
UNIT 3 METHODS OF STUDYING ARCHAEOLOGICAL ANTHROPOLOGY*

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Learning Objectives

After reading this unit, you would be able to:

- Understand about the archaeological site;
- Elucidate the methods of study in Prehistoric archaeology;
- Know how the data is collected by Exploration;
- Discuss the Importance of Excavation in Prehistoric Archaeology; and
- Explain the importance of conservation and preservation in Archaeology.

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3.0 INTRODUCTION

You already have learnt what Archaeological Anthropology means. In this unit we will be discussing the methods used by prehistoric archaeologists/archaeological anthropologists to study the man-made artefacts that are most times buried deep in the layers of the earth. Gordon Childe, a famous archaeologist, has defined the subject as study of all changes in the material world that are due to human action (Childe, 1956). Material remains of early men are found in the form of artefacts. Artefact is defined as things man made and unmade. These include movable items such as, tools, weapons, personal ornaments etc. and immovable items, such as houses, temples, palaces, canals etc. First task for archaeological anthropologists is to classify these artefacts. Method of classification is known as taxonomy.

Taxonomy is basic method in Archaeology. It involves description and classification of findings. Generally archaeologist deals with components of culture formed into units known as types. Types are arbitrarily 'designed' by the classifier for the convenience of studying the materials of the past. Types are the items which are similar to each other in form and function. Examples may be given as, handaxe, cleaver, scraper, knife etc. Each type has common characters. In other words, there are two basic methods for classification and determination of types. Firstly, classification of types is solely done on the basis of their usefulness; secondly, it is maintained that the types are related to certain behavioural traits of the prehistoric men. Types are considered as norms related to behaviour that is regulated by the society. Artefacts and their types are considered against the background of the occurrence in terms of time and space, also mentioned as temporal and spatial units respectively.

Before learning the different methods of study in Archaeological anthropology, a brief account about an Archaeological site and how the archaeological site is formed is discussed as below.

3.1 ARCHAEOLOGICAL SITES

An archaeological site is a place in which evidence of past human activity is preserved. Sites may range from those with few or no remains visible above ground, to buildings and other structures still in use. A site may be as small as the place where an arrowhead or a potsherd lies, a few centimetres, or as large as a town, such as the site of Harappa or Mohenjodaro which spans a few kilometres. Beyond this, the definition and geographical extent of a "site" can vary widely, depending on the period studied and the theoretical approach of the archaeologist. The site may be either primary, if people have deposited its own remains there or secondary, if the remains have been re deposited by another people or by natural agency. Any other human disturbance of the ground might result in elements of the site being moved around and re deposited. For example a primary deposit on a river terrace has been bulldozed into another part of the terrace; the place of redeposition is a secondary site.

3.1.1 Types of Sites

Types of sites can be identified in the following way:

- i) *By archaeological context:* Depending on where the artifact/feature or cluster of artifacts are found, a particular site may be a surface location site, if found on the surface, or a stratified location site, if found in layers or strata.
- ii) *By artefacts content:* The type or kind of artefacts found also delineates a site.

For instance, if Stone Age tools or Iron Age tools are found, a site may be referred to as a Stone Age site, or an Iron Age site.

- iii) *By geographical location:* If artefacts or evidence of past human activity is found inside a cave, then the site is a cave site. Similarly there could be sites located in a valley or a gorge or on a river terrace.
- iv) *By artefact content related to site function:* Depending on the kind of artefacts found in a site and its content, it is at times possible to delineate a site as a kill site, or a habitation site.

Check Your Progress

1) Name the ways by which archaeological sites can be identified.

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Sites based on functionality may include the following:

- a) *Living or habitation sites*, where people lived and carried out a number of activities. This is usually marked by the presence of hearths, food remains or artifact remains, and features or structures.
- b) *Kill sites*, where prehistoric people slaughtered or butchered animals mostly for food. This can be gauged from large heaps of animal bones together with some projectile weapons such as arrowheads or spearheads.
- c) *Ceremonial sites*, where certain rituals or ceremonies might have taken place. This can be conjectured by the unique ritual objects found or by the patterning and positioning of artefacts, features or structures.
- d) *Burial sites*, where prehistoric burial took place and are now recovered in the form of cemeteries and isolated tombs. In some places where secondary burials took place, large urns, jars, or sarcophagus is found with evidence of burial remains.
- e) *Trading, quarry and art sites* are specialist activity sites. In areas where trading activities took place, large quantities of exotic trade objects are seen, along with their strategic location near major cities. Quarry sites, on the other hand, are located near quarries, as well as with evidence of special tools needed for mining raw material such as copper, flint, etc. Art sites, are sites where evidence of past art activities are still seen such as the beautiful cave sites of Altamira in Spain, and Las Caux in France.

3.2 METHODS OF STUDY

Scientific reconstruction of early man and his culture is major part of the study of prehistoric Archaeology. There are several important methods for the study of prehistoric Archaeology. First step for the study is collection of data on man and culture. This is done through exploration and excavation. Second step is to fix the time dimension of the materials and data collected. Prehistoric culture has progressed and evolved through

time. Sequential ordering of culture in the background of timescale is necessary for understanding change, development and evolution.

Check Your Progress

2) What are the two different methods of study in Archaeology?

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3.3 EXPLORATION

In most of the cases evidences for prehistoric Archaeology is spread out in the sites. Exploration starts with systematic site survey. Search for sites which had experienced human activities in earlier times is an important part of Prehistoric Archaeology. Such places are known as prehistoric sites. Looking for prehistoric sites is known as exploration or site survey. Sites vary in their type. A site may be a place where people camped/ lived or just came to procure food and other materials or prepared tools, bury their dead or may be a rock surface on which prehistoric men drew, painted or engraved pictures etc. A systematic survey in a scientific way is carried out for understanding of prehistoric archaeology of a given area. Such survey for finding out remains of prehistoric men is known as exploration. Exploration is surface survey for studying the importance of associated prehistoric materials. Exploration points out the importance of the site and determines subsequent need for future excavation.

3.3.1 Aim and Objective of Exploration

Exploration starts with collection of artefacts and associated materials. Purpose of exploration can further be for the following: (a) To locate site as part of salvage archaeology, (b) to locate sites and obtain information relevant to specific problems previously formulated. Goal of exploration may be selective in nature or it could even be biased. Picking up of diagnostic tools, potsherds or any other artefacts may destroy the spatial patterning present on the surface of a site. Prehistoric archaeologist should keep his eyes open for all kinds of evidences. Collection of evidences should be scientific because on the basis of such evidences logical reconstruction of life ways of men of prehistoric period can be made.

3.3.2 Area Selection for Exploration

Before going for actual survey work there are a few choices and understanding are to be made about the area to be explored. Firstly the explorer should have background information about the area. The geomorphology, drainage pattern, land contour, relief, vegetation pattern soil etc are very important deciding factors for possibility of human occupation and activity. Studies of topographic sheets are important. Topographic sheets provide detailed information regarding the area. Aerial photographs may be studied because these often point out unusual features of a land surface, which may not be natural but man-made. Information from published work provides idea about previous work in the area pointing out scope of prehistoric work in the area. Most important part of exploration is meticulous reconnaissance of the surface of the area on foot.

Therefore we may say that two points are outstanding for area selection, firstly, importance of earlier works, secondly actual survey by reconnaissance.

Exploration can be divided into two types, extensive and intensive explorations. The first one is the preliminary and second is in detail. However, both types of exploration are complementary to each other. To complete exploration of an area and to make a complete understanding of the Prehistoric culture of the region, both extensive and intensive methods are to be followed simultaneously.

3.3.3 Extensive Exploration

As the name suggests, this involves extensive area survey. The explorer covers as much area as one needs to do. The aims of extensive exploration are as follows:

- a) To know the general background of the area, its configuration and presence of any archaeologically important evidence. These may be evidences of human activity, such as, tools, artefacts, habitation ground, walls, ditches, roads, burials etc.
- b) The evidences collected are to be related to different geological strata, so that the artefacts could be classified into types and may be arranged into different stages of culture.
- c) The artefact types may further be related to the system of existing cultural stages of the region.
- d) Environmental situation, both of past and present may be understood from extensive exploration. Environmental reconstruction may be made by studying naturally exposed stratigraphy and relief pattern of the area. On the basis of such evidences ecological reconstruction may be made.
- e) Extensive exploration relates the past culture of the area to the present day cultural element of the region. This helps especially with the ethnological reconstruction of Prehistoric Archaeology (Greene, 2003).

3.3.4 Intensive Exploration

Specific objectives guide the method of intensive exploration. Data collected through exploration must be arranged in chronological order and its extent in space should be ascertained. The prehistorians look for the geological context and for the geographical extent of distribution of data collected. In this way the space and time are to be reconstructed for the cultural elements.

Check Your Progress

3) What is exploration and excavation?

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3.3.4.1 Grid System

This is an important part of intensive method of exploration. This system is an aid to mapping and recording the location of artefacts and features found within the site. For drawing the grid a fixed point is to be selected. This point is known as datum point. From this point the grid originates. A line known as site Meridian is drawn from this point in a North South direction. Another line is drawn from the datum point at perfect right angle to the meridian. This line is called base line or the east west line of the site. There may be various types of grids laid down. The basic grid system is the finite or limited grid (Fig. 1). This is laid on a smaller sized site, such as house circle, factory site for manufacturing artefacts, single burial etc. Grids are constructed by driving stakes. The stakes are connected by stretch of strong strings. Taking base line on the one hand and meridian on the other the area is divided into small square units. Size of the units varies according to the choice of the researcher. Each square unit is numbered by marking through the meridian and base line in sequential order. This system gives a proper picture of the site. In this way meaningful reconstruction of the activities carried out in the area by early men could be reconstructed. At a Stone Age work shop site a lot of discarded cores, waste flakes and both finished and unfinished tools are to be expected. At a kill site tools with utility mark on the edges will be found and if one is lucky, he or she may find bones of the kill as well. Such sites are found near Olduvai Gorge in East Africa.

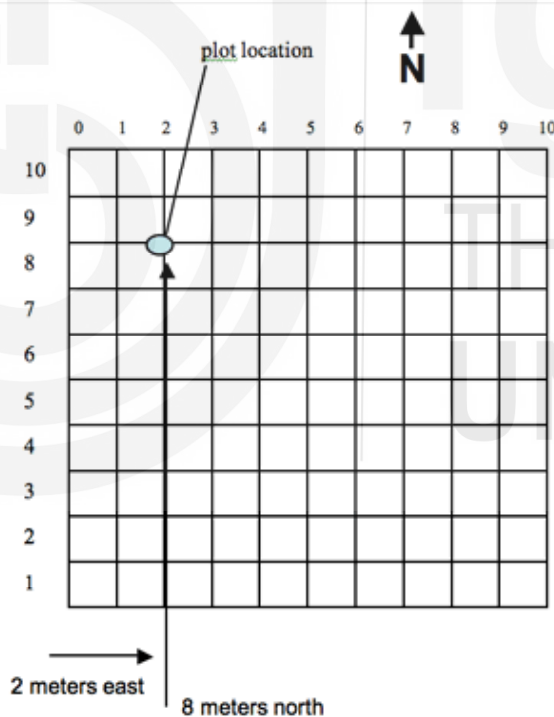


Fig. 1: Grid System

3.3.4.2 Collection of Materials

Exploration is conducted for collection of evidences. One must keep in mind that collection of data from the field also is kind of destruction of evidence from the site. For this reason the collection should be scientific in nature with careful recording of its occurrence in the grid. Earlier antiquarians collected whatever attracted their fancy. Such collection not only misuses the data but gives incomplete information. Complete tools as well as waste materials are important. The understanding of tool making technology depends on the debitage or waste materials. Other waste materials, broken and discarded objects have their own story to add to the cultural reconstruction of the

past. Therefore we may conclude that collection of materials in an exploration should be logical and scientific, not fanciful.

3.3.5 Analysis, Result and Interpretation

All the data collected should be recorded properly on a schedule. The artefacts are to be marked and catalogued. There should be adequate measure to preserve the artefacts collected. Finally according to objective set forth by the prehistoric archaeologist data to be interpreted and analysed.

In India major works on prehistoric sites and reconstruction of culture is done by exploration method. Several examples are cited here. Bruce Foote, a geologist is considered as the father of prehistoric studies in India. He discovered the first handaxe in 1863 from a site called Pallavaram, located near Chennai. He explored the area and for the first time presence of Palaeolithic culture was established in India (Paddayya, 2014). Subsequently many more site surveys followed. Some of the worth mentioning ones are given here. Joint expedition under the Yale and Cambridge universities were conducted in 1936. This expedition explored selected areas of the undivided Indian subcontinent, starting from Kashmir Valley, Punjab plateau, Narmada River Valley to Kortallyar River valley of the erstwhile state of Madras. De Terra, Patterson and others (De Terra and Patterson, 1939) explored and reconstructed Pleistocene glacial sequence around Pirpanjal ranges of Himalayas in Kashmir valley. They also explored Punjab area, especially Potwar Plateau (now in Pakistan) and found out Pleistocene climatic sequence and chronology of the region. From the valley of the River Soan, a small tributary of Indus, a culture which is famous by the name Soan culture was found. Both extensive and intensive methods of explorations were carried out. They reconstructed the culture on the basis of tools that they found in the datable context against geological strata and the nature of their occurrence in naturally exposed sections. Later on explorations in India were carried out by many famous prehistorians. In Narmada Valley De Terra and Patterson explored the Narmada basin and reconstructed cultural sequence of the region. They also showed that culture in the area grew under pluvial condition. Pluvial was a climatic condition which had experienced alternating dry and wet conditions. These were periods of more average annual rainfall compared to subsequent time period of lesser average annual rainfall. They further explored the Kortallyar river valley, where Bruce Foote had discovered Palaeolithic tools. As a result of this we get the account of Palaeolithic culture of India (Sankalia, 1977). Later on number stalwarts explored prehistoric sites of different corners of India and we at present have a complete account of past culture that existed in our country (Paddayya, 2014).

3.4 EXCAVATION

As opposed to exploration, excavation involves study of the under surface materials by digging them out. Excavation must have definite objective, otherwise however, it will be a waste. Excavation is not bulldozing of the surface of the earth but it is to be done meticulously, carefully and with a specific purpose. Excavation is done to discover cultural sequence in the site and also to collect and record details of cultural levels lying below the surface of the soil.

There are two types of digging. One is vertical and the other is horizontal. The vertical digging determines the different cultural levels lying one over the other. For this careful control over stratigraphy is to be maintained. Horizontal digging reveals relationship between each cultural material found in the same level.

Before going for actual digging the excavator must prepare a map of the area and take photograph of the site to be excavated. First work is to form a grid. The choice of laying the grid depends on the purpose of the dig. It also depends on the time, money and other resources available to the excavator. The figure (fig.2) below shows the layout of the trenches of an excavation. Grids are marked by pegs and square units are demarcated by stretched out strings. Some equipment like shovel, bucket and sieve is seen at a corner of the trench. The dirt heap is also located near the sieve.

3.4.1 Kinds of Excavation

First question that comes up in one's mind is where to dig? There are two types of excavation; one is by random sampling and the other by excavating the site completely. The first method is known as test pit or trial trench.

3.4.1.1 Test Pit or Trial Trench

This is also known as *sondage*, meaning sound pit. These are trenches dug to explore what lies beneath. This is a kind of random sampling. There are no hard and fast rules about the size of the trench. Trial digging is carried out first before going into extensive excavation. The place for digging trial trench is selected by means of computer or survey or intuition or at random or by logical reasoning. Test pit may be dug along a steep side of the site or it may be a rectangular trench. Trial excavation provides data on composition and location of cultural remains at the site. It locates areas of activity, especially rich deposits within it. Trial trenches are important for stratigraphy (Harris, 1969). It provides long, vertical profile of the site. Practice is to dig vertically until one reaches the culturally sterile level. Wheeler (1956) wrote that at Arikamedu in Puduchery, he had to dig the trial trench 11 feet below sea level to reach the base of his digging. At Mohenjodaro he went 10 feet below the water table and had to use water pump to reach the level. Test pits not only keep track of the cultural levels but also prevent unnecessary waste of money by digging at the wrong place. Sometimes step trenches are dug from the top of a mound to its base where it cuts into sterile soil. This kind of trench is laid to distinguish early materials from late ones. Later materials are found at the bottom layer. Test trenches are dug for sampling levels throughout the site (Fig. 3).



Fig. 2: Vertical Excavation

(Photo taken by Ranjana Ray at Museum of Human Evolution, Burgos, Spain)

3.4.1.2 Excavation of Large Areas

Once the vertical concept is cleared and vertical succession is ascertained lateral extension of trenches could be made. The purpose of digging large area is to expose the range of

activities that were carried out at the site. If a settlement site is dug, the excavator will try to expose as many habitation levels as possible and also would like to expose all kinds of activities that happened in the past. There too is no hard and fast rule for excavating large areas. It depends on the objective set forth by the excavator and the type of site to be excavated.



Fig. 3: Excavation of Large Area

Photograph taken at Hanoi Vietnam by Ranjana Ray

3.4.2 Other Methods of Excavation

There are a number of other methods of excavations. These are: (i) trenching, (ii) strip method, (iii) quadrant method, (iv) area or block excavation and (v) stripping excavation.

- i) *Trenching*: Long, narrow, rectangular trenches may be laid for getting the cross section of the site. This is especially important for understanding stratigraphy of the site. It provides a long vertical profile. Narrow trenching is used for sampling. This technique is useful for searching for houses, cemeteries and activity areas.
- ii) *Strip method*: This method is used in digging mounds and barrows. Excavation begins at the edge of the area to be excavated and digging continues straight towards the centre of the site in strips. The mound is investigated by working towards the centre in cuts of 5 feet wide.
- iii) *Quadrant method*: The mound is laid out into four quadrants with baulks three or more feet wide.
- iv) *Area or block excavation*: This is orderly excavation of a sizeable area of a site. The purpose is to obtain larger sample of artifacts, features, activity areas etc. This kind of excavation is usually done within a grid system. A baulk of about two feet wide is preserved between each square block of the grid until the very end of the work. This kind of excavation may be either or both vertical and horizontal excavation. The excavator may not always follow a grid system but expose an entire feature, which may be of importance.
- v) *Stripping excavation*: This kind of excavation involves complete removal of the surface material of the surface, so as to expose the stable land surface below. The stripping may expose features like living floor, houses etc. Binford (1972) considered it as the third phase of excavation; first being the test pit, second the area excavation. However stripping may be costly because it needs heavier machinery (Hester *et al*, 1975)

There however, are some special methods of excavation for some special sites like, caves and rock shelters, petroglyphs, water logged sites, underwater sites, graves, stone structures, timber structure and other building materials (Greene, 2003).

3.4.3 Basic Method of Excavation

Wheeler (1956) and many others think the method that an excavator should follow for digging the sites, vary from region to region and depends on the type of site that one undertakes for excavation. In Europe bulldozers are used for excavating Palaeolithic sites (Hole and Heizer, 1965). In most cases excavation is a careful, meticulous process with keen observation and adaptation to the situation. The surface and over burdens are carefully scraped off. Most important thing about excavation is that it is a process of destruction of evidences. Accurate recording of the site, findings in it and associated features are crucial for interpretation and reconstruction of culture of the area.

There are two basic methods. One is to strip the area by shovel in thin layers and thus expose the site horizontally. The other is to dig trenches in the ground into the area against a vertical face (Hole and Heizer, 1969). Archaeologists follow both the methods according to the need of the excavation. Horizontal excavation reveals the areal perspective of the site and vertical excavation is necessary for getting the time dimension of the site.

Layout of the trench is important. The trenches should be divided into square blocks and marked properly with pegs and strings (Fig. 4). The string gives the actual boundary of the trench to be marked. Between each trench balk with a minimum width of three feet should be left. A special “control trench” (Wheeler, 1956) should be made for recording the stratigraphy.

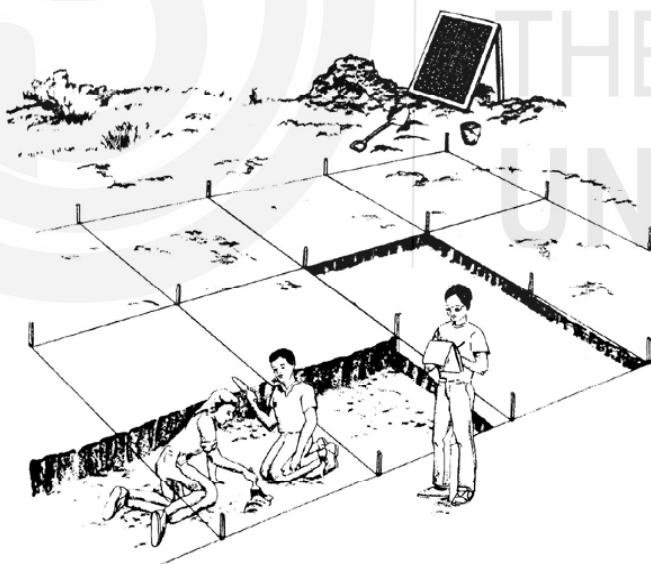


Fig. 4: Excavation

Source: Excavating an archaeological site. (Ward, H. Trawick, and R. P. Stephen Davis, Jr. 1999. *Time Before History: The Archaeology of North Carolina*. Chapel Hill: University of North Carolina Press.

The excavation must have a reference point, known as datum point for measuring the location of material objects and structures. This is chosen by the excavator. If there is no fixed point available the excavator should build a structure for fixing datum point. Throughout excavation this should be maintained. The distance from datum point should be measured through datum line. Datum line is made out of joining points laid tangentially

to the datum point. When excavation is in progress measurement of every single find should be noted and plotted. These will be longitudinal, outward and downward measurements. Lay out together with description of stratum in respect to finds must be maintained. Spoils should be placed at a place away from the trench. Spoil heap should be controlled otherwise important evidences may be lost in it.

All finds are to be recorded with reference to the section, structure and in relation with important objects together with the position of all measured sections. Finds should be classified in the note book with serial number, section label, stratum and sketches. Careful mapping of the objects in each level, plotting them position wise in the trench and photographing the objects are important parts of excavation. Preservation of the objects is important. Many fragile objects and perishable materials need immediate attention.

In addition to cultural materials there may be non artefacts that are to be collected, such as, pollen sample, charcoal, animal bones, plant remains etc. They will also have their own story to tell. They may also help in dating and reconstruction of the contemporary environment.

Finally on the basis of such recording reconstruction of the culture together with interpretation of different activities carried out by the people at the site will be made.

3.4.4 Equipments Needed for Excavation

For an accurate and scientific excavation proper and adequate equipments are necessary. Some of the equipments are given below:

Shovel: Long handled with pointed or rounded head should be provided to each worker.

Picks: These should have stout handles, heavy and with pointed ends. Picks are mainly needed to penetrate hard, compact and stony soil. Excepting for hard soil pick is not used because it damages the artefacts.

Screens for sifting earth: Usually a screen with half and one fourth inch mesh is used. Fine meshed shifts are preferred to find small objects like small tools, teeth and beads etc. Sometimes water screen is used so that all specimens are recovered without damage.

Bucket: It is used for fetching water. Sometimes specimens are washed for better viewing and also for photography. Care should be taken not to wash away fine specimens.

Measuring tape: These should be at least 50' - 100' long.

Smaller implement: Trowels for careful excavation, a rigid fine pointed pick, paint brushes, with 2" and less width. These are used to brush away dry, loose soil and also for washing specimens for photographs. Heavy brush and dust pans, pocket compass, note papers, graph paper, blank forms for recording findings, cataloguing of artefacts, cloth bag, strong paper bags, match boxes for storing artefacts found in the excavation, Soft metal or paper tags for marking the bags etc. Felt tipped pens for marking the boxes and bags, cardboard boxes for storing materials and wooden boxes for storing skeletal remains, wooden stake or iron spikes. These should at least be one foot long. Camera, pen, pencil are other important implements.

Check Your Progress

4) What are the tools required for excavation?

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3.5 CONSERVATION AND PRESERVATION

First of all it is absolute necessity to catalogue each and every finding. Specific source of the artefact should be mentioned. Each should have a catalogue or museum number. Individual finding should be recorded on individual sheets with drawings, which should be to scale. Final analysis will be made from the data recorded in the catalogue. The catalogues must be carefully preserved.

Human beings have immense capacity of producing artefacts. They have been fabricating such objects since very early times, ever since they became human from the rest of animals. About two million years have been passed for the human artefact production. The artistic and other creations of man have been destroyed by natural calamities and anthropogenic factors. At present only a small portion of material culture of man's activity is available, and is the heritage of humankind. It is the responsibility of the present generation to conserve and preserve the heritage for future research. Since these objects carry lot of hidden knowledge it is necessary that the present generation of people collect and properly preserve these vanishing objects for the posterity. The archaeological, historical and ethnological works of human kind carry lot of artistic, aesthetic and functional aspects, and they serve as an index of human civilization, thereby provide clue for understanding bio-cultural evolution. Any loss to such a material is irreplaceable. So it is the primary responsibility of all the culture historians and scientists to take all the precautions to conserve and preserve the objects in laboratories and museums for research as well as for display for public. The task of managing a museum needs knowledge on aspects like collection, transportation, physical cleaning, chemical treatment, display etc.

3.5.1 Care and Handling of Archaeological Objects

Archaeological findings are priceless heritage of humankind, therefore proper care is necessary for conservation of man-made objects, which are vulnerable against temperature, humidity, light, air etc., and biological beings like fungus, pests, insects etc. There are several purposes, for preservation, namely, for research, education, and knowledge of the people whether by a teaching and research department or by the government or private organization, the duty of the people engaged is to take proper care and preserve the objects in an appropriate manner, so that the objects can survive for a longer period of time.

3.6 SUMMARY

Basic method for archaeological anthropology is to identify and classify artifacts made and unmade by men. On the basis of characteristic features known as attributes the artifacts are classified into types. When similar types occur repeatedly, it is known as culture. Culture may be found in a specific locality, region or area. When similar cultures are found over a wide area, it is called tradition. There are various methods for collection of artifacts of early times. When it is a surface reconnaissance, it is called exploration. When the artifacts of prehistoric times are scientifically dug out it is called excavation.

Time and space are important. To understand time there are methods of dating. Geological layers give indication of time dimension. Functional identification is done by ethno-archaeological method. In this method present day parallel is taken and compared for understanding some functions and values for the prehistoric objects to its makers. Finally artifacts collected should be catalogued, analysed preserved properly.

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3.8 ANSWERS TO CHECK YOUR PROGRESS

- 1) Archaeological sites can be identified in the following ways: (i) By archaeological context: (ii) By artifacts content (iii) By geographical location (iv) By artifact content related to site function.
- 2) The two different methods of study in Archaeology are:

First method for the study is collection of data on man and culture. This is done through exploration and excavation.

Second step is to fix the time dimension of the materials and data collected. Prehistoric culture has progressed and evolved through time. Sequential ordering of culture in the background of timescale is necessary for understanding change, development and evolution.
- 3) A systematic survey in a scientific way is carried out for understanding of prehistoric archaeology of a given area. Such survey for finding out remains of prehistoric men is known as exploration.

As opposed to exploration, excavation involves study of the under surface materials by digging them out.

- 4) For an accurate and scientific excavation proper and adequate equipments are necessary. Some of the important equipments are given below:

(a) *Shovel* (b) *Picks* (c) *Screens for sifting earth* (d) *Bucket* (e) *Measuring tape* (f) *Smaller implement*: Trowels, Paint Brushes, Dust Pans, Pocket Compass, Note Papers, Graph Paper, Blank Forms, Cloth Bag, Strong Paper Bags, Match Boxes, Soft Metal or Paper Tags, Felt Tipped Pens, Cardboard Boxes, Wooden Boxes, Wooden Stake or Iron Spikes, Camera, Pen, Pencil etc.

