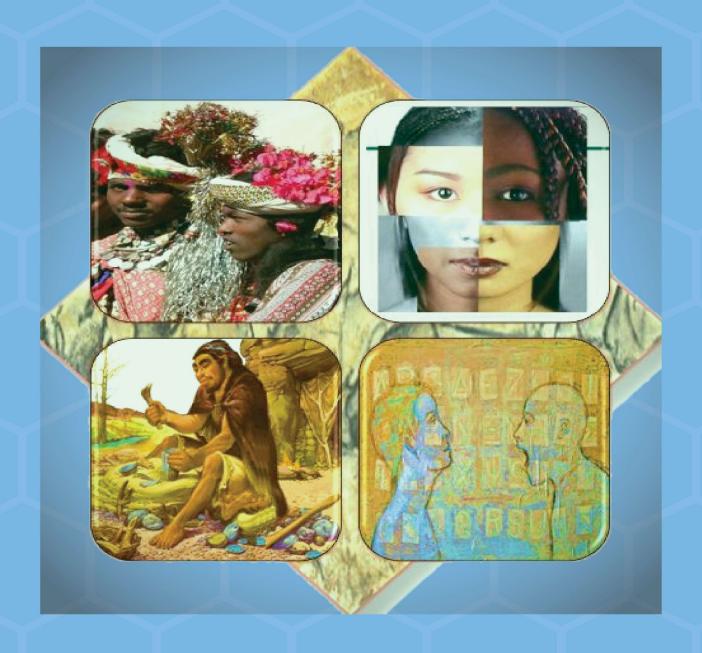


BANC-131

ANTHROPOLOGY AND RESEARCH METHODS





ANTHROPOLOGY AND RESEARCH METHODS

THE PEOPLE'S UNIVERSITY

School of Social Sciences
Indira Gandhi National Open University

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COURSE INTRODUCTION

Anthropology is a holistic science as it deals with all aspects of biological and cultural diversity of humankind. The discipline of anthropology is usually divided into four subfields: physical/biological anthropology, social/cultural anthropology, linguistic anthropology and archaeology anthropology.

Physical/biological anthropology aims to understand the biological origins, evolutionary changes, and the genetic diversity of the human species. Social/cultural anthropologists aims to understand the human social and cultural diversity across the globe, including variation and change. Archaeology deals with the study of past human cultures through their material remains. Linguistic anthropology deals with the study of human language and communication, including its origins, history, and contemporary variation and change.

The holistic approach of the discipline intersects natural science, social science, and humanistic perspective on the human condition. Anthropologists examine all the aspects of humankind from both scientific and humanistic perspectives. The main focus of anthropological research is a deep and rich understanding of who we are as human, how we changed and why we are as we are. Anthropologists engage in field-based research as well as laboratory analyses and archival investigations with established theories, methods and analytical techniques. Each branch of anthropology focuses on a different set of research interests and generally uses different research techniques.

This is a six-credit course. This course will provide an introduction to the subject, origin and development of the discipline, development of anthropology in India and research methods of the discipline. This course is designed for learners who may go on to conduct fieldwork in anthropology or other related fields. In this course you will learn what anthropology is, its major branches, concepts and development of the discipline. You also learn about research methods, tools and techniques that anthropologists employ to study human beings to solve global issues in contemporary changing world.

BLOCK INTRODUCTION

Of all the disciplines that examine aspects of human existence and accomplishments, only anthropology explores the biological and cultural aspects of human beings. Though anthropology is comparatively a young discipline, it occupies an important position in the academics. Even though anthropology took lot of time to develop as an independent discipline of teaching and research, it is taught in almost all universities in India and across the globe. Anthropology is a holistic science. In order to understand its holistic nature, it is important to know the various branches of anthropology. The course is divided into four blocks.

BLOCK 1:The first block is 'Understanding Anthropology'. It provides the learners with the basic understanding of the subject matter and highlights the importance of anthropology. This block consists of three units: **Unit 1** deals with meaning of anthropology, various definitions, scope and significance of anthropology. **Unit 2** deals with the various branches of anthropology. **Unit 3** deals with relationship of anthropology with other disciplines.

BLOCK 2: The second block is 'Origin and Development of Anthropology'. This block consists of three units: Unit 4, History and Development of Anthropology, deals with the growth of anthropology in the world. Unit 5, Anthropology in India, deals with the growth and development of anthropology in India. Unit 6, Fieldwork Tradition in Anthropology, describes the beginning and growth of fieldwork tradition in anthropology.

BLOCK 3: The third block is 'Major Fields of Anthropology'. This block deals with growth and development of major branches of the discipline. This block consists of three units: **Unit 7** describes the concepts and developments in biological anthropology. **Unit 8** describes the concepts and developments in social anthropology. **Unit 9**, Concepts and Development in Archaeological Anthropology, describes the concepts and developments in prehistory and archaeological anthropology.

BLOCK 4: The fourth block is 'Research Methods and Techniques'. This block provides a basic toolkit for field research methods in anthropology. It provides a foundation for the learners to plan and execute their own research project. The fourth block is 'Research Methods and Techniques'. It describes the main components of research methods in anthropology. This block consists of three units: **Unit 10**, Approaches of Anthropological Research, deals with basic issues and approaches of anthropology. **Unit 11**, Methods, Tools, and Techniques, outlines the various methods of data collection from fieldwork, in which the researchers live among the societies studied and observe their ways of life closely. **Unit 12**, Research Design, delineates the research processes and the ways and manners of conducting the study.

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Unit 1	: Definition, Scope and significance of anthropology	9-21
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UNIT 1 DEFINITION, SCOPE AND SIGNIFICANCE OF ANTHROPOLOGY*

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1.0	Introduction

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Learning Objectives

After having read this unit, you should be able to:

- define anthropology;
- list various defining characters of the discipline;
- underline its objectives; and
- describe its scope and significance.

1.0 INTRODUCTION

We, humans, have our own made world. Apart from our physical presence, there is also our social, cultural and practical world. We need anthropology when we have to know and understand things related to disciplining ourselve as a subject. It would be very interesting to understand human beings as a subject in human form. Humans want to understand themselves in all their forms.



Contributed by Dr. Prashant Khattri. Assistant Professor, Department of Anthropology,, University of Allahabad, Allahabad

1.1 DEFINING ANTHROPOLOGY

Giving a single comprehensive definition of anthropology is difficult as the subject is divided into four sub-branches that deal with different aspects of human existence. To be called an anthropologist a person needs to have studied all the four branches:

- social-cultural anthropology
- biological anthropology
- archaeology
- linguistic anthropology.

However, generally in India and elsewhere students tend to specialize in one of these branches for obtaining master's degrees and doing research. Anthropology is a holistic discipline as it tries to understand human existence from different angles of culture, biology, history, and environment. Eric Wolf (1964) states "anthropology is less a subject matter than a bond between subject matters. It is in part history, part literature; in part natural science, part social science; it strives to study men both from within and without; it represents both a manner of looking at man and a vision of man-the most scientific of the humanities, the most humanist of sciences."

Anthropologists are interested in understanding the origin and development of human species. They are also interested in knowing how environment affects culture and how culture has an impact over the growth and development of human personality. They inquire about the existence of human variation and try to find reasons behind such variations. They are equally interested in the reconstruction of human past and its culture. Besides having such diverse interests, anthropologists also have a diverse and unique tool kit in the form of research methods that help in answering such questions. Anthropologists also apply their knowledge and methods of research in solving practical problems and thus giving rise to a new field in anthropology called applied anthropology.

The word anthropology literally means science of human as *anthropos* means human and *logos* means science. However, this definition gives a very broad and vague idea about the subject matter of anthropology as other disciplines such as psychology, history and sociology can also be considered as studying human beings.

The American Anthropological Association defines anthropology as "the study of humans, past and present. To understand the full sweep and complexity of cultures across all of human history, anthropology draws and builds upon knowledge from the social and biological sciences as well as the humanities and physical sciences. A central concern of anthropologists is the application of knowledge to the solution of human problems" The basic idea in this definition is that anthropology is an integrative science that tries to understand human in its totality. It studies cultural and biological diversities for a better understanding of human existence. Anthropology appreciates and celebrates diversity.



1.1.1 Holistic/Integrated Discipline

Integrating biological, archaeological and cultural dimensions to understand human past and present can generate interesting results. An example can illustrate this point more clearly. We all have studied about the Indus Valley Civilization and know something about the fascinating culture and society during that period. Its past had been reconstructed on the basis of archaeological findings in the form of artifacts, seals, statues, objects of daily use, objects of luxury etc. as its script has not been deciphered. The past is reconstructed based entirely upon contextual findings and scientific analysis.

Some male and female skeletal remains have been found from Harappa. On genetic analysis of these remains found that most of the male skeletal remains were genetically not related. On the other hand, most of the females were genetically related to each other. Since most of the females were related genetically, therefore, the residence pattern after marriage could be 'matrilocal' in nature. This suggests that after marriage a male might have go to his wife's house to reside, which is opposite of what we observe generally in India. This may also have important bearing in the context of position of women in the society. It has been observed that in matrilocal societies, position of women is better than their patrilocal counterparts. Anthropology therefore takes a holistic view of human existence. It starts from placing the Homosapiens in the evolutionary scheme to analyzing the variations within the human species. It then tries to understand the emergence and diversification of culture and emergence of civilization (McIntosh, 2008).

1.1.2 Comparative Science

Besides being holistic there are other defining characteristics of the subject. Anthropology since its inception had been a comparative science. It is through the method of comparison that an anthropologist reaches to some kind of generalizations. Different cultures and human populations are compared in order to understand similarities and differences between them. During the emergence of the subject, comparison was used as a method to illustrate and categorize different cultural groups into an evolutionary sequence. However, over a period of time (from the beginning of twentieth century) due to the emergence of new ideologies in the subject, comparison was made in order to reach certain generalizations about the structure of the society and laws governing the society.

The comparative method also generated an important debate between ethnocentrism and cultural relativism. In the beginning, comparison between 'simple' and 'complex' societies led to a belief that some societies are superior to the others and the western societies are at the epitome of cultural evolution. This gave rise to an ethno-centric bias. However, over a period of time it was realized that every culture should be understood in its own specific context and there is nothing like the concept of superior or inferior culture, this came to be known as the idea of cultural relativism (Harris, 1968/2001). It is this idea which adds value to the subject and makes us more tolerant towards other cultures and populations. Such kind of a debate and synthesis of idea was possible only in a subject like anthropology which is concerned with human and cultural variations.



1.1.3 Fieldwork Method

The hallmark of anthropology is its fieldwork method. B. Malinowski popularized intensive fieldwork method. An anthropologist is expected to spend a considerable amount of time in the field (around one year). Traditionally a field is defined as a place inhabited by a cultural group. Mostly anthropologists choose their field among the tribal communities that inhabit certain far-flung hilly, forest or coastal areas. Most of the earlier stalwarts in the subject chose their field among such communities. For example,

- Malinowski worked among the Trobriand Islanders inhabiting Papua New Guinea.
- Evans Pritchard worked among the Nuer community of Anglo-Egyptian Sudan,
- Radcliffe Brown worked among the Andaman Islanders,
- Margaret Mead worked among the Samoans.

It is also expected from a fieldworker that she will not only stay with the people that she intend to study but also learn their language and ways of life. She is expected to participate in the daily activities of the people and at the same time observe how people and their various institutions function. This method is known as 'Participant Observation'. Employing this method, a fieldworker participates in the social life of the community she is studying and observes how people negotiate their cultural and social lives.

This method was popularized by Malinowski as he was of the opinion that an anthropologist should not rely on what people say that they do but rather an anthropologist should observe for herself what people actually do because sometimes people won't tell you what they exactly do or how they carry out their social and cultural activities as they might indulge in politics of representation where they might project the 'ideal' and conceal the 'actual'. Therefore in order to understand the 'actual', observation is needed. The idea of participant observation will get a researcher closer to the way people think and carry out their activities. This is the way of understanding the people's point of view or people's perspectives (Robben and Sluka, 2007).

Activity 1.1.3

Watch a BBC Four Documentary on Malinowski "Tales From the Jungles: Malinowski" for getting a closer look into anthropological fieldwork.

Check Your Progress 1

1)	Anthropology has how many sub-branches?

2)	Who popularized intensive fieldwork method?	Definition, Scope and Significance of Anthropology
3)	What is 'Participant Observation'?	

1.2 OBJECTIVES OF ANTHROPOLGY

Objectives of a discipline can be defined at two levels:

- a) at the level of the students of the discipline which includes the objective of studying the discipline.
- b) at the level of different stakeholders, that is to say, that how the knowledge created by research in a particular discipline is being negotiated by people at large or what purpose does it serve for different people such as administrators, thinkers, and researchers.

At the first level, the objective of anthropology is to make students aware of and appreciate human and cultural variations. This, in turn, leads to a much nuanced approach to various life situations. It is the only discipline that takes into account the bio-social existence of the human population. Most of the path-breaking researches in anthropology have been conducted among the tribal and peasant groups and therefore it brings a largely marginalized section of human population into dominant public and intellectual discourse through knowledge sharing and dissemination.

1.2.1 Cultural Relativism

At the second level, of different stakeholders, one would find that, anthropology as a discipline started with the objective of studying human and cultural evolution. Cultural evolution like human evolution was thought to have occurred in a stage-by-stage manner from simple to complex cultural and societal traits. This led to the belief that most of the tribal societies around the world represent an earlier stage of cultural evolution and will ultimately be evolved to the level of western cultures and civilization. This led to a kind of ethnocentric bias. This bias tilting towards the superiority of the white western 'race' gave impetus to the idea of colonialism as it was considered e the duty of the 'white men' to civilize the 'primitive' societies. This earlier idea was used to consolidate western colonialism in Africa and Asia

In the Indian context most of the early anthropologists were British and their main aim was to study different population in the sub-continent in order to improve the administrative mechanism. However, not every anthropologist and scholar of human culture was convinced of the line of thought of the

Understanding Anthropology

evolutionists. This led to a change in the objective of the subject towards a more synchronic view or in other words the objective changed from anthropology as a study of history to a discipline that became more concerned in studying societies at the present state or as here and now. This objective was most visible in the works of Malinowski who rejected the idea that simple social institutions were inferiority to complex one. He was of strong view of that the idea of basic needs that are common to all human beings and because of which different social institutions are formed (Harris, 1968/2001).

1.2.2 Nature-Nurture Debate

Pioneers in the subject have used the anthropological methodology to fulfill the objective of challenging certain stereotypes and assumptions. It is through this objective that anthropologists have contributed positively towards some basic debates in both natural and social sciences. One such debate centers around the nature-nurture controversy. It is still being debated that which among the two is more important. Is it nature or biology that determines human capabilities and personalities or is it the nurture or culture that contributes towards this end? Leaning heavily towards any one of them can lead to dangerous conclusions.

The case in point here is the notion of 'race'. Although race is a social construct, people tend to believe that certain physical characteristics go with certain behavioral patterns. In other words, human behavior is considered to be naturally determined. This led to the formation of certain stereotypes related to race. For instance, this led to a belief that certain races are superior to others. However, this line of thinking was not acceptable to some anthropologists and pioneer among them was Franz Boas.

Boas was of the opinion that human behavior is culturally determined and to fulfill this objective and to establish this line of thinking he prepared one of his students Margaret Mead to study the adolescent behavior among the Samoans. It was widely held before this study that adolescent was an age of trauma and disturbances and adolescent boys and girls tend to engage in a rebellious behavior. Such kind of behavior was thought to be rooted in their genes and thus was thought to be universal. Boas contended that if he can find even one example where adolescent was not a period of trauma and disturbances then the biological basis of such an assumption could be challenged and its cultural basis could be established. With this objective in mind, Margaret Mead studied the adolescent behavior among the Samoans and found that their adolescent was unlike that of Americans. Samoan adolescents seemed to be well adjusted with no associated trauma or disturbances. With such a finding the importance of nurture became established (Harris, 1968/2001).

1.2.3 Applying Anthropology to Solve Life Problems

Anthropology is studied and practiced to bring about positive change in the lives of the people. This is the applied aspect of anthropology where anthropological knowledge is used to help people lead better lives. Development seems to be the buzz word in the present global context. It requires utilization and consumption of natural resources in the form of forest produces, minerals, coal, etc. that in turn may require felling of trees

Definition, Scope and Significance of Anthropology

for wood and mining to extract minerals. Such activities lead to large-scale displacement of people mostly tribes who inhabit such areas for centuries. It is in this context that the anthropological knowledge and insight comes in handy. Anthropologists are people who can take stand for such a marginalized section of the population. Knowledge about tribal needs and wants can help in protecting their rights. In this context anthropology relates to the issue of advocacy of civil rights (Olivier de Sardan, 2005).

The applied dimension of anthropology was also largely influenced by the World War II (Eames and Goode, 1977). During the Second World War, it was realized that anthropological knowledge and methods can be used to understand the enemy culture in order to hasten victory of the allied forces. One such study was conducted by Ruth Benedict on Japanese prisoners in America in order to understand the Japanese culture. Such studies came to be known as studying 'culture at a distance' because in such a study the anthropologist is not going among the natives in their land but trying to study their culture through some cultural representatives, like in this case, war prisoners. Based on her study, Benedict wrote Chrysanthemum and the Sword. Studies with similar objectives were conducted by other anthropologists during the Second World War in America that focused on the issue of dietary patterns of the people. It was believed that if the dietary pattern can be studied and changed in accordance with food items that were in greater supply during the war then the food crisis may be resolved (Eames and Goode, 1977).

1.2.4 Universal vs. Specific Knowledge

The basic underlying objective of the subject has been to juxtapose the local with the global. In other words, the anthropological knowledge has grown from understanding the particular in the context of the universal. This is to say that even when an anthropologist looks on the particular, her aim remains universal. This is evident from the above examples where an anthropologist chose a very specific community for her study and based on such a study aimed at answering certain basic questions which are more fundamental in nature.

Acquiring particular knowledge also fulfills the objective of comparing it with the known. For example, if the objective of an anthropologist is to understand the position of women in the society then she will start with asking the question what is the position of women across different societies? After having obtained answers from different societies, she will compare them in order to reach some kind of conclusions. This kind of particular knowledge also has some advantage in the form of suggesting alternative strategies and structural formulations that may lead to solving present problems. For example, while studying gender equality, if alternative models of equal status of men and women in the society are available then they can be emulated on a larger scale (Beard-Moose, 2010).

Similarly, understanding religion and its function in the contemporary society will begin from similar questions of the function and status of religion in other societies. This specific/particular knowledge about a single society helps in re-orienting and reframing fundamental questions and concepts. For example, Kathleen Gough studied the marriage and family patterns among the Nayars of Kerala which led to the reformulation of the definition of

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marriage which was till then defined as a union of male and female with common residence for attaining certain social goals.

Another important dimension of the particular knowledge is the study of the indigenous knowledge system of tribal groups. Such indigenous knowledge is the product of specific socio-economic and ecological situations that over a period of time become important strategic tools for survival. Recently this indigenous knowledge system has been given prime importance even by the Government of India as it has proved to be of great help in managing extreme life conditions during natural disasters.

Some communities have lived with disasters such as floods and droughts for decades and therefore have developed specific knowledge related to its management and resilience. This knowledge is integrated with the larger disaster management plans (National Policy on Disaster Management, 2009). Similarly indigenous knowledge related to medicinal plants and their use is of great importance for treating certain diseases.

Check Your Progress 2

4)	What is the main objective of anthropology?
5)	What is culture relativism?
6)	Who studied the adolescent behaviour among the Samoans in the 1920s?

1.3 SCOPE OF ANTHROPOLOGY

1.3.1 Urban Anthropology

Most of the anthropological studies in the past were conducted upon isolated social groups that can be called 'tribes'. Even today, anthropologists have not completely abandoned their bailiwick for studying such groups as most of the anthropological fieldworks planned by independent researchers and groups are conducted among these tribal groups. However, besides carrying out the ethnographic descriptive account of these groups, anthropologists are also interested to understand various cultural and social changes that are taking place among such communities.

Definition, Scope and Significance of Anthropology

The scope of the subject has also widened especially after the 1960s when a new sub-branch of anthropology emerged known as urban anthropology (Eames and Goode, 1977). As the process of urbanization picked-up pace, urban centers attracted the population of the rural areas searching for better livelihood opportunities. Also, with the process of development gaining importance, a lot of forests and agricultural lands that belonged to the tribes and peasant communities was taken for building dams, mines, etc. which led to a large-scale migrations and displacement of these communities. With such communities migrating to urban areas, anthropologists also shifted their attention to these areas and hence emerged studies that focused on 'peasant in cities' (Eames and Goode, 1977). Such studies mainly focused on the adaptability of the migrant community to new places and ensuing social and cultural changes that accompanied such migrations.

The discipline of archaeology also contributed to urban anthropology. Archaeologists are more concerned with the study of the emergence of urban centers and the factors that led to their emergence. Such studies become important in the backdrop of understanding the processes that led to urban civilizations (Eames and Goode, 1977).

1.3.2 Anthropological Methods

The applied dimension of anthropology has broadened its scope by applying the methods of anthropology to solve the problems of communities. Applied anthropology uses tools like Rapid Rural Appraisal (RRA) and Participatory Rural Appraisal (PRA) for addressing particular problems and then suggesting solutions. Under the RRA a quick appraisal of the problems of a rural community is made in order to bring about time-bound changes in their conditions. With the use of PRA, the anthropological notion of insider's perspective comes to life (Bernard, 2006). Under the PRA techniques, people participate in negotiating the meaning and extent of their problems and suggest solutions.

For example, people affected by floods might sit together and prepare vulnerability maps that may mark those areas in their vicinity that are more prone to floods. Similarly, they may prepare safe route maps that can provide alternative routes in case of an emergency situation (Khattri, 2012). PRA is based upon the notion that 'people know the best'. A lot of tribal communities in the central Indian belt have been displaced from their lands on the pretext of developmental activities in the form of building dams, mining, acquiring forest produce especially wood, etc. as these areas are rich in mineral and forest resources. Anthropologists have been studying such processes and have advocated for the rights of such tribes.

1.3.3 Business Management

Anthropologists have ventured into new and challenging areas of business management and disaster management. The twin concepts of society and culture are the hallmark of anthropological studies. Anthropologists are considered to be specialists in understanding culture, society and various changes that occur in these systems. The field of management anthropology makes use of this specialty of an anthropologist in understanding cross-cultural trade and business practices. Business is not only limited to economic



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transactions rather it envisages a more dynamic behavioural aspect. People meet and interact with each other and crack deals worth billions of dollars. These behavioural aspects are best understood by anthropologists. The anthropological method of ethnography and in-depth study at a micro-level come in handy while studying management-related issues. The entire range of anthropological tools can be applied basically at three levels:

- 1) at the level of understanding the organizational structure and culture of a multi-national corporate business house.
- 2) at the level of understanding the behavior of consumers and customers for enhancing product design for attaining more profit.
- 3) at the level of understanding the impact of market culture on the lifestyle and social institutions like family, marriage patterns etc. in the society.

The anthropological tool of the comparative method provides an opportunity for cross-cultural comparisons and reach to a generalization of best practices in relation with marketing and organizational set-up of an organization (Khattri, 2012).

1.3.4 Disaster Management

Anthropologists have a lot to contribute towards disaster management. Disasters are increasing globally which is resulting in large-scale damage to property and life. This has led to a realization that disaster management has to be a continuous process rather than limited to a post-disaster relief event. Now the efforts are made towards reducing risk and vulnerabilities of various social groups. Some people are more vulnerable than others on the basis of poverty, gender, age, social capital, and the physical space that they occupy. A disaster, rather than being a physical or natural event, is a product of hazards and socio-spatial vulnerabilities. Anthropologists have contributed towards disaster management by studying and suggesting methods of vulnerability reduction (Khattri, 2012).

1.3.5 Biological/Physical Anthropology

As anthropology is a holistic discipline, the study of human beings as biological entities also fall under the scope of the subject. Here anthropologists are largely concerned with human paleontology and human genetics. In human paleontology, studies are conducted on human fossils and an attempt is being made to unravel the evolutionary history of humans (Ember et al., 2002).

The field of primatology is also related to human beings as it tries to trace the roots and points of departures that led to the evolution of Homo sapiens (Ember et al., 2002). The field of human genetics tries to understand human variations, disease distribution across regions and human adaptations on a genetic level. There are areas like human growth and nutrition where both physical/biological and socio-economic dimensions become integrated. Growth and nutrition are affected by socio-economic factors such as income, group status and social capital (Ember et al., 2002).

1.3.6 Archaeological Anthropology

Studying societies and cultures of the remote past also fall under anthropology. This branch is called archaeological anthropology. Here the main emphasis

Definition, Scope and Significance of Anthropology

is on reconstructing the past societies on the basis of evidences that may appear in the form of artifacts, cave paintings, etc. Anthropologists try to reconstruct the lifestyle of the people who either left no written records or those who left certain written material but which could not be deciphered as yet (Ember et al., 2002).

Check Your Progress 3

7)	What is applied dimension of anthropology?
8)	What is PRA method?

1.4 SIGNIFICANCE

Anthropology acquaints us with human, cultural and biological variations. This realization makes us more sensitive to the aspirations of different groups in the society. Anthropological methods of in-depth fieldwork and participant observations bring out significant results in the form of giving voice to people's experiences. Such methods are also adopted by other disciplines like history. Oral histories of different oppressed communities are generated using these methods. This becomes important in the backdrop of the emergence of 'political public'.

An anthropological concern with the tribal societies helps in understanding them better and in turn lead to better policy formulations for their development. The British to a great extent were able to rule Indians because of their training and knowledge in anthropology. The subject is also significant because it advocates a holistic understanding of humans as opposed to partial and more specialized understanding. This furnishes a complete picture of any event or phenomenon. For example, if a new drug or a treatment regimen for a disease needs to be introduced in a tribal area it is bound to meet with resistance as the two world views- modern medicine and traditional health care- are not compatible to each other. The anthropological solution would be against the forceful introduction and it would comply with a more nuanced approach of making people realize the importance of such regimen through their cultural metaphors.

Anthropology tries to capture the uniqueness of human existence. It studies different cultures and societies. In the present globalized context, such studies become important as people are interacting with different cultures more frequently. Anthropology makes us more conversant with different cultures and enables us to appreciate diversities.

The kind of knowledge that an anthropologist seeks is less in supply because anthropology emerged quite late on the academic scene. It emerged as an academic discipline only in the 19th century. Disciplines like physics, chemistry and mathematics predate it as human beings started studying themselves and their own behavior quite late. This calls for further research on various dimensions in which an anthropologist is interested and thus acquires significance as a separate discipline (Ember et al., 2002).

1.5 SUMMARY

Anthropology is a subject that studies human beings in time and space. It is a holistic discipline based on the notion of cross-cultural comparisons. Anthropology since its inception had been a comparative science. It is through the method of comparison that an anthropologist reaches to some kind of generalizations. Different cultures and human populations are compared in order to understand the similarities and differences between them. Anthropology is not a single discipline but an amalgam of different branches, namely physical, social and archaeology, linguistics. These three branches taken together help in giving a total picture of the human existence.

Anthropologists are interested in understanding the origin and development of human species. They are also interested in knowing how the environment affects culture and how culture has an impact on the growth and development of human personality. They inquire about the existence of human variation and try to find reasons behind such variations. They are equally interested in the reconstruction of the human past and its culture.

Anthropologists also have a diverse and unique toolkit in the form of research methods that help in answering questions and queries relating to the origin and development of man. In the new field of applied anthropology, anthropologists apply their knowledge and methods of research in solving practical problems.

The objective of the subject has been to juxtapose the local with the global. In other words, the anthropological knowledge has grown from understanding the particular in the context of the universal. This is to say that even when an anthropologist looks on the particular, her aim remains universal.

The hallmark of anthropological enquiry has been its fieldwork method. It is with this method that anthropologists are able to understand the 'other culture' or different culture including their own in a better way. As anthropology is a new academic discipline, it needs a lot of research to enrich its knowledge base that it may meet the present global challenges.

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1.7 ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress 1

- 1) Anthropology is divided into four sub-branches: social-cultural anthropology, biological anthropology, archaeology and linguistic anthropology.
- 2) B. Malinowski popularized intensive fieldwork method.
- 3) Participant Observation is the method in which the researcher participates in the daily activities of the people and at the same time observe how people and their various institutions function.

Check Your Progress 2

- 4) The objective of anthropology is to make students aware and appreciate human and cultural variations.
- 5) Every culture should be understood in its own specific context and there is nothing like the concept of superior or inferior culture. This came to be known as the idea of cultural relativism.
- 6) Margaret Mead.

Check Your Progress 3

- 7) The applied dimension of anthropology has broadened its scope by applying the methods of anthropology to solve the problems of the communities.
- 8) Participatory Rural Appraisal (PRA) is a method that aims to incorporate the knowledge and opinions of rural people in the planning and management of development projects and programmes for them.

UNIT 2 BRANCHES OF ANTHROPOLOGY*

Contents

- 2.0 Introduction
- 2.1 Physical/Biological Anthropology
 - 2.1.1 History and Development
 - 2.1.2 Current Fields of Study
- 2.2 Socio-cultural Anthropology
 - 2.2.1 History and Development
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 - 2.4.2 Current Fields of Study
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- 2.6 References
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Learning Objectives

After going through this unit, you will be able to:

- understand the different branches of anthropology;
- critically evaluate the interrelationship among the different branches of anthropology; and
- understand the current fields of study within the subject.

2.0 INTRODUCTION

Anthropology is a holistic and multi-faceted discipline dealing with the study of man in totality. It studies man not only as a part of nature but also as a dynamic creature in terms of biological and social features. Anthropology is holistic because all aspects of culture and society, for example, religion, social life, politics, health, and technology, are studied in an integrated and comprehensive manner.

Anthropology is also referred to as a comparative study of man because it takes into consideration the similarities and differences in human body, behaviour and values of all human groups. The wide scope and vastness of anthropology necessitates its division into four branches. The four branches of anthropology are:

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- biological/physical anthropology
- socio-cultural anthropology
- archaeological anthropology
- linguistic anthropology.

Anthropology retains its holistic orientation by ensuring the interconnectedness and interrelationship among its four branches as well as with humanities, social sciences, biological sciences and physical sciences.

2.1 PHYSICAL/BIOLOGICAL ANTHROPOLOGY

Physical anthropology, now popularly known as biological anthropology, is the oldest branch of anthropology. Physical anthropology studies the human body, genetics and the status of man among living beings. As the name indicates, it studies the physical characteristics of man. It uses the general principles of biology and utilizes the findings of anatomy, physiology, embryology, zoology, paleontology and so on. Paul Broca (1871), the famous biologist, defined physical anthropology as the "science whose objective is the study of humanity considered as a whole, in its parts and in relationship to the rest of nature" (cited in Basu Roy: 2012: 5). According to Herskovits "Physical anthropology is, in essence, human biology." Piddington says "the chief subject matter of the study of Physical Anthropology is the classification and characteristics of human races." Another important field of study in physical anthropology is the process of human evolution which shows how human body has evolved through different stages (cited in Das: 1996:3).

Physical anthropology was initially devoted to the study of measurements and observations on the human body and human skeleton. Today physical or biological anthropology encompasses the following:

- the study of evolutionary biology and human genetics
- hominid evolution to understand the origin of modern humans
- biological differences in human populations
- a bio-cultural overview on human growth and development.

2.1.1 History and Development

Although physical aspects of man have been studied since the time of Herodotus, "the Father of History," it was only during the latter half of the 19th century that physical anthropology developed as a systematic science.

Herodotus (c.484 B.C - c.425 B.C) in his writings mentions the differences in human skulls of Egyptians and Persians and attributes them to environment. Hippocrates (c.460B.C - c.377 B.C), "the Father of Physic", is the pioneer in the field of physical anthropology. He made several contributions, two of which, *De naturahominis* and *De aeraacquiset loci*, are of special interest to anthropologists.

Aristotle (c.384 B.C - c.322 B.C) viewed man as a social animal and his study was based on biology. His work on the physical and mental set-up of man was unaffected by the dogmas of religion and philosophy. Although he

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placed man among animals, he also noted their distinguishing features such as the relative size of the brain, the biped gait and the mental characters. Galen (131–200 A.D) in Rome brought out a series of monographs on muscles, nerves, foetus formation and so on. Andreas Vesalius (1514 – 1564) studied the different anatomical features of man and apes which created a revolution in the anatomical studies of those days. His study on human anatomy was based on direct observation and he was able to bring many new thoughts and ideas. He laid the foundation of modern anatomy.

Towards the close of the 17th century more studies were done from which Johann Sperling's *Physical Anthropologia* (1668) and Samuel Haworth's *Anthropologia or Philosophical Discourse Concerning Man* (1680) are worth mentioning. Around the same time Edward Tyson (1650 –1708), a fellow of the Royal Society whose main interest was on comparative morphology, conducted the first systematic research on anatomy. His work *Orang-Outang, sive Homo Sylvestris: or, the Anatomy of a Pigmie Compared with that of a Monkey, an Ape and a Man* (1699) is regarded as the first attempt in the analytical study on the anatomy of anthropoid ape.

The 18th century is marked by outstanding contributions made by Linnaeus, Buffon and Blumenbach. Swedish Carl Linnaeus (1707–1778) in his immortal work *Sytema Nature* designated each living organism by two Latin names (binary nomenclature), one for genus and the other for species. From the days of Linnaeus man has been scientifically known as Homo sapiens. Buffon (1707–1780), the French contemporary of Linnaeus, discussed the changes in the organic world in his voluminous work *Historic Naturelle*.

But it was the French Lamarck (1744 – 1829) who came forward boldly with observations on the descent of man from the anthropoid apes. Lamarck gave considerable importance to the erect posture of man, occasionally assumed by the apes, for human evolution. Lamarck is remembered for his doctrine that the characteristics developed during the lifetime of an individual are transmitted to the succeeding generation. J.F. Blumenbach (1752–1840) known as the 'father of physical anthropology' was the real founder of craniology. He won recognition as a craniologist through his publication *Decades Craniorum*.

During the later part of the 19th century, anthropologists like Broca, Fowler and Turner followed the path of Blumenbach in the craniological studies. J.C Pritchard (1786 – 1848), in his *Researches into the Physical History of Man* (1848), contributed some classified and systematized facts on the races of mankind. Samuel George Morton (1786 – 1848) used anthropometric measurements to study human physical variation. The year 1859 is highly remarkable in the history of anthropology. With the publication of Charles Darwin's book *Origin of Species* a revolution started in the line of thinking.

The Societie de Anthropologie de Paris was established on 19 May 1859 and Paul Broca (1824 – 1880), the French anthropologist and physician, was appointed its secretary. He threw new light on the different lines of the study of cranial anthropometry. From 1880 onwards Joseph Deniker, a friend and associate of Broca, recognised 29 racial elements from his study on racial features in the world population. In Germany Virchow (1821–1902) contributed to the field of physical anthropology through his works on skull pathology. Landsteiner's study of the blood groups of man opened a new

Branches of Anthropology

vista in the analysis of anthropological data. Ales Hrdlicka's (1860–1943) contribution towards the development of physical anthropology at the Smithsonian Institute in America can never be underestimated. It was solely due to his efforts that the *American Journal of Physical Anthropology* was established in 1918. He also encouraged the creation of the American Association of Physical Anthropologists in 1930.

In course of time the study of physical anthropology became more specialized and scholars like Weiner, Ashley Montagu, Hooton, Barnett, and Zuckerman contributed towards the study and development of the varied sub-fields of physical anthropological studies. The modern trend in physical anthropology started from the beginning of the 19th century. Franz Boas (1858–1942) laid emphasis on the study of human races in terms of culture. The problem of race has been treated from the different angles by anthropologists like Huxley and Haddon (*We Europeans*, 1935), Dahlberg (*Race, Reason and Rubbish*, 1942), Ashley- Montagu (*Man's Most Dangerous Myth*, 1945), Washburn (*The Races of Europe, 1945*), Boyd (Genetics and the Races of Man, 1950). The UNESCO statement on the nature of Race and Race differences (1952) has presented an integrated view of a number of physical anthropologists and geneticists, which has resulted in a publication like. *The Race Question in Modern Science*, in the year 1956, in the study and analysis of Race. (Sarkar: 1997)

In 1939, forensic anthropology developed as a specific branch of physical anthropology due to the pioneering contribution made by W.M. Krogman. In 1965, Kerley published a work on the estimation of age at death in skeleton. This method was then revised and improved by Atilqvist and Damstern (1975), and Thompson (1979). In 1978, American Board of Forensic Anthropology was established. The efforts of Sherwood Washburn towards the reintroduction of field work tradition during the 1950s and 1960s paved the way for the development of contemporary anthropology.

2.1.2 Current Fields of Study

The study of physical or biological anthropology has achieved new heights as much emphasis has been laid on the systematic orientation of various approaches for its development.

Palaeo-anthropology

Palaeo-anthropology, or human evolutionary studies, focus in documenting the biological history of mankind. The human evolutionary history of man is reconstructed by a paleo-anthropologist on the basis of his study of fossilised skeletal remains collected from different layers of the earth. Paleo-anthropologists are thus specialists in comparative anatomy of man and apes and they evaluate the fossil remains found from different sites and establish their status and evolutionary significance.

Palaeo-primatology

Palaeo-primatology deals with the study of living and fossil primates. Primates are the most diversified of all animals and these include man—the focus of anthropological study. Hence an integrated study of the primates helps in understanding the position of man. Through such studies attempts are made for preserving the habitats of our closest living primates.

Osteology

Osteology refers to the study of bones. An osteologist studies the bone structure, skeletal features and morphology and ascertains the age, sex, growth, development and death of the human remnants.

Human Genetics

According to E.C. Colin, "genetics is that branch of biology which deals with laws of principles of heredity and variations as observed in plants, in animals and in man. Human genetics, the study of human heredity, understand the human physical characteristics transmitted through the process of heredity from one generation to another generation." (Das, 1996: 3-4). Human genetics provides a theoretical framework for understanding the biology of the human species. The introduction of the study of human genetics resulted in designating physical anthropology as biological anthropology.

Population Genetics

A population in a genetical perspective is defined as "a reproductive community of sexual cross fertilizing individuals which share in a common gene pool." (Cited in Sarkar: 1997: 53). Population studies provides an understanding of the processes of evolution i.e., natural selection, genetic drift, gene flow and mutation. The process of development of new species and their adaptation through the study of the frequency, distribution and change in allele in populations are also taken into consideration in such studies.

Molecular Anthropology

Molecular anthropology is concerned with the comparative study of all existing populations. Through the use of molecular analysis and DNA sequence, attempts are made to understand the interrelationship between earlier and contemporary humans.

Human Variation

Human biology essentially means the study of human variation. Variation is produced by the inheritance of particular characteristics from ancestors and by the action of environment. Thus the effects of genes and environment are taken into account in the study of human variation.

Human Growth and Development

This field enables an understanding of the different perspectives of human growth and development. Growth and development are dependent on varied factors like heredity, nutrition, and environment. All these factors are taken into consideration in the study of human growth and development.

Human Ecology

Human ecology refers to the study of the relationship patterns between populations and their environment, and energy exchanges with other living organisms. The pattern of human adaptation and adjustment to the natural environment is an important aspect in the study of human ecology and therefore its study is of prime importance for a physical anthropologist.

Forensic Anthropology

Forensic anthropology deals with the identification of human skeletal remains for legal purposes. Forensic anthropologists are able to identify murder victims, missing persons or people who have died in accidents and disasters through a detailed study and analysis of the human remnants. In many instances forensic anthropologists have identified victims who died as a result of human abuses in different parts of the world.

Demography

The study of demography is directly related to fertility and mortality and these two factors are specifically influenced by heredity and environment. Demographic study involves the use of various statistical data and their subsequent analysis. Demographic study is centred round the nature, growth, age-sex structure, spatial distribution, migration in addition to fertility and mortality of populations.

Check Your Progress 1

	What is physical anthropology?
	Which book of Charles Darwin started a revolution in the nineteenth century thought?
,	What are the current fields of study in physical anthropology?

2.2 SOCIO-CULTURAL ANTHROPOLOGY

Socio-cultural anthropology, the second major branch of anthropology, focuses on the comparative study of human culture and society. The intensive study of social behaviour, customary patterns in human behaviour, thought and feelings and organisation of social groups are all included in the purview of socio-cultural anthropology. Socio-cultural anthropology is referred to as social anthropology in Great Britain and cultural anthropology in America. In the nineteenth century the term ethnology was in use for similar studies.

2.2.1 History and Development

Ever since man emerged on earth, there have been growing interests to know about themselves and the ways of other people across the globe. Social facts

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and themes were discussed with methodical rationality by the Greek social thinkers and philosophers of the fifth century B.C The contributions of Greek scholars such as Herodotus, Democritus (c.460 B.C – c. 370 B.C), Protagoras (c. 480 – c. 410 B.C), Socrates (c. 470 - c. 399 B.C) and Aristotle during the early stages of socio-cultural anthropology is worth mentioning.

Herodotus considered his Greek culture to be superior to the prevailing primitive culture. Nevertheless he advocated the importance of studying all human habits and customs – a central theme in anthropological studies today. He provides a detailed account of ancient conventions, practices, natural habitats, political scenario etc. of various cultures and their conflicts in his book, *The Histories*. Due to his significant contributions in the study of socio-cultural anthropology, he is recognized as the "father of anthropology" by many.

Democritus, who came after Herodotus, wrote on nature. He spent much of his life experimenting with and examining plants and minerals.

The philosopher Protagoras is famous for his phrase: Man is the measure of all things. He explained how different social traits evolved. He suggested that early society was homogeneous, unified and undifferentiated, and some fundamental inventions such as language, family, justice, morality etc. were made in very early stages of human evolution.

Socrates, another well-known Greek scholar, contributed towards the anthropological thinking on social facts. He opined that society is guided by certain universal values which transcend various social customs.

Among all Greek philosophers, Aristotle was the first to use the term 'anthropologist'...- who talks about himself. According to Aristotle, man (anthrdpos) is by its nature a sociopolitical (politikon) animal (zdion). As mentioned earlier he was first scholar to advocate that 'man is by nature a social being'. His study on culture and society and his anthropological insight that culture is acquired by learning are similar to the present day study of socio-cultural anthropology.

But proper systematic study of the subject began when the Europeans formed colonies and inducted their cultures. A good deal of information about people and their culture was derived from missionaries, travellers and diplomats. David Hume and Immanuel Kant revealed that the studies presented by travellers were highly imperialistic and racist in perception. The simple way of living of the primitives in the colonies under study prompted these traveller to claim racial superiority over them.

The beginning of the seventeenth century presented a more developed theoretical framework as evidenced from the writings of philosophers, social thinkers and academicians. Thomas Hobbes (1588–1679) studied society in *Leviathan* (1651) and Herbert Cherberry (1583–1648) wrote anhistory of religion, which was an early work on comparative religion.

The study of socio-cultural anthropology gained new heights in the second half of the nineteenth century as the evolutionary theory (inspired by Charles Darwin's book *Origin of Species*) developed simultaneously in Britain, America and Germany. Sir Edward B. Tylor (1832–1917), one of the pioneers of the classical evolutionary school of thought, advocated the unilinear

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sequence of cultural evolution or unilinear cultural evolution (see **Box 1**). He also emphasised that similarities in cultures around the world, without known historical connections, were due to mental unity or psychic unity of mankind (see **Box 2**).

Box 1: Unilinear Cultural Evolution:

Postulated that culture or cultures of the world pass through different successive stages in continuity. As a result of which simple forms change into complex ones, homogeneity moves to heterogeneity and the state of uncertainty goes towards certainty.

Tylor propounded his scheme in which religion evolved in the following stages:

- 1) animism (worship of spirits, connected with simple societies)
- 2) polytheism (worship of many divinities).
- 3) monotheism (worship of one divinity, connected to advanced societies).

Thinkers such as Henry Maine, James Frazer, L.H. Morgan, Bachofen, W.H.R. Rivers, Carlos Seligman, and A.C. Haddon supported the use of evolutionary scheme as a methodology to reconstruct the cultural history of mankind. They were also convinced that culture had undergone progressive and development-oriented changes but always in a sequence. They explained similarities in culture in terms of psychic unity of man. Based on this school of thought Morgan presented the evolutionary model of humans going through the stages of savagery, barbarism and civilization.

Box 2

Psychic unity of mankind: Refers to similar mentality of human beings to react and think similarly with like environmental situation at a particular period of time.

The evolutionary school of thought faced severe criticisms from contemporary scholars who claimed to be anti-evolutionists or diffusionists. They advocated that culture not only developed but also degenerated through cultural diffusion. They were convinced that man was basically uninventive, and important inventions were made at a particular place from where it was diffused, migrated, borrowed to other parts of the world. Thus, cultural diffusion is the process by which culture traits, discovered or invented at one place or society, is spread directly or indirectly to other societies. The School of Diffusion has been divided into British, German and American based on the geographical and national identity of the supporters. Main propounders of this school are Schmidt, W.J. Perry, Robert Lowie, Franz Boas, Clark Wissler, and A.L. Kroeber.

Franz Boas was one of the most influential figures in the history of sociocultural anthropology. As a critic of the evolutionary school of thought he completely rejected the unilinear evolutionary theory and stressed upon the necessity of conducting extensive field work. He conducted extensive field studies to free anthropology from its amateurs and armchair specialists. He also opined that all cultures were distinctly different and therefore they must be studied on the basis of their worth and not in comparison to other cultures. This concept came to be known as historical particularism.

2.2.2 Current Fields of Study

The tradition of fieldwork in anthropology came into existence towards the beginning of the twentieth century. The early twentieth century scholars also denounced the unilinear evolutionary theory. Brownislaw Malinowski was the main advocate of this. He was the first anthropologist to conduct study in native language. He insisted that a researcher should collect data through the medium of native language and undertake intensive fieldwork. He also developed a methodology for the scientific analysis of culture by which existing cultures could be compared, analysed and interpreted. This methodology of Malinowski was known as functionalism. Malinowski believed that every aspect of culture has a function and they are interdependent and interrelated. According to his theory of functionalism, institutions of a culture operate to satisfy the needs of the individual and the society as a whole.

A. R. Radcliffe-Brown, another British anthropologist and contemporary of Malinowski, developed the concept of social structure. According to Radcliffe-Brown, social structure deals with the network of social relations within an institutional framework. For Radcliffe-Brown, social structure is an 'empirical' entity, constituting the subject matter of socio-cultural anthropology. He stressed on the idea that social organizations are made of parts and each part functions in a way to form a complete whole. This model of Radcliffe-Brown is known as structural functionalism.

The anthropological fieldwork conducted by Boas in the Baffin Islands, Malinowski in Trobriand Islands and Radcliffe-Brown in the Andaman's inspired many scholars and intellectuals. Boas also encouraged his students to build up on a theory in the study of socio-cultural anthropology in the early twentieth century (1930s).

Around this time Ruth Benedict, Margaret Mead, Linton, Cora-Du-Bois, A. Kardiner and others criticised the theories of evolution and diffusion. They felt the necessity of studying interaction between culture and personality or vice versa on the basis of psychoanalysis. This school of thought was known as Culture and Personality School. This school is also known as School of Psychological Anthropology. The pioneers of Psychological School were inspired by Gestalt psychology which deals with the total perception of behavioural pattern of human beings. Psychological anthropology as a subpart of social anthropology is today a highly recognized field of study.

Another school of thought emerged in the late 30s of the twentieth century when V. Gordon Childe, Leslie White and Julian Steward advocated the revival of evolutionary approach. The trio came to be known as neoevolutionists. Julian H. Steward (1902-1972) in his *Theory of Culture Change* (1955) discussed about the powerful effect of ecology on culture. Leslie A. White (1900–1975) and archaeologist V. Gordon Childe (1892–1957) discussed about the influence of means of production on society's behaviour.

The introduction of linguistic, symbolic and cognitive anthropology in the 1950s widened the horizons of the study of socio-cultural anthropology. Eminent French anthropologist Claude Lévi-Strauss is closely connected to his method of structuralism for undertaking the study of social behaviour (relations and experiences). Thus Levi-Strauss's structuralism has become

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concerned with understanding cultural and social patterns in terms of the universal mental processes that are rooted in the biochemistry of the human brain. In America, Emile Durkheim, Victor W. Turner, Mary Douglas and Clifford Geertz works on symbolic anthropology based on magico-religious concerns of society became more popular than structuralism.

From the beginning of the study of socio-cultural anthropology till date many theories were formulated in the study of human society and culture. The middle of the twentieth century witnessed newer perspectives and dimensions related to studies on women, class and power structure, caste, employment, migration, urbanization, etc. The works of social scientists like Jacques Derrida (1930–2004), Michel Foucault (1926–1984), Jacques Lacan (1901–1981), Simone de Beauvoir (1908–1986), Jean-Paul Sartre (1905–1980) were influenced by theories like marxism, feminism, post-modernism, post-colonialism, post-structuralism.

Contemporary socio-cultural anthropology encompasses research-oriented studies in all parts of the world. Socio-cultural anthropology ensures the study of cultural traits and social activities of humans round the globe by using the anthropological field methods and comparative analysis. But such studies are conducted while maintaining the holistic orientation of the discipline. Globalization, transnationalism, multiculturalism, and diaspora studies are becoming a major trend in the study of socio-cultural anthropology. Nowadays, socio-cultural anthropology also includes the following studies:

- gender and other sub-areas like sexuality involving lesbian, gay and transgender,
- human rights,
- corporate and public sector,
- health sector.

Hence the study of socio-cultural anthropology will help us to understand human society and culture.

Check Your Progress 2

4)	Define social-cultural anthropology.
5)	What is psychic unity of mankind?
6)	What is role of unilinear cultural evolution in anthropology?

2.3 ARCHAEOLOGICAL ANTHROPOLOGY

Archaeology studies human cultures through the recovery and analysis of material remains and environmental data. Material products scrutinised by archaeologists include tools, pottery, hearths, and enclosures that remain as traces of cultural practices in the past, as well as human, plant and animal remains, some of which date back 2.5 million years. (Havilland et al 2008: 26) Archaeology is best regarded as the science which concerns itself with the recovering and studying the relics of Man's past; it has its own techniques, of which excavation is only one, though a highly specialised and important one. (Roe: 1971: 21). Nelson defines archaeology as "the science devoted to the study of the entire body of tangible relics pertaining to the origin, antiquity, and development of man and his culture." (Das: 1996: 35). Although archaeology exists as a separate discipline, in its study of humans it gets connected to anthropology and thus making it a humanistic science. In archaeology the time period covered are prehistoric, proto-historic and also later periods like civilization.

In recent times studies like new-archaeology, processual archaeology and post-processual archaeology have helped the researcher to understand the history of cultures and its processes. The study of palaeo-anthropology, ethnoarchaeology and settlement archaeology is all included within the framework of the archaeological study. Initially the study of archaeological anthropology involved the application of absolute and relative dating methods to ascertain the physical and material cultures. With the passage of time demographic conditions and environmental order, subsistence patterns, economy etc. were all included in archaeological study.

2.3.1 History and Development

Prehistory is the immensely long period of Man's existence before written records, and in the absence of writing, there are various special kinds of evidence, with which the prehistorian, the student of prehistory, has to concern himself (Roe:1971: 21) Paul Torunal (1833) used the term "pre-historique" after findings were made in the caves of Southern France. However, the exact term "prehistoric" was used by Daniel Wilson in 1851. Prehistoric stages are studied by archaeologists with the help of substances like stone, wood, bone, metals, earthenware, tools, ornaments and outfits.

The Prehistoric Period is too vast and varied to be studied without divisions. The original and classic division was eminently simple. It divided prehistory into three parts, successive technological stages, which are not by any means of equal length, thus:

- The Stone Age
- The Bronze Age
- The Iron Age.

Later on Bronze Age also included copper in it, thus calling it the Copper/Bronze age. However, the Stone Age being so vast was further sub-divided into lower palaeolithic, middle palaeolithic and upper palaeolithic. The other stages after the three palaeolithic stages are called mesolithic and neolithic stages or cultures.

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Some pre-historians not satisfied with classifications based on the use of technology classified the prehistoric era on the basis of subsistence economy. They used the following stages:

- barbarian or food gathering stage,
- food producing stage
- urbanization stage.

After prehistory comes the stage of protohistory, which is the period between prehistory and history. This period is marked by the presence of some form of writings. In India the pre-Harappa days to the time of Maurya rule, can be said to fall under proto-historic category, i.e. from 3500 to 300 B.C.

Civilization is marked by the presence of large complex societies, settled existences, domestication of animals, plants, specialist occupations, division of labour and trade. In India, the Indus valley civilization (2500 B.C.), with its two cities Mohenjodaro and Harappa, is considered to be one of the oldest civilizations of the world. Other important civilizations known at that time are Egypt, China and Mesopotamia. The fact that Indus Valley civilization disappeared from history while the others continued is one of the major concerns for an archaeologist.

Archaeological anthropology tries to find and explain the origin, growth and development of cultures in the past. Though the main method employed by the archaeologist is excavation, surveyance and data analysis also form important methods. The main aims of archaeology are to recover, record, analyse and classify material collected.

2.3.2 Current Fields of Study

Archaeology exists as a humanistic discipline as well as a science. As a humanistic discipline, it tries to understand things like evolution of culture, people, ideology, power and anything and everything that has effected in the changes that societies go through. As a science it tries to reconstruct events on the basis of whatever evidence is available with them. It uses scientific methods like relative and absolute dating for reconstructing man's past.

Archaeological anthropology has the following different areas:

- Palaeo-anthropology
- Environmental archaeology
- Ethno-archaeology
- New archaeology or processual archaeology
- Settlement archaeology
- Post-processual archaeology

Palaeo-anthropology is the study of people of palaeolithic times. In this study, human lineages and evolution is reconstructed on the basis of the study of fossils and skeletal remnants excavated from burial grounds etc. Comparative studies are undertaken through the study of primatology. Ethnographic details are also used to draw definite conclusions. Hence, the



Understanding Anthropology

methods used for reconstruction can be termed as historical, comparative and survivals.

Environmental archaeology is the study of environmental evidences in an attempt to understand the impacts of environment on culture and vice versa. It uses geological and biological methods to study the fossilised remains of plants, animals, and pollen cores etc. In order to study the environments of the past human societies.

Ethno-archaeology is the use of ethnography in the study of archaeology. This study helps in deciphering the life ways, religious beliefs and social structure of the past. It is a recent form of study.

New archaeology or processual archaeology involves studying the processes by which humans lived, i.e. how humans in the past did things like create artifacts and how they finally got decayed. The archaeologist studies how artefacts are created and what natural or cultural reasons made the archaeological site look like the way it does during time of study. This is termed as a site formation process. Processual archaeologists made use of the cultural historical method in the study of past human societies. This trend set in from the 1960s in the U.S. especially after Sally R. Binford's and Lewis Binford's book on *New Perspectives in Archaeology* (1968) came out, where they suggested the use of computer technology for the analysis of information gathered.

Settlement archaeology deals with the study of settlements in landscape and the impact of environment on the work done by humans, how they build themselves according to some principles. It also concerns itself with relationships shared between urban and rural spaces. All these concerns are studied but situated in past circumstances. The traditional issues related to cultural anthropology were given prime importance as a result of the use of archaeological and ethnological expertise in studying social occurrences. Settlement archaeology, hence, is one of the core areas of archaeology and it is sometimes also called non-site archaeology as it also investigates bigger areas instead of just focusing on a single site. This form of archaeological study was first carried out extensively by Gordon R. Wiley in the Vriu Valley of Peru.

Post-processual archaeology, also known as interpretative archaeology, is a controversial process. It is often referred to as a movement which started in archaeological theory. The theory of post-processual archaeology came into existence as a reaction and critique of processual archaeology. Post-processual thinkers are influenced by theories of society, more specifically by neomarxism, post-modernism, feminist archaeology, critical theory, structuralism, etc. Around the late 1970s and early 1980s post-processual archaeology made its appearance in the United Kingdom followed by United States. The main propounders of post-processual archaeology in the United Kingdom are Ian Hodder, who also coined the term, Christopher Tilley, Daniel Miller, and Peter Ucko. Post-processual archaeology displays any archaeological knowledge as open to interpretations which emphasizes on reflexivity (being aware of one's own position relative to the material) and multivocality (accepting multiple interpretations and approaches as being complementary in understanding archaeological material).

Thus the study of archaeological anthropology is conducted through reconstruction of history with the help of material remains along with skeletal remains, pollen, etc. The different areas of archaeological anthropology like new-archaeology or processual archaeology, settlement archaeology, ethnoarchaeology, paleo-anthropology, environmental archaeology, and post-processual archaeology came into existence as a result of using varied methods of reconstruction.

Check	Your	Progress	3
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7)	What is the concept of civilisation?
8)	What are the main aims of archaeology anthropology?
9)	What is use of ethnography in the study of archaeology?

2.4 LINGUISTIC ANTHROPOLOGY

Linguistic anthropology deals with the study of human languages. A linguist anthropologist is concerned with the relationship between language and culture behaviour. Language is an important aspect of human behaviour and the transmission of culture has been possible only through language. Due to this fact language is often referred to as the vehicle of culture. Language enables man to preserve the traditions of the past and to make provisions of future. Linguistic anthropology studies the emergence and divergence of languages over time. Initially this branch was concerned with the study of origin, evolution and development and salvaging of languages which were on the verge of disappearing. With time the various facets of language and its effect on social life were also taken into consideration. Today linguistic anthropology as an interdisciplinary science works in collaboration with anthropological linguistics, ethno-linguistics and socio-linguistics.

2.4.1 History and Development

During the later part of the nineteenth century and early decades of the twentieth century Franz Boas (1858–1942) made anthropology field-based and stressed upon the need of studying the linguistic aspects in anthropological study of culture. He was particularly interested in the study of Native American Indian languages and encouraged his students to analyse the emergence and divergence of language over time. Eventually linguistic anthropology came

to be recognised as an integral part of anthropological study. Boas started documenting the language of almost extinct tribes in an attempt to preserve and retain it for further research. This model of Boas was then called 'salvaging anthropology' and now more commonly known as 'anthropological linguistics'.

The term 'anthropological linguistics' can be traced back to Edward Sapir (1884–1939), a student of Franz Boas. He defined language as a purely human and non-instinctive way of communicating ideas, emotions and desires by means of a system of voluntarily produced symbols. Inspired by Sapir his students devoted themselves solely to the study of anthropology and language and referred to themselves as anthropological linguists. Around this time Leslie A. White in his book *The Science of Culture* (1949) mentioned that all behaviours originated and was based on man's capacity to use symbols. In fact use of symbols paved the way for communicable speech. Nineteenth century linguists were engaged in describing the languages and classifying them into families and sub-families on the basis of their similarities and dissimilarities.

Sapir was interested on comparative studies of cultures on the basis of language. Sapir and his student Benjamin Lee Whorf (1897–1941) further advanced a hypothesis on linguistic relativity which is popularly known as *Sapir-Whorf hypothesis*. It suggests that language influences thought which in turn affects cultural behaviour. This hypothesis is an extension of Boas' concept of cultural relativism. In simple words they believed that human behaviour will vary among groups speaking different languages. Therefore a single language can never form the basis for understanding the effect and influence of different languages on society. In the 1950s Whorf developed his own methodological and conceptual framework (termed as metapragmatics) based on the use of grammar for understanding the speaker's sensitivity. Inspite of severe criticisms in the 1960s and 70s, their role in the study of linguistic anthropology cannot be denied. Sapir and Whorf's concepts were utilized by scholars in the 1980s especially in the contemporary study of language ideology.

Sapir and Whorf's concept of literary relativity and Sapir-Whorf hypothesis were put forward after being inspired by the works of German scholars, Johann Gottfried von Herder (1744–1803) and Wilhelm von Humboldt (1767–1835). In the United Kingdom anthropologists stressed on the use of native language during fieldwork, with Bronislaw Malinowski (1884–1942) setting a benchmark by providing the theoretical and methodological framework for it. He was the first anthropologist to conduct study in native language. During the course of his field work among the Trobriand Islanders of Melanesia he was able to converse in the native's language. Malinowski emphasised the necessity of learning the language of the people under study in order to interpret their way of life in totality. Malinowski insisted on documenting the native mentality through the native language.

In the 1950s, the study of ethno-linguistics gained ground where linguistics was studied in relation to anthropological issues. In the United States, linguistic anthropology was developing at a rapid pace. Whorf's studies paved the way for theoretical understanding in the use of language and by 1960s the study of languages came to be known as linguistic anthropology.

Branches of Anthropology

At this stage more emphasis was laid on the aesthetics of language and its effect on culture.

Dell Hymes (1927–2009), a sociolinguist and anthropologist, may be regarded as the person who introduced this name. He along with linguist John Gumperz (1922-born) postulated that language can be considered as a cultural activity and can be investigated only through ethnographic methods. Though the earlier model of anthropological linguistics delved on issues like 'cultural organisation of speaking' it ignored the concept of language evolution. In the late 1980s the students of Hymes and Gumberz conducted studies on social life of speech, language diversity, and use of language in social interaction.

At present anthropologists and linguists differ in their theme though both of them study languages. Linguistic anthropology which is concerned with the relationship between language and cultural behaviour can be divided two parts.

- Historical linguistics deals with the emergence and divergence of languages.
- Structural linguistics or socio-linguistics deals with the role of language in the context of social behaviour. Structural linguistics also discovers the rules that reveal how sounds and words are incorporated in actual speech.

The pattern of speech varies from society to society on the basis of action, behaviour and communication. Cognitive anthropology is the outcome of linguistic anthropology, which employs the principles on which speakers of a particular language classify and conceptualize the phenomena. Anthropology in one way has learnt from the linguistics: on the other way has contributed to it.

2.4.2 Current Fields of Study

Fieldwork still remains an integral aspect in the study of language. The use of anthropological methods and techniques in linguistic enquiry enables a researcher to comprehend the relationship between language and cultural behaviour. Since the 1980s language socialisation has become an important aspect in the study of linguistic anthropology. It has been adapted from the term socialisation which in anthropology refers to the process of rearing and teaching an individual the basics of social life and its various aspects. Elinor Ochs and Bambi Schieffelin, who are both linguistic anthropologists, are the pioneers of this concept. They defined language socialisation as the process of getting socialised through and to language.

In the 1980s again, the concept of language ideologies gained ground with earlier works of scholars like Valentin Voloshinov (1895–1936), Mikhail Bakhtin (1895–1975) and Roman Jakobson (1896–1982) being discussed with newer ideas by many linguist intellectuals. Among them, Michael Silverstein (1945-born), a student of Roman Jakobson's tried to elaborate on language ideology, which is now considered to be a significant field in linguistic anthropology.

Language ideology implies ideas that are related to language and its connection with social, economic and political ethics of society. This occurs because

language as a sign system allows its use to convert itself into a social reality. Throughout the years, linguistic anthropologists have also been concentrating on studying languages as a system of power play i.e. how language can be used to control actions and behaviour. In theory of politeness formulated in 1978, Penelope Brown (1944-born) and Stephen Levinson (1952–born), both socio-linguists, stressed that polite speech can be used to ease 'face threatening acts'. This theory has been further analysed by many scholars. Maurice Bloch's (1939–born) work exhibits how a speaker in power is able to maintain authority and leadership through sheer use of words.

Linguistic anthropology has come a long way since the days of its inception. We have come to realize the importance of the study of linguistic anthropology in understanding the principles on the basis of which speakers of a particular language will behave in human societies and the emergence and divergence of languages.

2.5 SUMMARY

The interrelationship and interconnectedness between the four branches of anthropology ensures the holistic orientation of the discipline of anthropology. The subject matter of the study of the four branches of anthropology reveals the multidimensional aspects of the study of man in totality. All the following four branches deal with human biology, culture and language:

- physical or biological anthropology,
- socio-cultural anthropology,
- archaeological anthropology and
- linguistic anthropology.

Physical or biological anthropology studies human body, genetics and the status of man among living beings. It studies the physical characteristics of man. It uses the general principles of biology and utilizes the findings of anatomy, physiology, embryology, zoology, palaeontology and so on.

Socio-cultural anthropology includes an intensive study of social behaviour, customary patterns in human behaviour, thought and feelings and organisation of social groups.

Archaeological anthropology involves both physical and social aspects of human lives but of what is bygone. It deals with the reconstruction of history with the help of material remains along with skeletal remains, pollen, etc. The different areas of archaeological anthropology like new-archaeology or processual archaeology, settlement archaeology, ethno-archaeology, paleo-anthropology, environmental archaeology, post-processual archaeology, etc. came into existence as a result of using varied methods of reconstruction.

Linguistic anthropology deals with the study of human languages. Anthropologist who specialise in this area is particularly concerned with the relationship between language and culture behaviour. Language is an important aspect of human behaviour and the transmission of culture has been possible only by language.

To sum up, the theoretical and conceptual framework of each branch of anthropology, while maintaining a distinct identity, aims at studying about man in totality over time and space – thus keeping intact the uniqueness of the study of anthropology.

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2.7 ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress 1

- 1) Physical anthropology is that branch of anthropology that studies the human body, genetics and the status of man among living beings.
- 2) The publication of Charles Darwin's book *Origin of Species* started a revolution in the line of thinking.
- 3) Current fields of study in physical anthropology are Human Ecology, Forensic Anthropology, Demography, Human Growth and Development, Human Variation, Molecular, Anthropology, Population, Genetics, Human, Genetics, Palaeo-primatology, Osteology and Palaeo-anthropology.

Check Your Progress 2

- 4) Socio-cultural anthropology is the second major branch of anthropology. It is a discipline which focuses on the comparative study of human culture and society. The intensive study of social behaviour, customary patterns in human behaviour, thought and feelings and organisation of social groups, are all included in the purview of socio cultural anthropology.
- 5) Psychic unity of mankind refers to similar mentality of human beings to react and think similarly with like environmental situation at a particular period of time.

6) Evolutionary scheme as anthropology to reconstruct the cultural history of mankind. They were also convinced that culture had undergone progressive and development oriented changes but always in a sequence. They explained similarities in culture in terms of psychic unity of man. Based on this school of thought Morgan presented the evolutionary model of humans going through the stages of savagery, barbarism and civilization.

Check Your Progress 3

- 7) The concept of civilisation. Civilisation is marked by the presence of large complex societies, settled existences, domestication of animals, plants, specialist occupations, division of labour and trade.
- 8) Archaeological anthropology tries to find and explain the origin, growth and development of cultures in the past. Though the main method employed by the archaeologist is excavation, surveyance and data analysis also form important methods. The main aims of archaeology are to recover, record, analyse and classify material collected.
- 9) The use of ethnography in the study of archaeology is termed as ethnoarchaeology. This study helps in deciphering the life ways, religious beliefs and social structure of the past lived. It is a recent form of study and is not free from complications.



UNIT 3 RELATIONSHIP OF ANTHROPOLOGY WITH ALLIED FIELDS*

Contents

- 3.0 Introduction
- 3.1 Relationship of Physical/Biological Anthropology with Other Disciplines
 - 3.1.1 Relationship with Health Sciences
 - 3.1.2 Relationship with Genetics
 - 3.1.3 Relationship with Chemical Sciences
 - 3.1.4 Relationship with Nutrition
- 3.2 Relationship of Social/Cultural Anthropology with Other Disciplines
 - 3.2.1 Relationship with Sociology
 - 3.2.2 Relationship with Psychology
 - 3.2.3 Relationship with History
 - 3.2.4 Relationship with Linguistic
- 3.3 Relationship of Archaeological Anthropology with Other Disciplines
 - 3.3.1 Relationship with History
 - 3.3.2 Relationship with Archaeology
 - 3.3.3 Relationship with Earth Sciences
 - 3.3.4 Relationship with Physical/Natural and Biological Sciences
- 3.4 Summary
- 3.5 References
- 3.6 Answers to Check Your Progress

Learning Objectives

After going through this unit, the learners are expected to:

- compare and contrast anthropology with other related behavioral or social sciences;
- comprehend the relationship of anthropology with other sciences;
- understand how different disciplines contribute to the study of anthropology; and
- know how anthropologists can collaborate with other sciences.

3.0 INTRODUCTION

As mentioned in the previous units of this block, one of the main differences between anthropology and the other allied fields is that anthropology is a holistic study of humankind because of its unique blend of biological, social, cultural, linguistic, historical, and contemporary perspectives. Paradoxically, while distinguishing anthropology from others, this breadth is what also

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links it to many other allied disciplines. It is said that anthropology is the most humanistic among the sciences and the most scientific among the humanities. As a discipline that is both scientific and humanistic, anthropology has relationship with many other academic fields.

Anthropology is not the only subject that studies humankind. Each allied discipline focuses on a particular area and trains oneself to think and study the human society and its way of life in one way or another. Malinowski states that culture is a means to satisfy bio-psychological needs of human. Anthropology is grounded in both the sciences and the humanities. According to Malinowski, anthropology stands in between natural and social science. The bio-social nature of humankind is an area of interest of anthropology where anthropology greatly overlaps with other disciplines that study human society. Anthropology thus cuts across many disciplines and always takes the help of other disciplines to support and validate the nature of study. In this way, anthropology shares certain interests and subject of the study with the other disciplines.

3.1 RELATIONSHIP OF PHYSICAL/ BIOLOGICAL ANTHROPOLOGY WITH OTHER DISCIPLINES

According to Herskovits, in the term 'man and his works', the term 'man' implies human as a 'biological organism' and 'work' stands for 'culture'. Anthropology studies human biology and cultural diversity, both the factors are equally important and relevant since anthropology explores biological aspects like human origin, evolution and variation as well as socio-cultural aspects like society and culture.

3.1.1 Relationship with Health Sciences

Biological anthropology, also known as physical anthropology, is concerned with the study and understanding of human biological variability, including morphological variation. Anthropometry is a major tool in these studies. Anthropometry, literally 'measure of humankind', was defined by Ales Hrdlicka in 1939 as 'the systematized art of measuring and taking observation on man, his skeleton, his brain or other organs, by the most reliable means and methods, for scientific purposes'. Anthropometry is the single most universally applicable, inexpensive, and non-invasive method available to assess the size, proportions, and composition of the human body.

Moreover, since growth in children and body dimensions at all ages reflect the overall health and welfare of individuals and populations, anthropometry may also be used to predict performance, health and survival. These applications are important for public health and clinical decisions that affect the health and social welfare of individuals and population. Anthropometric measures have been the subject of much epidemiologic and patho-physiologic research involving obesity, overweight, body fat distribution, and health outcomes. In short, the assessment of health risks by using anthropometry is a well-established and time-honored concept in the scientific literature.

In recent years, anthropometric indicators such as body mass index (BMI) and waist circumference (WC) are repeatedly shown to be simple yet powerful predictors of common adult chronic conditions such as Type 2 diabetes mellitus (T2DM) and cardiovascular disease (CVD).

Relationship of Anthropology With Allied Fields

The importance of anthropometric indices for promotion of health and primary care can be summarized at three levels:

- **Individual level:** At the individual level, the measurements can be promoted both for health care providers' use in clinical applications and for patients' use in self-monitoring over time.
- Community level: At the community level, simple anthropometric
 measurements can help in identifying sub-populations in which the risk
 of chronic disease is concentrated, allowing these individuals to benefit
 from targeted interventions to reduce health risks.
- Population level: At the population level, secular trends in body measurements can be tracked to help evaluate societal and environmental changes that affect individual energy balances and to monitor the effects of large-scale prevention strategies.

3.1.2 Relationship with Genetics

Anthropological genetics is a synthetic discipline that applies the methods and theories of genetics to evolutionary questions posed by anthropologists. These anthropological questions concern the following:

- the processes of human evolution,
- the human diaspora out of Africa,
- the resulting patterns of human variation, and
- bio-cultural involvement in complex diseases.

How does anthropological genetics differ from its kin discipline, human genetics? Both fields examine various aspects of human genetics but from different perspectives. With the synthetic volume of 1973 (Methods and Theories of Anthropological Genetics), it became evident that the questions posed by the practitioners of anthropological genetics and human geneticstended to be somewhat different. What distinguishes anthropological genetics from human genetics is its emphasis on smaller, reproductively isolated, non-Western populations, plus a broader, bio-cultural perspective on evolution and on complex disease etiology and transmission.

Judging from the contents of the American Journal of Human Genetics (premiere journal in the field of human genetics), we see that there is a greater emphasis on the causes and processes associated with disease, and the examination of these processes in affected phenotypes (probands) and their families. Anthropological geneticists tend to focus more on normal variation in non-Western reproductively isolated human populations. Anthropological geneticists also attempt to measure environmental influences through co-variates of quantitative phenotypes, while human geneticists less often attempt to quantify the environment in order to assess the impact of environmental-genetic interactions.

3.1.3 Relationship with Chemical Sciences

Pollution is a worldwide problem and its potential to influence the physiology of human populations is great. Studies of human growth and development in relation to pollution have increased in number and quality since the mid-

twentieth century. Many studies have found that some pollutants have detrimental effects on human growth, particularly prenatal growth. A heavy metal, lead, is commonly found in human populations and is related to smaller size of human baby at birth; studies have reported decrements that range up to about 200 grams. Studies of humans exposed to polychlorinated biphenyls, one of the persistent organic pollutants, have shown that they cause the following:

- reduced size at birth,
- advanced sexual maturation, and
- altered hormone levels related to thyroid regulation.

Thus different pollutants exert effects through different physiological pathways.

However, some studies have not observed these effects, which indicate that the situation is complex and requires further study with better study designs. Determining the effects of pollutants on human physiology and growth is difficult as it requires fairly large numbers of subjects who are not purposely exposed but for whom exposure can be measured. These effects of pollutants and the mechanisms of effect require further study and, it is hoped, to blunt or block any detrimental effects on human health and well-being.

Check Your Progress 1

)	What is meant by public health?	y anthropometry	/? How does	it help ir	the doma	in o
)	How anthropolog	gical genetics is	distinguishe	d from hu	ıman genet	 tics?

3.1.4 Relationship with Nutrition

Nutritional anthropology has emerged as a new branch of applied anthropology over the past 20 years, and its methods are having an important influence on the methods of nutrition survey and nutritional epidemiology. Nutritional anthropology has continued to develop rapidly, providing solid information for studying key aspects of the nutrition of individuals, families, and communities. The methodological options in nutritional anthropology and strategies for field research provide a background for more specialized information on

- social behaviour and household functioning,
- the determinants of food intake,
- the analysis of energy expenditure.

3.2 RELATIONSHIP OF SOCIAL/CULTURAL ANTHROPOLOGY WITH OTHER DISCIPLINES

3.2.1 Relationship with Sociology

The social science that is closest to social anthropology is sociology. Yet there are strong and divided views on the relation between them. Both claim to study society, not just a single aspect of it, such as economics and politics, but all of it. Sociology is much older than social anthropology as it began with Auguste Comte in France and Herbert Spencer in England. The two men who are regarded as the founders of the British tradition in anthropology, Malinowski and A.R. Radcliffe-Brown, drew on the ideas of the French sociologists of the late nineteenth century. A.R. Radcliffe-Brown in a presidential address to the Royal Anthropological Institute said he was quite willing to call the subject comparative sociology if anyone so wishes.

Many of the newer British universities have combined departments in sociology and anthropology. However, universities give separate degrees in the two subjects so there must be a reason for this. The reason is a simple one: it is a matter of practice rather than theory, they deal with different subject matter and to a large extent by different methods. It might be noted that they are the branches of the study of society as botany and zoology are branches of biology.

Anthropology and sociology provide a comparative framework for interpreting and explaining human social behaviour. Although each discipline arose in response to different historical circumstances which have resulted in somewhat different traditions of emphasis and approach, the two fields draw from a common body of theory and, increasingly, a common toolkit of research methods. With the study of anthropology and sociology, one will become familiar with a wide range of human societies in all regions of the world. Those who study it will gain an appreciation for the cultural complexity, historical context, and global connections that link societies and social institutions to one another. They will also learn about key social structures and dynamics embedded in contemporary societies, including the forms of social power and privilege that exist in any society, and how these often unequal power relations are organised, sustained, reproduced, and transformed.

Anthropology is a comparative study of human kind, its aims are to describe, analyse and explain both the similarities and differences among human groups. Anthropologists are interested in characteristics that are typical or shared in a particular human population, rather than what is abnormal and individually unique. In their study of human variation, anthropologists try to focus on the differences among the different groups rather than the differences among the individuals within those groups.

In their attempts to explain human variation, anthropologists combine the study of both human biology and the learned and shared patterns of human behaviour which we call culture. Because anthropologists have a holistic approach to the study of human experience they are interested in the total range of human activity.



Understanding	
Anthropology	

Ch	eck Your Progress 2
3)	Who suggested the term comparative sociology for the subject social anthropology?
4)	What is the subject matter of sociology?
3.2	.2 Relationship with Psychology
Ant cult ove forr util	chropologists approach this domain from defining personality in terms of ture. Several important approaches to the study of personality have arisen in the years. Within the socio-cultural milieu, the process of personality mation is studied. The key concepts of socialisation and enculturation are issed in this study. Various types of child-rearing practices in different ieties are investigated in order to assess their implications for the elopment of personality.
Psy	hort, culture is reflected in personalities and personalities reflect culture. chological anthropologists divide the cultural institutions of a society the following:
•	Primary or basic institutions: They compromise the geographical environment, the economy, family, socialisation practices, and the polity etc?
•	Secondary or projective institutions: They comprise the myths, folklore, religion, magic, art etc.
the	ile the basic institutions condition personalities, personalities construct secondary institutions. The relationship between culture and personality each society is studied by psychological anthropologists.
The nee as s nor prol to	icient studies by psychological anthropologists were not taken up till 0s. The earlier work of some of these scholars lacked scientific vitality. In fundamental human conflict, which is in between human and personal ds, is multiple and must be thoroughly investigated at individual as well ocial level concurrently. This aspect was realised but neither psychologist anthropologists alone could adequately manage all the spheres of the blem in the support of one single discipline. This understanding gave rise the need for a two-way endeavour between psychologists and propologists.
Ch	eck Your Progress 3
5)	What is the basis of psychological studies?
6)	What is the focus of psychological anthropologists?

3.2.3 Relationship with History

Anthropology and history both attempt to trace the origin, expansion and advancement of culture in the past. Here we mean the age when human beings had not attained the competence of using the language as speech and also to write. Archaeologists are labelled as the historians of anthropology because they attempts to reconstruct the events of human's past. However, unlike the discipline of history which is concerned only with the past 5000 years during which human beings have left behind written materials of their accomplishments, the archaeologist is concerned with the millions of years in which human beings developed culture without the benefit of the written word and has left behind only unwritten materials or artefacts.

In this sense an anthropologist studies past cultures and tells us about the technology of past peoples by analysing the tools those people used in the past. This can throw light on the economic endeavours of the people who have utilised that technology. This artistic potential of people become visible by seeing the remains of wall engravings on different materials like on pottery, and jewellery. The settlement evidences of the houses can also focus on various spheres of social structure. Some facets of religious beliefs can also be determined by the burial sites and also by the materials kept inside or with the burials.

The main methods of archaeological anthropologists are:

- excavation to find out artefacts,
- dating to dispense a rough time period, and
- witty speculations to form the cultural history of one's past.

In all these efforts the anthropologists focuses on the studies related to reconstruction of the past cultures by different methods of exploration which is a method known to infer the unknown from those materials that are well known.

Check Your Progress 4

7)	What is the common study area of the anthropologists and the historians?
8)	Which period of human past is studied by historians?
9)	What is the main method used by the archaeological anthropologists?

3.2.4 Relationship with Linguistic

One of the most distinctive features of human being is the ability to communicate through speech. The branch of socio-cultural anthropology

that studies languages is called linguistic anthropology. Linguistic anthropologists account for the diversity of languages in two ways:

- It can be shown that culture influences the structure and content of language, and by implication, linguistic diversity arises at least partially from cultural diversity.
- It can be shown that linguistic features affect other aspects of culture.

In order to reveal the relationships between language and culture, anthropologists have taken either of the two ways, which has resulted in debate and discourse on the matter. The linguistic anthropologist borrows from the socio-cultural anthropologist. The meaning and content of words and phrases in each language have unique nuances that are intelligible only to the people who speak that particular language which is a product of their culture. The language of some people may not have referential terms for certain features of the world around them. These give the clues to those features which do not hold any cultural significance to that people.

The major difference between the linguists and linguistics anthropologists is that the former are mainly concerned with the study of how languages, particularly written ones, are constructed and structured but the linguistic anthropologists study unwritten languages as also written languages. Another crucial difference between linguists and linguistics anthropologists is that those features which the former take for granted are taken into consideration by the latter. These features relate to the systems of knowledge, belief, assumptions and conventions that produce particular ideas at particular times in the minds of people.

Check Your Progress 5

0)	How does languages?	the lin	guistic	anthro	opologists	aco	count	for	the	diversity	
1)	State the anthropolog		differ	ence	between	a	lingı	uist	and	l linguis	tie

3.3 RELATIONSHIP OF ARCHAEOLOGICAL ANTHROPOLOGY WITH OTHER DISCIPLINES

In archaeological anthropology, man and culture are reconstructed from bits and pieces of early man and his material remains found scattered over different spaces over the surface of the earth and below the surface as well. The method of reconstruction of early man in anthropology is considered a conjunctive one. It is done with the help of many sciences.

Relationship of Anthropology With Allied Fields

Many sciences, such as geography, geology, archaeology, history, botany, zoology, chemistry, physics and mathematics are involved in the methodology. Anthropology of course is a very important part of the study of archaeological anthropology because it is the mother discipline and has evolved its own methodology.

3.3.1 Relationship with History

Any subject for its study of its origin and development owes to its history of origin. The reason for the slow growth and development of the subdiscipline can only be understood in the study of its history of coming into being (Penniman, 1965). History says that prehistoric/archaeological anthropology is more than a hundred and fifty years old. History also points out the nature, time and sequence of finding of different artifacts and fossil remains unclear and incomplete. On the basis of history of discoveries, the theory of evolution and understanding of development, change and diffusion mechanism can be studied. Reconstruction of cultural history is related to this discipline. Often archaeological data, combined with historical records, produce a complete picture of man and culture than either would have given separately.

3.3.2 Relationship with Archaeology

Archaeologists are anthropologists who excavate the material remains of past culture (Deetz, 1967). To begin with, archaeology is largely concerned with material remains of man, both of past and recent past. Archaeological anthropology is restricted to very early times, before the discovery of writing. Archaeology too is dependent on other disciplines for its study.

Archaeology relates to search for material objects left by man. There are two kinds of search:

- Exploration: This provides data from the surface.
- Excavation: This brings out data from beneath the surface.

Archeologists have developed methods and techniques for the recovery of materials from both exploration and excavation. After the materials are recovered, they are put into order in relation to space, time and form (Deetz, 1967). Childe (1956) in his book "Piecing Together the Past" has pointed out how inferences can be drawn beginning with drawing and describing a single artifact and then going on to making a catalogue of all the related objects in space and time. This he called assemblage. From assemblage, archaeologists go on to make inference on culture and finally interpret the total cultural regime.

3.3.3 Relationship with Earth Sciences

Earth sciences include both geography and geology. The common element between the two subjects is the prefix 'geo' meaning earth. In many respects, geology and geography are common as both of them deal with the study of the Earth. But they are not synonymous.

Geology is concerned with time and geography is concerned with space. The former studies the earth below the surface and the latter studies the surface of the earth.

Earth, which was at one time exposed, has been covered up by deposits or broken down over time, due to erosion and depositional activities of water, wind and temperature. These are studied by geologists.

When both geology and geography are taken together, they give impression of diachronic study.

- The geological aspect presents vertical dimension mainly of time.
- The geographical science provides horizontal concept of space.

Both time and space information are very important for archaeological anthropology. Relations of the two sciences with archaeological anthropology are discussed separately.

3.3.4 Relationship with Physical/Natural and Biological Sciences

Many sciences are closely related to reconstruction, mainly in connection with dating. These range from chemistry, physics, astronomy, mathematics, statistics, botany, and zoology.

There are two kinds of dating:

- Relative. This establishes the date of human remains in relation to an already dated event.
- Absolute: This establishes the date of an object in absolute numerical order of the calendar (chronometry).

An account of the relationship of these sciences with the archaeological anthropology is given below.

Radiometric dating is based on physical and chemical sciences. The most known is radio carbon method which is done on radioactive carbon (c14). Other radiometric methods are Potassium Argon method, Thorium Uranium method, Thermoluminescence, Obsidian Hydration, Fission Track, and Archaeomagnetism.

Flourine test, amino acid racemization, and nitrogen analysis are a few examples of importance of chemistry in archaeological anthropology. Moreover these subjects also provide mechanism for preservation of perishable objects.

Electronics provides means for detecting objects below the surface of the earth. With the help of electromagnetic resonance, buried objects like metal objects, burials, walls, foundations, kilns, furnaces, hearths and even pits and ditches filled up with topsoil or rubbish can be located. The satellite images help not only to identify unusual features of archaeological interest on the surface but it also points to buried objects. Remote sensing has become an important tool for the archaeological anthropologists.

Man is a part of the animal kingdom. His relation with animals may be either positive or negative. Human beings may be preyed upon by carnivores or may prey upon other animals. Human beings domesticates animals for their own advantage. With the help of zoologists, man-animal relationship and its cultural implications are properly understood. Past faunal remains are identified by the zoologists.

Dendrochronology is one method of dating that the botanists provide. Botany also helps to analyse man-plant relationship. Human beings use plant resources

Relationship of Anthropology With Allied Fields

as food, fibre, medicine, container and so on. They not only use plants in their natural habitat but also domesticate them. These are turning points of human history and origin of cultivation and domestication mechanism can be researched with the help of plant science.

Finally there are a number of shell fish, mollusks, micro plants, animals and virus, which are sensitive to any kind of change in the environment. They also are important marker for dating and reconstruction of environment and culture.

	8	
12)	What is dendrochronology?	
		•••

3.4 SUMMARY

Check Your Progress 6

Anthropology is closely related to behavioral or social sciences. Physical / biological anthropology deals with human biological diversity in time and space. Biology deal with all living organisms including human being. The relationship between biological anthropology and biology is that both the disciplines analyse origin, evolution, heredity, variation, and anatomical and physiological features of human being.

Biological anthropology studies the physical characteristics of man. It uses the general principles of biology and utilizes the findings of anatomy, physiology, embryology, zoology palaeontology and so on Paul Broca (1871) defined physical anthropology as the "Science whose objective is the study of humanity considered as a whole, in its parts and in relationship to the rest of nature".

Apart from the similarities, both disciplines differ in many respects.

Biology	Anthropology			
a biological science	a bio-social science			
Views human beings as biological entities	Views human beingsas both biological and social entities			
Studies all living organisms	Studies primates and human species.			

While biology is considered a biological science, anthropology is considered a bio-social science. In the discipline of biology, a human being is viewed as a biological entity whereas in biological anthropology a human being is considered both a biological and social entity. For instance, when a zoologist tries to understand the biology of an animal, he never goes into the details of the length and breadth of the skull. Physical anthropology examines the skull in all its details. Thus, anthropology has a sort of specialization or sharpening of certain aspects of general biology.

Biologists study all the living organisms but anthropologists are restricted to study primates and human species. Subjects such as archeology, paleontology, osteology, geology, and geography help the biological anthropologists and archeological anthropologists in reconstructing biological and cultural aspects of human evolution. In using techniques to date fossils and artifacts, anthropologists take help from physics, chemistry, and geology. Anthropologists collaborate with the disciplines such as botany, zoology, and paleontology at the time of studying human fossils and artifacts.

3.5 REFERENCES

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3.6 ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress 1

- 1) Refer to section 3.1.1
- 2) Refer to section 3.1.2

Check Your Progress 2

- 3) A.R. Radcliffe-Brown suggested that social anthropology maybe termed as comparative sociology.
- 4) Refer to section 3.2.1

Check Your Progress 3

- 5) Refer to section 3.2.2
- 6) Refer to section 3.2.2

Check Your Progress 4

- 7) Refer to section 3.2.3
- 8) Refer to section 3.2.3
- 9) Refer to section 3.2.3

Check Your Progress 5

- 10) Refer to section 3.2.4
- 11) Refer to section 3.2.4

Check Your Progress 6

12) Refer to section 3.3.4