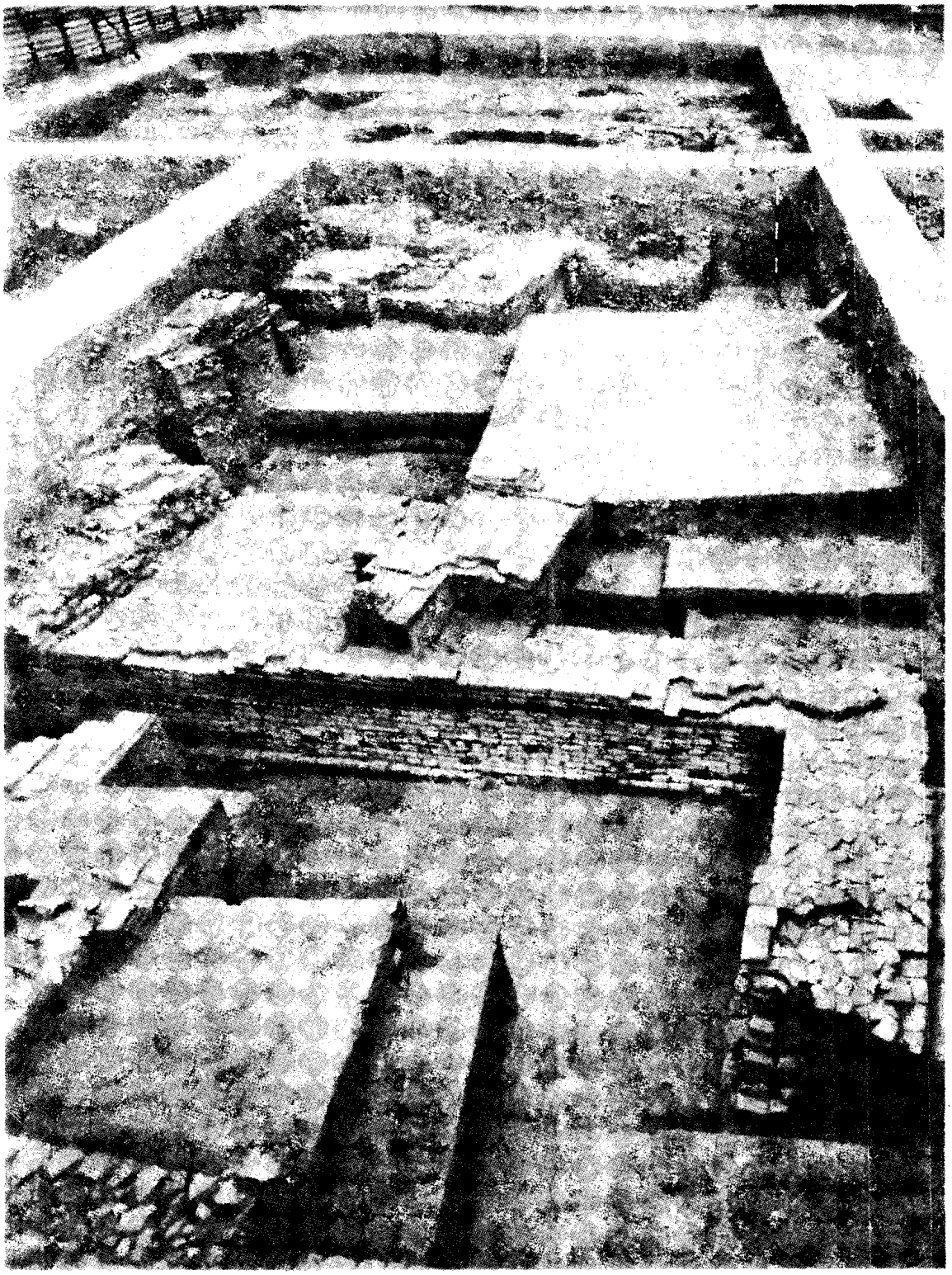


Nagarjunakonda: Buddhist Chaitya-griha



Nagarjunakonda: Fragments of terracotta figures

inscriptions in the Brahmi script of the early centuries of the Christian era. Kaveripattinam was the sea port capital of the Colas. It was located on the mouth of the river Kaveri. Excavations have shown the presence of a massive brick platform built on natural sand and perhaps a wharf for tying the boats. A water reservoir made of an earthen bund with brick facade has also been discovered. Another structural complex found in this area is the remains of a Buddhist monastery. Korkai was the capital of the ancient dynasty of the Pandyas. It has been identified with a modern village on the bank of the Tamraparni river near Madras. The discovery of innumerable pearl oysters in different levels indicates that the site was an important centre of pearl fishery.



Kaveripattinam: Excavated remains of Buddhist Vihara

Arikamedu

The site of Arikamedu in Pondicherry has shown the presence of a Roman warehouse. It was a brick built commercial town. It seems that this place functioned as a trading station for the Roman traders. Finds of Amphora (a particular pottery used by the Romans for exporting wine) are specially interesting as it indicates that the Indians had developed a taste for foreign wine. The warehouse was used for working precious and semi precious stones and exporting it to Rome. Many Roman coins have also been found in the excavations.

The presence of Roman influence along with the influences from the Ganga valley in the form of Buddhism indicate the nature of urbanisation in the South. The spread of Buddhism was related to the expansion of trade networks which together created the cities of South. But the ethos of these cities remained very different from those of the Ganga valley.

Check Your Progress-3

1) Read the following statements and mark right (√) or wrong (×).
   i) Rahghat is situated in Rajasthan. [ ]
   ii) Rajgir was the earlier capital of the Magadh state. [ ]
   iii) Udayan was the king of Hastinapur. [ ]
   iv) Archaeological findings show that Mathura was an ancient city. [ ]

2) Write short notes on the following:
   a) Hastinapur b) Nagarjunkonda.

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19.8 LET US SUM UP

The survey of the settlements in the post Harappan period is by no means comprehensive. Indian archaeology is still in its formative stage. So much remains undiscovered that any aspiring archaeologist can discover a settlement in his backyard. Virtually every corner and every settlement hides some secret of the past. India needs a very large number of amateur and professional archaeologists to discover its rich heritage.

19.9 KEYWORDS

Aryans : The group of people who spoke the Indo-European languages like Sanskrit, Latin, Greek, etc.

Brahmi Script : The earliest known script of post-Harappan India. Most of modern Indian scripts such as Tamil, Devanagari, etc. are derived from it.

Double cropping : To grow two crops on one piece of land in one year.

Lower Ganga Valley : The areas covered by the river Ganga and its tributories in Bengal.

Middle Ganga Valley: The areas covered by the rivers Ganga, Sarayu, Kosi, etc. in Eastern U.P. and Bihar.

Upper Ganga Valley : The areas covered by the rivers Ganga and Yamuna in the plains of western U.P., Delhi, etc.

Thermoluminiscent Dating : A scientific method of dating ceramic materials.

Wattle and Daub House : A house or hut made of interlaced twigs plastered with mud or lay.

19.11 ANSWERS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress-1

1) See Section 19.2.

2) See Sub-sec. 19.2.3.

Check Your Progress-2

1) See Section 19.3 and 19.4.

2) See Sub-sec. 19.4.1.

3) See Sub-sec. 19.4.3.

Check Your Progress-3

1) i) ×, ii) √, iii) ×, iv) √

2) See relevant parts of Secs. 19.5 and 19.7.

UNIT 20 MUSEUMS AND ANTIQUITIES

Structure

20.0 OBJECTIVES

After reading this Unit you shall be able to know:

- how the museums developed historically,
- the variety of museums and their roles in society,
- the factors determining the acquisition of museum objects; and
- the relationship between museums and tourism.

20.1 INTRODUCTION

Museums today are an important source of tourist attraction. Objects and artefacts revealing the genesis of a country, its cultural expanse, landmarks of its industrial and technological development, etc. are housed in the museums. Now concepts in museology have emphasized the social responsibilities of the museums towards educating and entertaining the public.

All over the world the number of museums as well as the number of the people visiting them have gone up substantially. The attraction of the museums for the public has increased. It is, therefore, necessary for everyone involved in promoting tourism in the country to know about the museums. In TS-2, Unit 8 you were familiarised with the role of a guide in the museum through the case study of Prince of Wales Museum, Bombay. In this Unit we shall tell you about various aspects of a museum and its roles and responsibilities towards the society in general and towards the promotion of tourism in particular.

20.2 MUSEUMS - A HISTORICAL ACCOUNT

Since ancient times museum - like institutions have been part of the social life of humankind. Although the concept of the modern museum as primarily a collection and exhibition centre for antiquities, artefacts and other historical and cultural objects has developed in Europe, institutions with some resemblance to them have been found in India too. In this Section we shall discuss the historical progression of the museums in two parts:

- for the western world mainly taking Europe and United States of America into account; and
- for India.

20.2.1 The Western World

The earliest organized museum was established at Alexandria, Egypt in about 3rd century B.C. by Ptolemy Soter, a ruler of Egypt in the post-Alexander era. But it was more like a university than a collection house for artefacts. It was a state-supported institution and was a place for advanced studies. It was functional for about six centuries when it was destroyed during the civil disturbances.

For a long time after this, no proper museum development took place. In the 14th century, the period immediately preceding the Renaissance in Europe, there was a revival in the interest for museums. In the 15th century, the term 'museum' was used to describe the collections of the Medici family in Florence in Italy at the time of Lorenzo the magnificient. The re-emergence of the museums as institutions of human enlightenment coincided with the vigorous developments in the fields of arts, sciences and humanities.

But even during the Renaissance the museums were not open to the public. Infact, they were more of private collections of artefacts. The first public museum opened in Oxford in 1683 using the collections of Mr. Elias Ashmole. It was followed by the British Museum in 1753. The admission to these museums, however, was limited to only a few individuals everyday. In France also, the Louvre museum allowed limited entry to the people until the French Revolution in 1789 opened it fully for the public. It, therefore, took about two centuries for the private museums to be transformed into public museums in Europe. Moreover, the gradual handing over of the private collections for public use is "generally considered to be a European concept of museum evolution."

In the United States the development of museums is comparatively recent. The museums, threfore, started with the idea of public service and education from the very beginning. Charleston Library Society of Carolina in the U.S.A. was established in 1773. From then on upto the establishment of the National Museum in 1846 "the museum development in the U.S. was a public affair."

20.2.2 India

Various methods were evolved in our country to preserve our heritage. In ancient India there were painting galleries **(chitrashalas)** and art galleries **(chitravithis)**. During the medieval period the kings and nobles had their impressive private collections. The beginnings of the first modern museum in India can be traced back to the year 1796. The Asiatic Society of Bengal, established in 1784, decided in that year that several artefacts it had collected over the years should be housed properly in Calcutta. The plan, however, did not succeed and it was only in 1814 that the society could establish a proper museum. It had two divisions - the first dealing with archaeology, ethnology and technology and the second dealing with geology and zoology. By 1857 there were twelve various types of museums in India. But the first important museum was the Indian Museum in Calcutta founded in 1875. By 1936 the number of museums was around one hundred. The most important development was the establishment of the National Museum in Delhi in 1949. By 1995, the number of museums in India had increased to around 360.

20.3 PHASES OF DEVELOPMENT

The museums as we know them today emerged during the Renaissance and expanded during the Age of Enlightenment in Europe. Until now we have four phases of museum development.:

i) Initially they mainly served the function of **storing the objects of artistic and scientific interests**. This was the first phase starting from the 14th century upto around the 17th century.

ii) The second phase was during the 18th and 19th Centuries when many of the museums were taken over by the state which turned them into public institutions. The effort was to project the glory of newly industrializing nations and expanding imperial powers.

iii) During its third phase in the 20th century the museum assumed an educational role. Through the selection of objects, their arrangement and exhibitions, the museums

endeavoured to educate the public about their history, culture, scientific and technological traditions, etc.

iv) Recently, since 1970s with the onset of the phenomenon of mass tourism, the orientation of the museums have changed yet again. They are now "more concerned with entertainment, tourism and income generation". Their educational role has declined somewhat in favour of generating more finances.

The move has increasingly been towards more egalitatianism. The public has become a major factor now and the museums are endeavouring more and more to cater to the public interests.

20.4 TYPES OF MUSEUMS

The International Council of Museums (ICOM) defines the museum as "**a non-profit making, permanent institution in the service of society and of its development, and open to the public, which acquires, conserves, researches, communicates and exhibits for the purposes of study, education and employment, material evidence of man and his environment.**"

Apart from the museums the other institutions which conform to this definition are:

a) Conservation institutes and exhibition galleries permanently maintained by libraries and archive centres.

b) Natural, archaeological and ethnographical monuments and sites and historical monuments and sites of a museum nature, for the acquisition, conservation and communication activities.

c) Institutions displaying live specimens such as botanic and zoological gardens, aquaria, vivaria, etc.

d) Nature reserves.

e) Science centres and planetariums.

The museums can be categorized as follows on the basis of grants received and the control exercised:

1) **Central Government Museum**, such as National Museum, New Delhi.

2) **State Museums** such as Orissa State Museum, Bhubaneshwar, and Assam State Museum, Guwahati, etc.

3) **University, College and School Museums** such as Folklore Museum, University of Mysore, Bharat Kala Bhavan, B.H.U., Varanasi, etc.

4) **Private Museums**, such as Maharaja Sawai Madho Singh Museum, Jaipur, Birla Academy of Art, Calcutta etc.

Museums can also be classified based upon the nature of their collection.

1) **General Museums**

Most of the Museums come under this category. Their collections include articles of various types ranging from ancient to modern times, encompassing sculpture, painting, jewellery, pottery, technological implements etc. They have something or the other for almost everyone. Some important museums of this category are:

National Museum, New Delhi: This museum possesses a very large number of objects which include sculptures of terracotta and bronze as well as potteries and jewellery from the Harappan, Mauryan and Gupta periods; scultures, manuscripts, paintings from the medieval period,

- a collection of antiquities from Central Asia and the America;
- a large collection of textiles, jewellery and coins from different ages and regions.

- **Prince of Wales Museum, Bombay**: We have given a detailed description of this museum in TS-2, Block-2, Unit- 8. It has sculptures, painting, textiles, a natural history section, etc. from various periods of Indian History.
- **Indian Museum, Calcutta**: Its most notable collections are 2nd century B.C. railings containing Buddhist sculptures from Bharhut in Madhya Pradesh. Apart from these, it has a collection of textiles and sections on minerology, zoology and anthropology.

2) **Archaelogical Museums**

Such museums mostly contain articles discovered from the local excavations. Many of them are **site museums** maintained by the Archaeological Survey of India. Some important museums include Archaeological Museum at Red Fort, Delhi, at Bodh Gaya and Nalanda in Bihar, at Sanchi, Khajuraho and Gwalior in Madhya Pradesh and at Mathura and Sarnath in Uttar Pradesh, etc.

3) **Art Museums**

These museums mostly possess works of arts which include sculpture, painting etc., the important among them are the Ashutosh Museum of Art (Calcutta) and National Gallery of Modern Art (New Delhi).

4) **Crafts Museums**

Here we can find the live crafts traditions of India with craftsmen exhibiting their skills as well as selling their products. These museums endeavour to popularize the crafts traditions of india and provide the craftsmen direct access to the consumers. **National Crafts Museum** in Pragati Maidan, New Delhi is the most prominent example.

5) **Children's Museum**

Objects mainly of children's interests are housed here. **Bal Bhawan** and **International Dolls Museum** are two such museums.

6) **Defence Museums**

Their collections comprise of the objects relating to national defence. **National Defence Academy Museum, Pune** and **Air Force Museum, Palam**, New Delhi are important examples.

7) **Personality based Museums**

These contain articles used by or related to some important persons. **Gandhi Memorial Museum** and **Nehru Memorial Museum** in Delhi are two such institutions.

8) **Natural History Museums**

Flora and fauna of the world, objects showing the major landmarks in the development of the earth and its inhabitants, etc. form parts of their collection. **National Museum of Natural History** in New Delhi is the most important museum of this kind.

9) **Science and Technology Museums**

For example, **Central Museum,** Pilani (Rajasthan), **Visvesvaraya Museum,** Bangalore and **Rail Transport Museum**, New Delhi.

10) **Specialised Museums**

These museums mostly keep specialized collections. **Calico Museum** (having a collection of Indian textiles) and **Utensils Museum** (with a collection of Indian utensils) in Ahmedabad (Gujarat) are two such examples.

20.5 MUSEUMS - ROLES AND RESPONSIBILITIES

Museums have many roles to play in modern times. They utilize the national resources and exist for public benefit. Preservation, educating the public and entertainment are some of the functions a museum performs.

20.5.1 Socio-Cultural

Museums are meant to shoulder the cultural responsibilities of a nation. They function as custodians of the natural, cultural, scientific and technological heritage of a people. The material remains of the development of the earth and of human society, the arts and crafts of a country, etc. are housed in the museums. In India, the Archaeological Survey of India and the State Departments of Archaeology have the responsibility for excavation and preservation of historical sites in rural as well as urban areas. The Anthropological Survey of India collects and provides informations about the aboriginal and semi aboriginal people of India thereby contributing to the cultural enrichment of the country.

Museums also testify to the composite cultural ethos of our country. Their collections include artefacts from various periods and regions and make them part of our common cultural heritage. Apart from this museums organize exhibitions on themes of socio-religious significance. For example, the Salar Jung Museum, Hyderabad holds various exhibitions on themes like 'Lord Krishna in Indian Art', 'Christianity and Art' and 'Islamic Contribution of Indian Art'. Such activities make people aware of the cultural heritage of their own country. This also encourages people to visit the museums.

The reason of a museum's existence is the public. They exist for the benefit of the society. They are also the "medium for expression of new - or at least newly discovered - democratic cultural values."

The new museums take upon themselves the responsibilities of democratizing their collection. Their role includes providing the public a wide range of aesthetic, cultural and emotional experiences as well as the knowledge about human past. As the American Association of Museums has formulated:

"The ethical duty of museums is to transfer to our successors, when possible in enhanced form, the material record of human culture and the natural world."

20.5.2 Educational

The museums also play an educative role through the collection, conservation and interpretation of the objects of historical and cultural interests. By exhibiting their collections ranging from mundane to exotic, they attract and entertain people and arouse their curiosity. This stimulates the imagination of the visitors and induces them to ask questions thereby promoting learning. The educational role of the museums are enormous, particularly with regard to the children. The museums are ideal places to impart education to people of all age-groups, interests, capabilities and backgrounds. The museums are often situated in attractive and spacious buildings; the objects are normally arranged systematically and attractively; everyone is free to approach the displayed articles freely and without interference. The visitors gain knowledge about innumerable things about their past. Seeing things in their actual form is much more instructional than reading about them in books. Frank Oppenheimer opines:

"The whole point of education is to transmit culture, and museums can play an increasingly important role in this process. It is a mistake to think that preserving culture is distinct from transmitting it through education."

The ICOM also recognizes the contribution of the museums in educating the public by:

- increasing the awareness of cultural heritage,
- transmitting the essence of the evolving culture to new generations,
- raising the awareness of other cultures.

In our country, many museums, apart from educating the public by displaying their collections and organizing special exhibits, also give practical training courses on the ancient arts and crafts of the country. For example:

- The **Salar Jung Museum** in Hyderabad conducts courses on bronze casting, lapidary work, woodwork, Bidri artwork and tribal embroidery.
- **Archaeology Museum** at Baroda organizes temporary exhibitions whenever a new excavation is done in order to educate the trainee teachers and higher level students.
- **Birla Industrial and Technology Museum, Calcutta** and **Visveshriya Industrial and Technology Museum, Bangalore** conduct short term training courses for school teachers in science and technology and museums.
- In **Bal Bhavan,** New Delhi, children are given instructions in arts, painting and dance.

20.5.3 Entertainment

In the modern period another responsibility of the museums is to entertain public in order to augment the domestic and foreign tourism. The exoticism and the attractive arrangement of museum objects fascinate the visitors and also satisfy their urge for knowing about their past in case of domestic tourists and about host cultures in the case of foreign tourists. Later in this Unit we shall discuss the role of the museums with regard to tourism.

Check Your Progress-1

1) Narrate the phases of museum development in 100 words.

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2) What is the educational role of the museum? Write in 100 words.

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3) What is the different between the archaeological museum and crafts museum ? Write in 100 words.

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20.6 MUSEUM ORGANISATION

At the level of organisation there are three functions in a museum:

1) **Administrative** which includes personnel management, financial management, general services, fund-raising and public relations;

2) **Curatorial** which involves collection registration, collection care, conservation and research;

3) **Operations** involving exhibitions, public education, technical services and security.

The major decision-making staff of the museum consist of the following personnel:

Director: Director is the topmost decision-making person in a museum responsible for policy making, planning, organizing, staffing and coordinating activities.

Curator: Curator is the academic decision maker in a museum. It is primarily on his/her recommendations that the objects are acquired and accessioned. The curator is also responsible for research and publication.

Museum Educator: Museum's educational and training programmes are the responsibilities of the museum educator. These include organization of classes, tours, films, lectures, training programmes etc.

Museum Registrar: The Museum Registrar is responsible for the preparation and maintenance of legal documents, files and forms for acquisition, accession, cataloguing, loans, etc.

Conservator: The conservator's duty is to see that the museum objects are kept in good condition and no damage is done to them.

Exhibit Designer: The exhibit designer plays an important role in designing the exhibitions along the lines suggested by the curator and eduational staff.

Collections Manager: Supervision, numbering, cataloguing and storage of the objects in each division are the responsibilities of the collections manager.

20.7 HOW THE MUSEUM OBJECTS ARE ACQUIRED?

The acquisition of the museum articles takes place mainly in five ways:

1) **Field Work:** The most important way to acquire the objects is through research and fieldwork. Items gained from excavations, regional and local tours, etc. are gathered to bring them to the museums. These include objects of historical importance both in geographical and cultural terms.

2) **Gift or Donations:** The museums also get their collections through gifts or donations from private sources. These objects are works of arts and artefacts of historical and ethnological value. In India many traditional rulers donated their private collections to the museums.

3) **Purchase:** Another way of collecting the objects for museums is through purchase. It, however, is subject to the availability of finances. Most of the objects which are worth collecting for the museums command high prices for which the museums have to compete in the open market.

4) **Transfer:** Sometimes the museums receive objects through transfer from one museum to another. The criteria for doing so can be various. For example, some of the objects acquired by the British museums from India during the colonial period were returned after independence. Some objects are transferred from State to the National Museums and vice versa depending upon the nature of the objects.

5) **Loan:** Museums regularly use this channel to augment their collections. It, however, does not involve the transfer of title and the lender museum gets its objects back after a definite period. It is a two way process and benefits all the museums.

After the acquisition the objects are accessioned on the advice of the curator. While the acquisition is an indiscriminate process, accession is done on the basis of set standards. Accession involves "the transfer of the titles of objects, through defined procedures, to the museums or the registration of objects held-in-trust for governmental agencies." After accessioning, that is, acceptance of ownership and responsibility, the museum is obliged to securely manage the objects.

20.8 ANTIQUITIES

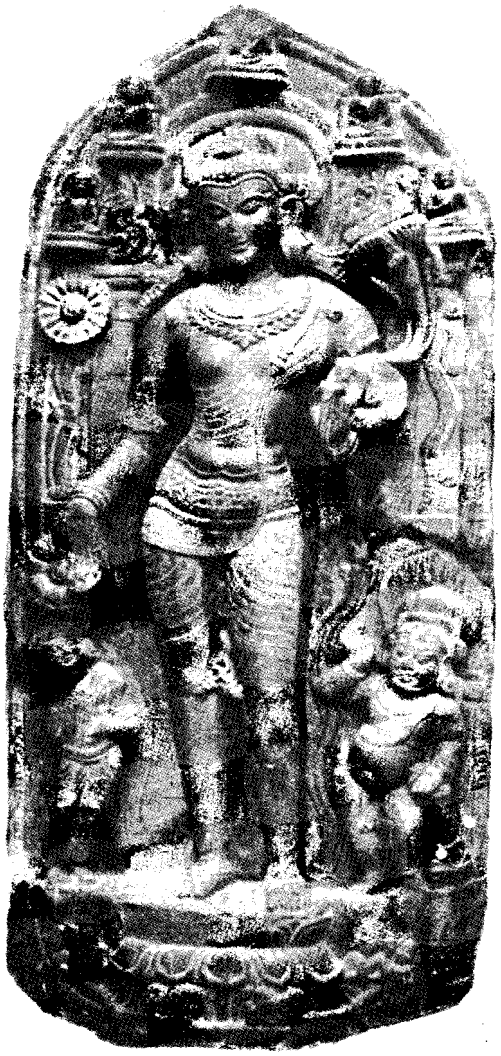
The museums collect, preserve and display the antiquities found at various archaeological sites as well as recovered from other sources. The antiquities of India are covered under Antiquities and Art Treasures Act, 1972. The following items come under the category of antiquities and art treasures:

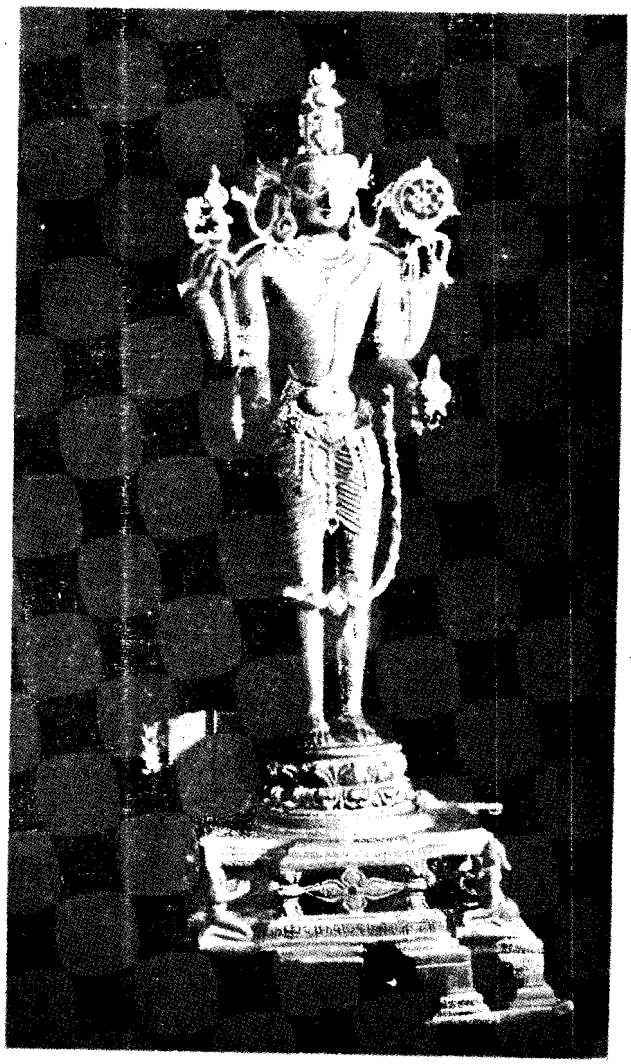
a) Sculpture

b) Painting

c) Other works of art and craftsmanship illustrative of science, art, crafts and religion and of historical interest.

But these items should be at least one hundred years old in order to become antiquities.

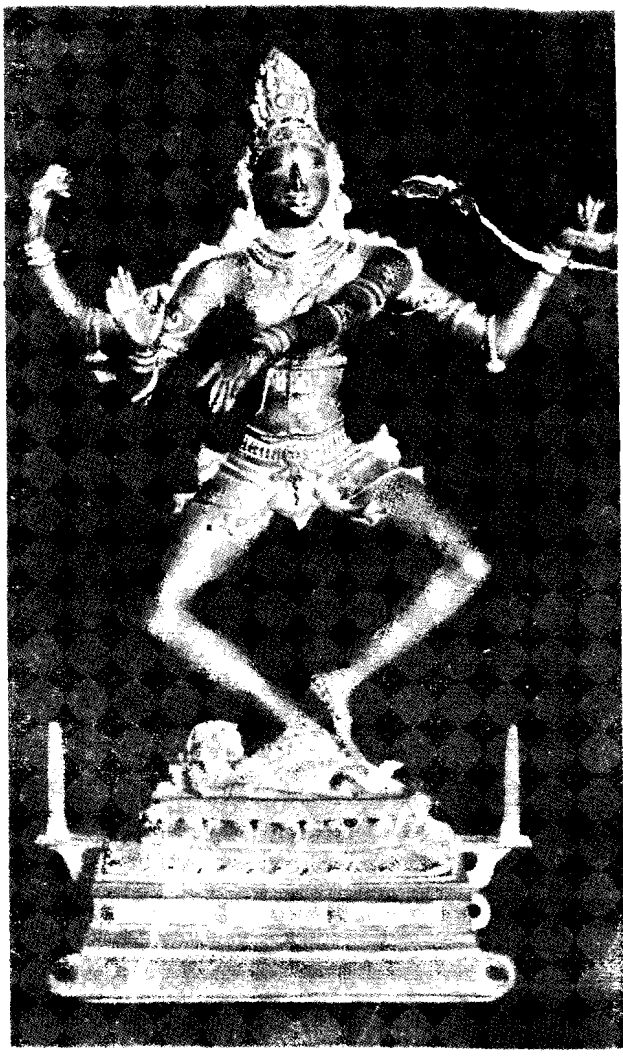




Antiquities in Ashutosh Museum, Calcutta

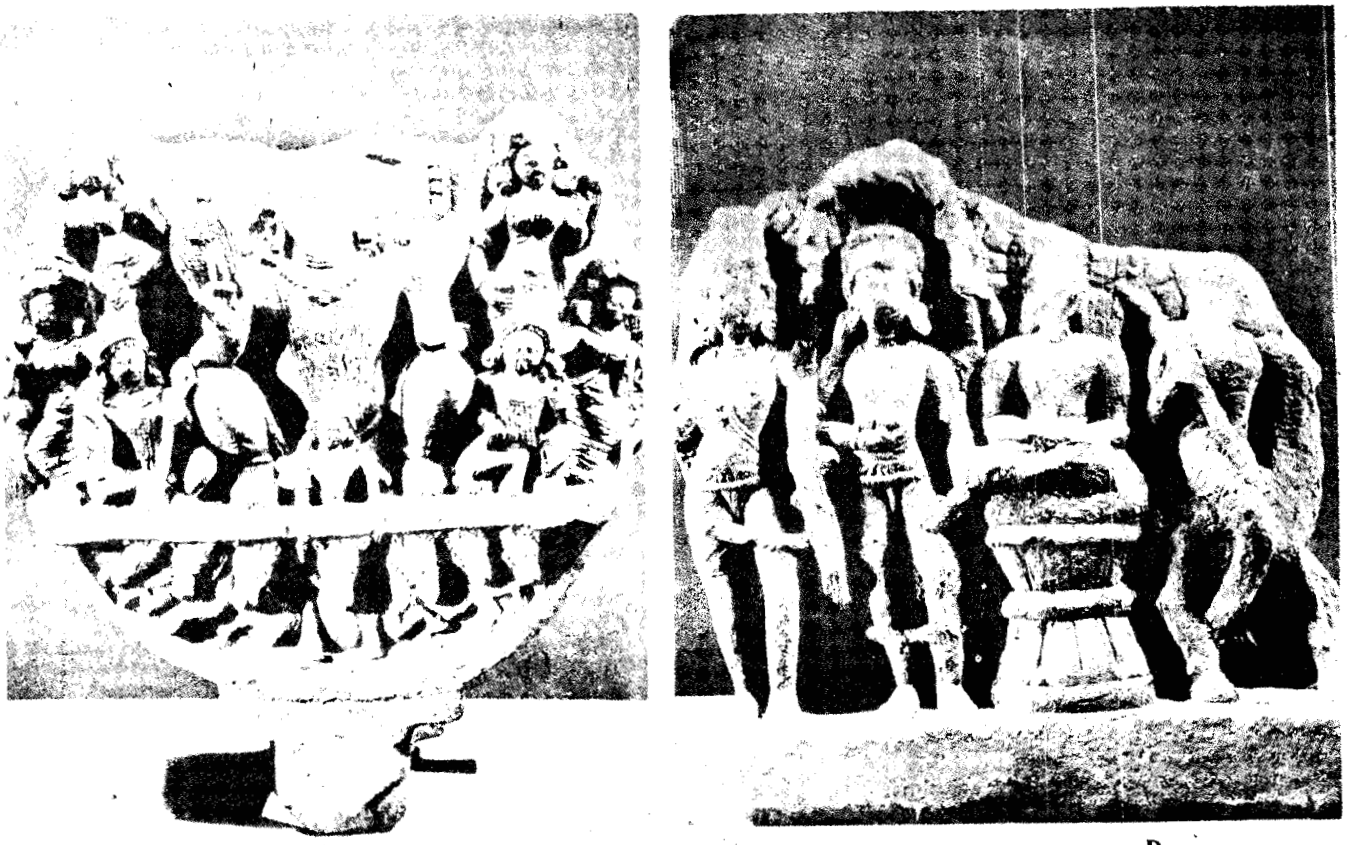
C

Baroda Museum, Baroda: A) Ekamukha Siva-linga, b) Head of Surya and C) Vishnu



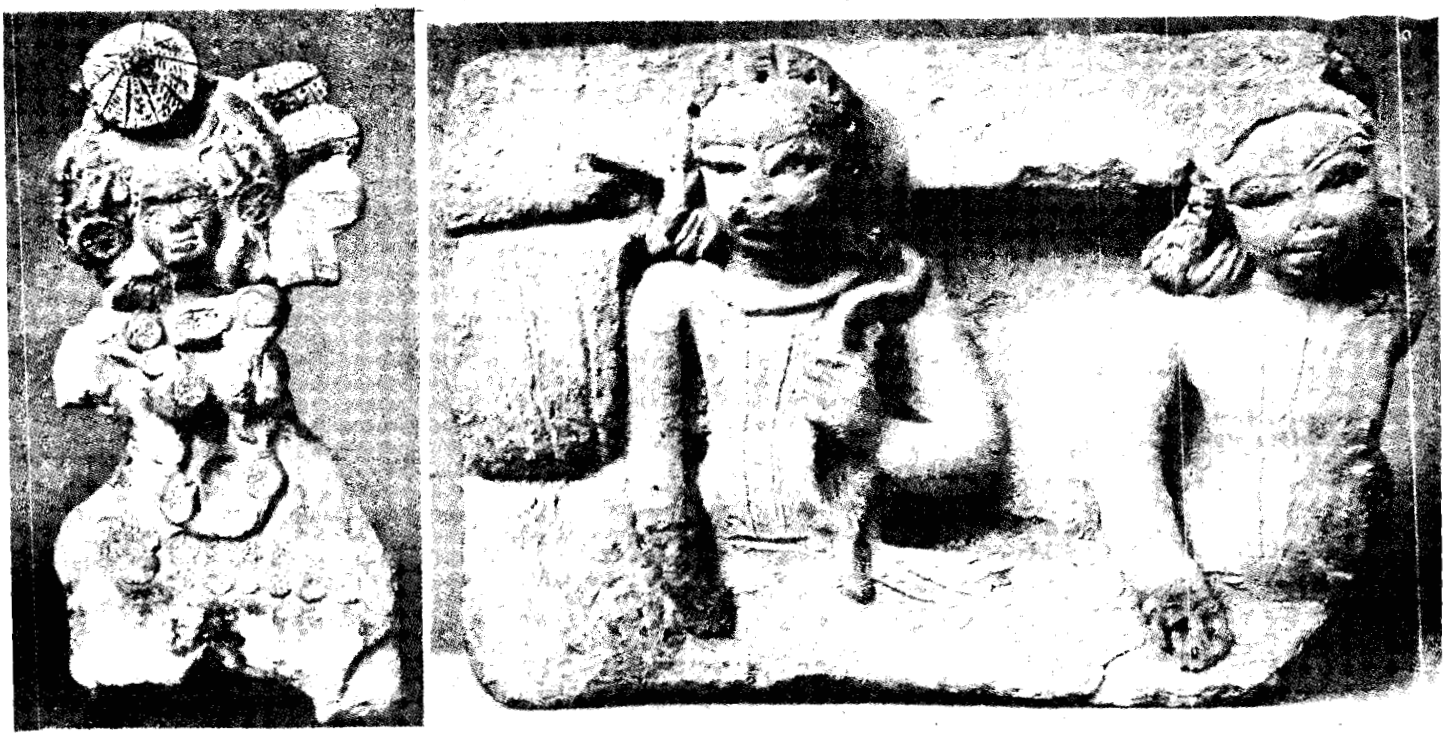
B

National Museum, New Delhi: A) Stone sculpture with flying gandharvas from Aihole and B) Bronze Nataraja from Tiruvarangulam



A B

Mathura Museum, Mathura: A) Sandstone image of Surya and B) Dasavatara panel



A B

Prince of Wales Museum, Bombay: A) Terracotta mother-goddess and B) Moulded Brick.

20.9 MUSEUMS AND TOURISM

Museums have the potential to play an important role in tourism sector. The touring children can perhaps be the largest clientele group because the museums offer both education and entertainment. Even for the adults they are a great source of information about the history, culture and tradition of a locality or country. People can discover their past through the museums. To the foreign visitors the museums offer detailed informations about their destination country. They can be supportive to the service sectors as the people visiting the museums use conveyances and visit the restaurants and shops nearby.

The promotion of tourism through museums, however, has to be a concerted effort. The museum management should bring out brochures and handbooks listing their collections and giving some information about them. In addition, photographs of the objects should be sold to the visiting tourists so as to leave them with a memory of the visit. The tourist agencies should give the museums a proper and prominent place in their itineraries for the tourists emphasizing the educational and entertainment roles of the museums. The tourist guides should be knowledgeable about the museum collections. They should also possess some information about the history and organization of the museums themselves.

It is only through the joint efforts of all concerned that a meaningful and frequent interaction can develop between the tourists and museums.

Check Your Progress-2

1) What are the main ways in which the museum articles are acquired ? Give your answer in 100 words.

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2) Write in 100 words about the role which the museums can play in the development of tourism.

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20.10 LET US SUM UP

The modern museum is a product of the European Renaissance, although institutions resembling it have existed since a long time before that. It evolved through various phases and in contemporary period it is conceived as an institution for education and entertainment. Acquisition, conservation and exhibition of its collections are its main functions. By proper management and display of its collection, the museum endeavours to attract more and more visitors and play an important role in the growth of tourism. However, concerted efforts are required on the part of all those wanting to promote tourism to make the museum an important element on the tourist map.

20.11 KEYWORDS

Aquisition The act of gaining physical possession of an object for the museum.

Accession : The process of transfering title or ownership from the providing source (fieldwork, purchase, gift, etc.) to the museum.

Artefact : An object that has been selected, altered, used or made by human effort.

Age of Enlightenment : The period during the 18th century in Europe, particularly France when some thinkers and writers believed that reason and science, not religion, would advance human progress.

Cataloguing : Assigning an object to an established classification system and initiating a record of the nomenclature, provenance, number and location of that object in the collection storage area.

Renaissance : The period of the revival of art and literature based on classical forms in the 15th and 16th centuries in Europe, particularly in Italy.

For the meanings of some of the keywords and all the quotations in the text, we acknowledge our debt to Gary Edson and David Dean, The Handbook for Museums, Routledge, 1994.

20.12 ANSWERS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress-1

1) See Sec.20.3.

2) See Sub-sec. 20.5.2.

3) See Sec.20.4.

Check Your Progress-2

1) See Sec. 20.7.

2) See Sec. 20.9.

SOME USEFUL BOOKS FOR THIS BLOCK

Dilip K Chakrabarty : **The Archaeology of Ancient Indian Cities**, OUP. 1995.

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