



RESEARCH METHODS

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Indira Gandhi National Open University

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COURSE CONTENTS

		Page No.
BLOCK 1	SCIENTIFIC RESEARCH IN ANTHROPOLOGY	11
Unit 1	Fundamentals of Scientific Research	13
Unit 2	Anthropology as a Science	26
Unit 3	History of Research in Anthropology	39
BLOCK 2	INVESTIGATION OF DATA	53
Unit 4	Fieldwork Tradition in Anthropology	55
Unit 5	Research Design	66
Unit 6	Methods and Methodology	78
Unit 7	Tools and Techniques	89
BLOCK 3	SPECIFIC ESSENTIAL ASPECTS IN RESEARCH	103
Unit 8	Ethics in Research	105
Unit 9	Statistical Analysis	121
Unit 10	Analysis of Data	143
Unit 11	Writing of the Research Report	156
PRACTICAL MANUAL		169
SUGGESTED READING		185

COURSE INTRODUCTION

The course on Research Methods provides a graduate level introduction to different anthropological research methods of enquiry and investigation. The course begins with a discussion on the validity of scientific research in anthropology and also takes into account the history of how research got incorporated to the study of anthropology with examples from works of eminent anthropologists through the years. The course highlights the importance of the fieldwork tradition in anthropology, the essentials of a good research design and the various steps followed in creating it. The course familiarises the learners with the building blocks like qualitative and quantitative methods, laboratory methods and field methods, ethnographic method, observation method, etc. and the actual tools and techniques involving both primary and secondary sources employed to collect meaningful data. The last part of the course acquaints the learners about the ethical debates to be aware of while conducting research, the analysis of data, both statistical and otherwise and the points to be taken care of in the final creation of the research report. This course plans to train the learner to become fundamentally equipped to conduct anthropological research and garner and disseminate anthropological knowledge in the process.

Course Outcomes

After completing the course, a learner is expected to:

- Define what research is in anthropology;
- Describe the approaches and methods to conduct research;
- Recognise the ethical aspects associated with conducting research; and
- Express how research is analysed and a research report is created.

Course Presentation

The Course is divided into three blocks and a practical manual. Each block carries a theme which is reflected in the form of units. There are a total of 11 units in each block of this course. Below we provide you with a brief explanation of what each unit covers in the thematic blocks.

Block 1 Scientific Research in Anthropology

The first block is an introduction to the course on Research Methods and hence begins with the explanation of how scientific research is done in anthropology. Hence the first unit, (Unit 1) ***Fundamentals of Scientific Research*** attempts to explain what science is and how we can differentiate it with common sense. The unit provides the learner with a clear description of the conventional modes of understanding science and also at the same time introduces the learner to the changes that have taken place in the definition of science and its methods. The second unit, (Unit 2) ***Anthropology as a Science***, defines the kind of discipline anthropology is to begin with and then tries to validate anthropology as a science. The unit also critically analyses the status of anthropology as a science. It will assist the learner to reconsider what science is and place anthropology in context to it. The third and last unit in this block is (Unit 3) ***History of Research in Anthropology***. The unit describes the separate trends that developed in anthropology in America and in Great Britain. It shows how anthropological research grew through various stages of development. With the growth of the

discipline, how the ways of researching people also progressed, is what the unit tries to deliver to the learner. The basic objective of this unit is to show how anthropological research has evolved with time and can be used differently to get the result which is sought.

Block 2 Investigation of Data

This block consists of four units and deals with the basic concepts and methods of doing fieldwork in anthropology. The first unit (Unit 4) is called *Fieldwork Tradition in Anthropology* and can be considered as one of the vital units of this block. This is so as it informs us about anthropology's uniqueness as a field science. The unit also delves into critically how in earlier times anthropologists were armchair investigators and how with time, actual fieldwork was given heed to and how. The unit gives a glimpse of how field investigation is dealt with at present taking into consideration ethical issues and norms for the benefit of the learner. The second unit is (Unit 5) *Research Design*. This unit largely tells the learner how important it is to have a research design to actually solve a research problem. The unit discusses the kinds of research design that a researcher can choose from to conduct investigation and the steps involved in a research design to make the framework of research. This unit will assist the learner when s/he plans to work on a research topic by providing with the background blueprint for investigation. The third unit (Unit 6) is *Methods and Methodology*. Here the learner is explained about the meaning of methodology and methods and how without them research is incomplete. Hence with the explanation that methodology is the strategy a researcher makes, broadly all major methods of doing research in anthropology are covered. The last unit (Unit 7) in this block is *Tools and Techniques*. This unit meticulously covers all important tools and techniques used in anthropological research. The tools and techniques are based on the methods chosen by the researcher to conduct fieldwork. This lesson is a crucial part of anthropology and will be of assistance in allowing the learner to choose the techniques best suited for her/his research.


Block 3 Specific Essential Aspects in Research

This is the last block in this course. The first unit (Unit 8) of this block is *Ethics in Research*. This unit covers the ethics aspect of research. The theoretical concerns associated with ethics are first talked about and then the unit proceeds with ethical concerns that a researcher should grapple with while conducting research. Ethical issues like informed consent, dilemma of confidentiality etc. are dealt with in this unit. The second unit (Unit 9) in this block is *Statistical Analysis*. This unit informs the learner why statistics is important in anthropological research, describes different kinds of variables, statistical techniques and explains about the statistical software tool, SPSS among other things. The third unit (Unit 10) is called *Analysis of Data*. This unit discusses how after collection of data, the findings can be analysed with the use of appropriate aids to create new knowledge. Various methods therefore are explained in this unit which help in analysis of data. The last unit (Unit 11) of this block and this course is *Writing of the Research Report*. This unit discusses the final stage of research where the final report, thesis or dissertation has to be created from all the data collected and analysed. The unit informs how each part of writing is to be done sequentially, illustrate the results in the report with associated aids like tables, figures, graphs, photographs etc. and finally produce new knowledge appropriately with the proper display of the report.

Practical Manual: This practical manual will assist the learner to build a research design and make her/him ready with the methods and techniques discussed in the manual to apply them in actual research scenarios. The learner will be able to check these techniques and practice them and create small projects now and later utilise these same methods and techniques in future research work. So the practical manual will help the learner to identify methods and techniques to conduct research, familiarise oneself with the exact way of doing research and learn how to analyse research results to create knowledge.

With this brief about the course, you are now ready to go through each lesson in a comprehensive manner. As you will be doing the major part of the studying on your own, the lessons have been created in such a way to assist you to understand the course in an inclusive manner. It is advised that you go through the course sequentially so as to not lose the thread of clarity. As you would find a teacher in a classroom teaching a course in a thematic and chronological manner, similarly you too need to study your course from Unit 1 and end it with the last unit, in this case, Unit 11 followed by the **Practical Manual**. Units are further divided into sections and sub sections for your easy reading and better understanding. Each unit comes with learning outcomes which outline what is expected from you after the unit is read. Units also contain **Check your Progress** throughout so as to help you test yourself if you have learnt what you have read. This is a good way to go about the lesson and will help you prepare well for your **Term End Examination** later as you will learn to frame your answers in your own words rather than just copying and pasting from the sections. Each unit also contains a **Summary** towards the end which gives you a brief about what the lesson entailed. The units end with **References** which are cited works mentioned through the lesson and **Answers to Check Your Progress**, which assists you to know where the answers to your questions are placed. It is reiterated that though the sections where the answers can be sought are given, you should attempt to frame the answers in your own words which will bring clarity in your understanding of the units. In your internal **Assignments**, you will be given questions/activities where you can test your learning of your methods and techniques.

Good luck with your reading and it is hoped that this course will provide as a basic preliminary training in your journey towards becoming an anthropological researcher.



BLOCK I
SCIENTIFIC RESEARCH IN
ANTHROPOLOGY

Obafemi Awolowo
THE PEOPLE'S
UNIVERSITY

Unit 1
Fundamentals of Scientific Research

Unit 2
Anthropology as a Science

Unit 3
History of Research in Anthropology

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UNIT 1 FUNDAMENTALS OF SCIENTIFIC RESEARCH

Contents

- 1.0 Introduction
- 1.1 Science and Common Sense
- 1.2 The Scientific Method
- 1.3 Laws
- 1.4 Changing Perceptions of Science
- 1.5 The Social Sciences
- 1.6 Is Anthropology a Science?
- 1.7 Summary
- 1.8 References
- 1.9 Answers to Check your Progress

Learning Outcomes

After reading this unit, the student will learn to:

- Explain what science is and how it is distinguished from common sense;
- Describe the classical modes of understanding science; and
- Identify the transformations that have occurred with respect to the definition of science and its methods, in recent times.

1.0 INTRODUCTION

Before we enter into an understanding of what the nuances of research methods in anthropology entail, we need to begin at the beginning. This lesson therefore will deal with the basics of what research is and how does it justify itself as scientific.

We are all habituated to referring to anything we consider as true and logical, as being scientific. The word ‘science’ or scientific conjures up a feeling of respect and also of belief. When told something is backed by ‘scientific’ research, the usual reaction is that it must be true. This link between science and truth is however the product of a history, that of colonisation, since most of what we understand today as science and the scientific method is a particular form of knowledge that originated in the West, in specific North European countries that were at the same time the mother countries of the colonised south. The spread of so called scientific knowledge was a result of an imposed power hierarchy. Therefore, the belief that only western science was science and all other forms of knowledge were not also became widespread. If we accept that science is the pursuit of truth as well as a tool to solve the problems of human existence, then science began the day an earlyman or woman in the Pleistocene picked up a stone and used it as a tool. From the earliest times of their evolution as a human species, humans have been endowed with the capacity to both make and use tool, to modify their

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environment and to create things for their use. They have also been inquisitive about what was happening around them? They had questions and they sought answers to them. Thus the beginning of science as the pursuit of knowledge and its application towards fulfillment of human requirements is as old as human kind. What happened later was the systemisation of this knowledge and its classification into different classes depending upon the kind of questions that were to be answered and the area into which knowledge was applied. For example astronomy is one of the oldest of sciences. Ancient humans looked up at the sky to answer many questions regarding their environment and they learnt the science of reading stars and heavenly bodies to predict weather and to find directions and to navigate the seas. In this Unit, let us begin by discussing the difference between science and common sense.

1.1 SCIENCE AND COMMON SENSE

Although it is recognised that much of what we call science today, originated from commonsensical activities used to solve day to day problems. In fact many pre-literate societies, like for example the Australian Aborigines, had deep knowledge of say, aerodynamics that had enabled them to make a tool like the returning boomerang. But the difference between science and what we now understand as indigenous knowledge is that science goes beyond the achievement of a practical goal, to seek explanations for the phenomenon. The establishment of a causal relationship between the variables is to look for explanations of why things happen, and not stopping at making them happen. Thus science will try to explain how and why the boomerang returns, just as it will go beyond the use of a plant for medicinal purposes and try to establish the exact chemical component of the plant and its relation to the disease.

Science tries to systematise and organise knowledge so that by comparing and classifying a large number of processes and factual data it is able to deductively, that is through the power of reasoning as well as intuitive insight, establish regularities that at time become generalised principles or laws. For example, had the Australian Aborigines been aware of the actual principles of aerodynamics that informs the making of their boomerangs, they would have extended it to make other tools as well, and could have advanced to making aircrafts.

The value of systematisation and classification of knowledge as a part of the scientific endeavour has the effect of bringing together a large range of phenomena under one key explanatory framework; as for example the laws of gravitation can be used to explain a huge range of events and actions, from the falling of apples to the movement of planets.

Another significant difference between common sense and science is that the former is derived from experience and observation and thus works fine as long as the conditions of its application are the same; but they are not able to deal with changing circumstances and also how to diversify the range of application of their knowledge as they are not aware of the basic principle or causal relationship underlying a particular application.

Further, the language of common sense observations is not precise. For example people may say that if water is heated, it boils after some time, but they will not know the exact temperature at which it boils. In fact concepts such as exact

temperature and exact time are not known outside of the scientific terminology. When ordinary people talk about such matters they use a language of approximation, and science uses a language of being exact, even up to a very high degree of precision. Thus precision and exactness separates scientific language from commonsense.

Another aspect of science is its predictability, based on the knowledge of the exact causal relationship that causes a phenomenon; like science knows exactly how water can be made in the laboratory, but common sense knowledge, lacking the precise causative relationship may have to depend upon a hit and trial method.

Scientific observations are also of a more abstract nature and offered at a higher level of generalisations than common sense observations that are also directly related to human needs. Much of science in spite of their possible application to real life is carried out for purely esoteric reasons that are for the pure abstracted pursuit of knowledge. Thus those who were engrossed in discovering the structure of the atom, for example, were not thinking about making an atom bomb! Science has so far distanced itself from the consequences of the knowledge that it produces whereas common sense knowledge is grounded in human society and everyday lives.

Let us now examine what is meant by a scientific method and modes of explanation.

Check Your Progress

- 1) How does scientific thinking differ from commonsense?

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- 2) What are the most salient characters of scientific thought?

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1.2 THE SCIENTIFIC METHOD

The scientific method comprises of several types of explanations that is the various ways in which one arrives at the explanation or conclusion with respect to any phenomenon.

Deductive method is the most highly regarded and respected of all types of scientific methods. It involves a purely logical process of analysis and is most

applicable to mathematics and related subjects. In the social sciences it is usually associated with some degree of observation and contextual reference. But the deductive explanation must contain at least one premise of a universal truth. For example the deductive reasoning of the law of gravitational pull is supported by the universal premise that everything on earth will fall to the ground; if things were flying away and even if only one object flew instead of falling then one has to look for a sufficient reason for it to do so and a reason that is still explainable within the law of gravitation. If no reason is found then one has to abandon the basic premise and it ceases to be universal. It is possible and it is always possible to happen that some basic premises that were taken to be true have to be abandoned. Then the law built upon that premise has to be abandoned as well.

Racism for example was a deductive theory based upon the premise that human beings are graded into superior and inferior, but Darwin's theory proved that Homo Sapiens is one species and all members are identical, thus the Race theory was rejected as *a scientific theory* even though it may continue in a social form.

Deductive logic is attributed to Aristotle, who considered it a definitional aspect of scientific explanation. The deductive process is essential in the formulation of general laws that is the ultimate goal of science. Formulation of laws means that a large number of even apparently disparate phenomena can be explained with one generalised statement; like for example Newton's Laws of Motion. The ultimate goal of the scientific method is organisation and classification of phenomena in a way that it advances our understanding of what is happening. Therefore a large number of events can be explained with Newton's laws and more importantly there is explanation for those that cannot be explained.

The theories that are formulated with help of the scientific methods link two or more phenomena in a definitive way, like the Theory of Evolution that describes the descent of the species with modification. Basically the theory tells us that species undergo modifications in their progeny in very minute ways, or that a progeny is never identical to its parent and these minute changes accumulate over a very long period of time, in the scale of thousands of years to produce a modified version of the species. The important aspect of any theory is that it can never be proved directly. The very general nature of a theory makes it invisible or non-observable. No one can for example *see* evolution. But the existence of evolution can be demonstrated by illustrative cases and also by the universality of its application.

All laws are also based upon some associated premises, for example the biological law of evolution is based upon the universal premise of reproduction, that all creatures are offsprings of their parents. This is a universal or what is known as a law of nature. Such a law is not derived but is taken as a given condition. All deductive reasoning must contain at least one such universal or natural premise in its explanatory conditions.

Aristotle had also given what is known as the epistemic or cognitive aspect of an explanation. In other words what we know or perceive about an explanatory premise. An explanatory premise must be known to be true and in a scientific explanation the truth must also be demonstrable or knowable. But as pointed out by Nagel (1979: 43) if pursued too far, it may block scientific explanations that are often derived from intuition or hunches. "Were it adopted, few if any of the explanations given by modern science could be adopted as satisfactory". However

it is necessary that the explanatory premises should be at least commensurate with known or existing facts or should not be negated by known observations. For example the explanatory premise should not be based on a statement like “The storm was caused by a winged horse”, for there is no evidence that such a horse exists or has even been seen anywhere.

Another kind of explanation that is weak is one that is known as a circular or tautological explanation. That is where the explanation contains the conditions of the explanation already; for example it is raining so the sky must be cloudy.

A satisfactory explanation however need not be based on what is widely known, like the sun rises every day, but may contain things that are not known or familiar to most people. Yet one goal of science is to make things intelligible to as many people as possible, like today most people know the explanation of rainfall through the water cycle and do not think rains are tears of a heavenly bird or any other such thing. The goal of science is thus to make the unknown known and that too within a logical frame of reference.

Check your Progress

3) What is deductive logic? How does it define science?

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4) Discuss the contribution of Aristotle to the construction of modern science.

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5) What are the different kinds of explanations possible in science?

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1.3 LAWS

A law is a statement of universal conditionality. It is characterised as infallible and mostly unchangeable. The first kind of law, based on common sense as well

as systemic observation is what is known as Laws of Nature or Universal Laws.

The definition of universal laws is vague and often it is based on observation without explanation, like horses do not fly. At one level it is based on the universal observation that no horse has ever been known that flies, or will be known in the future. But this is not a fully satisfactory or scientific law. A scientific law must have a stronger connection between the antecedent and consequent conditions than a mere statement based on recorded observation. For if we make the above statement it does not cover for the possibility that a horse may one day be found that flies. But if we frame an explanation in known and proven premises other than mere observation, then we can say that some creatures can fly because they have the biological and anatomical pre-requisites for flying. As far as a horse is defined as a horse, it does not have the anatomical features of a flying species, and therefore it does not and will never fly. Thus to our physical observation we must add the scientifically determined premise of how any living thing flies. If ever a horse like creature that flies is discovered then it will be scientifically put into a category that is neither a horse nor a bird, but we will say a new species has been discovered.

There is a difference between what is accidental universality and nomic universality. The fact that all tigers have stripes is an accidental universality but a nomic universality would depend on a logical and necessary relationship between the antecedent and consequent conditions. However these definitions are often debated and refer to deeper philosophical issues and will not be discussed here.

More often in science we deal with causal laws where the consequent is an effect of the antecedent. For any causality to assume the status of a law, it must satisfy four conditions. Thus if A and B are the antecedent and consequent conditions, then the first is that whenever A occurs B will follow, Secondly A is a necessary condition for B to happen, further A constitutes both a necessary and sufficient condition for B to occur and finally while B is the effect of A, the opposite is not true, that is B is not necessary for A. These again are open to criticism, for example not all causal relationship are asymmetrical (the last condition); clouds and thunder have a symmetrical relationship for example.

Not all laws are based on observation, some are also based on pure logic and they are known as theoretical laws. They are most likely to be found in a pure science (purely logical) like mathematics. Thus evaporation of water, when based upon observation can be called an experimental law and when based upon the properties of molecules, can be called a theoretical law. The latter are mostly not observable or beyond observation, like the law that parallel line meet at infinity. The methods based on observation are called as inductive.

However most theories are related to observations, although the theoretical laws are expressed at a higher level of generalisation and are usually not observable in the generalised form. Thus when we observe the progeny of a couple as resembling the parents in essential features like colour of hair and eyes and skin colour, then we may call it an experimental law but when it is explained on the basis of genetics and the composition and structure of chromosomes, we call it a theoretical law as chromosomes and their transmission cannot be observed but only inferred from observations. A theory in itself can be neither proved nor disproved except by the proving of secondary statements and hypothesis that is

derived from it. If any observation is contrary to the law then one has to look for additional information as to the reason for the discrepancy that may itself be another theory. Like for example, if a child is born not resembling its parents then an additional theory of genetic mutation is referred to for explanation.

Experimental laws can also be proved by setting up artificial conditions or laboratory conditions for proof. For example, if we want to prove that water is nothing but a combination of two molecules of Hydrogen and one molecule of Oxygen then this process can be recreated in the laboratory and water created under these artificial conditions, will be exactly like natural water. Unlike theoretical laws where all components can be abstract, in the case of experimental laws at least one component is observable.

A critical difference between an experimental law and a theory is that the latter has a much broader range of explanation than the former. A general theory can explain many divergent kinds of phenomena and subsume several experimental laws under it. An example of a general law is Archimedes' principle of buoyant force of liquids that can explain a wide range of phenomena.

The theory is also only a premise, and it is something that can be referred to in order to demonstrate, prove or disprove some hypothetical statements. It is not in itself a demonstrated truth. The value of a theory lies in its application and the extent to which it can explain a wide range of phenomena.

This process called experimentation is an integral part of scientific method and setting up of an experiment by creating artificial conditions in the laboratory also allows greater control over the different parts of the process. One can manipulate them for different variations and new products. In fact experimentation is the key to scientific creativity and growth of scientific knowledge. However there are limits to experimentation mainly because of reasons of ethics and humanity. It is not ethical to experiment on human beings except on volunteers, especially if such experimentation is likely to have adverse effects on a human. Medical experiments have been done on animals but in recent times, there has been great resistance and criticism of such experiments. Yet experiments are still being done on animals and covertly on human beings as well. Nuclear experiments in the name of science have caused much damage to the environment as well as to human and animal populations.

Check Your Progress

6) What are the characters of a scientific law?

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7) What do you understand by accidental and nomic universals?

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8) What is a theoretical law?
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9) What is an experimental law?
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1.4 CHANGING PERCEPTIONS OF SCIENCE

In the period of the European Renaissance, which also marks the consolidation of western system of scientific thinking; science was defined largely in terms of the validity of sensual perceptions and the faith that was reposed in human faculty of reasoning. The possibility of pure reason existing is attributed to the existence of a thinking being, namely the human. The human being has a consciousness that expresses itself through doubt. Doubt was viewed by him as the foundation of the scientific method that basically means that one should not accept anything without reason. For example he established that God exists by the process of reason and not by faith. Thus reason is the basis of science and the basis of science is doubt, not taking anything for granted.

Renee Descartes is credited with making a separation between the mental and physical world; in other words the abstract world that humans have the power to create and imagine and what is the material and the objective world that is available to the senses. This has come to be known as Cartesian duality where only the object or phenomenon that is located on the axis of space and time as described by the four dimensions of height, width, depth and time; have any material existence. He also imposed a duality between humans and animals by positing that animals have no subjective consciousness and therefore are to be treated as mechanistic object and not as beings.

Much of what he said is discredited today, both the duality of mind and matter and the division of human and non-human have been proven to be wrong. His description of the material world and in fact the entire concept of what constitutes matter has been disproved by modern physics, which shows that matter can turn into energy only by speed. Although the doubt as the basis for science is still acceptable, the question of proof through reason alone is no longer acceptable as physicists are delving into Black Holes and Dark Matter. Today as science is going further and further with knowledge production, the distinction between

material and non-material is getting blurred. Yet Descartes's contribution in establishing what we understand as the philosophy of modern science lies in his recognition of the human subject as a doubting and thinking being and in his positing of human reason as the path to true knowledge. No matter what direction the concept of science may take, the notion of proof of evidence as the basis for acceptance in science will always remain.

1.5 THE SOCIAL SCIENCES

The prefix, science was added to social or the study of society, when it was believed that societies are like natural beings or that social behaviour is subject to rules that are organised, systematic and capable of being classified and generalised as laws, for example, the Principles of Kinship as postulated by A.R. Radcliffe-Brown and Structuralism as advocated by Levi-Strauss which attempts to be viewed as a universal theory. The period of modernism in anthropology was marked by the application of the scientific method to the collection and analysis of data on society. Anthropology thus has the basics of science like theory and methods. It also had the scientific perspective of objectivity based on the duality of mind and matter, like the attempt of classical anthropologists to develop an objective attitude towards the subjects of their study. This period was marked by the application of the comparative method borrowed from the natural sciences in order to overcome the limitations posed by the impossibility of conducting laboratory experiments on human subjects and society.

The comparative method takes either a temporal perspective or a spatial perspective for the sake of establishing relationship between two variables. For example if we wish to study the effect of the introduction of television on family life, one way would be to study a family before and after they buy a television. However if this is not feasible then one can study a family that has a television and one that does not. Again such a comparison will be somewhat successful if all other variables are held constant. Although some commendable works have been done by the comparative method including Raymond Firth's method of dual synchronic study to document the changes that took place in Tikopia society over a period of twenty years, it remains an awkward method especially in today's world when there is a need for quick documentation. The comparative method however remains an inherent part of anthropological research even when a particular research is compared to others through reference to existing and ongoing works.

The modernist period also focused on the generation of what was regarded as 'factual data', emphasising on collection of quantitative and substantive data such as field census, household budgets, genealogies, demographic and geographical data and so on. The basic philosophy of the scientific method, namely that of evidence based truth and of applying reason was and is still being followed in most anthropological research.

Let us take a look at what Alan Barnard (2000: 5) has to say about the theory in anthropology as compared to theory in pure sciences.

Barnard considers four aspects of theory: Questions, Assumptions, Methods and Evidence. He summarises his opinion about these four aspects as follows:

The most pertinent questions are regarding what one is trying to find and how

this knowledge is useful. The first question relates directly to the nature of the discipline. In anthropology the questions pertain to the nature of culture and of society, they look for explanations to behaviour, to the material products of culture, they are directed towards finding both causes and effects of change and any number of questions with respect to why humans behave as they do. The second aspect can be of either esoteric or instrumental and more frequently a combination of both. Scientific inquiry was ideally supposed to have been 'pure' or what is known as 'knowledge for the sake of knowledge'. However the knowledge so gained, like about the properties of matter or about the nature of heredity were applied for numerous instrumental ends like making of machines and treatment of cancer. Yet one can distinguish the initial query as being directly in the applied field like if someone is looking for cure to a particular ailment or driven by pure inquisitiveness like looking for a new species.

Assumptions refer to what we have already discussed as basic premises or the presumed laws of nature. At this point it may be mentioned that assumptions play a very significant role in a discipline like anthropology, where the various schools of thought go their different ways. For example while all anthropologists believe that societies are the creation of human beings and not of any divine being, they differ in thinking of societies as harmonious and integrated or as driven by inner contradictions. Some may assume that all social institutions are functional and some others may not agree.

A third aspect of any theory is method. Method refers to the operational aspect of doing research but it is closely related to theory. Some theories are associated with a synchronic method where the data needs to be collected mostly for things as they are, but some others that emphasise upon change or social transformation, need to refer to history. Even the understanding of change differs, for example in the classical structural functional method, change was seen as external to the system and studied that way but in the Marxist perspective change is internal to the system and therefore the study will focus on the process of history. The method of study is thus closely linked to the basic assumptions that any scholar or school of thought holds with respect to how they view what society is or what culture is, and what is the relationship between individual and society and whether a sociological perspective should include psychological aspects also or not.

The last aspect of Evidence, again depends to a large extent on the theoretical perspective; some anthropologists who have a positivist approach may think that evidence can only be collected by an objective and impartial method from the outside while those who think more subjectively might derive evidence from the narratives of the informants and from the beliefs and values held by the members of society rather than by those held by the researcher. Thus some may believe in the comparative method and some may believe in holistic ethnographic method for comprehensive evidence of any social phenomenon.

Check Your Progress

10) How can social sciences use the experimental method?

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11) What are the components of a theory?

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12) How is theory in anthropology different from that in the pure sciences?

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1.6 IS ANTHROPOLOGY A SCIENCE?

Lastly let us come to the final and important question of whether anthropology is a science? There has been considerable debate on this point, as some scholars are of the opinion that anthropology, since it deals with human behaviour, cannot be considered as a science. Human beings are conscious beings with a will, and therefore their behaviour cannot be understood within a restrictive framework. One character of a scientific law is predictability and the second is generalisation. Although some structural laws have been postulated for human societies, there is always the possibility that individuals may change their behavior or already existing institutions may transform according to changes in times.

Thus while the laws of mechanics apply to inert bodies, laws of society apply to sentient, living beings with a volition of their own. Although societies have their norms and all social actions are bound by certain rules, there is always the possibility of individual dissent. According to some scholars and certain perspectives, like that of Levi-Strauss, the regularities of human behaviour are at a deeper layer than what is apparent on the surface and therefore ethnographic differences mask regularities that can be discovered by the analyst. This view confirms to the positivist view of science that things that may look very disparate may be confirming to an underlying principle, not apparent to the lay person and to common sense. It also contributes to the belief that science is purely objective and transcends all cultural and subjective bias.

However in the post-colonial era when the field of science was critiqued on these very premises, namely that science as it developed in the West was not as purely objective as it was purported to be but was both Eurocentric and Androcentric; that is the white male was taken as the standard for rational and logical thinking; and non-whites, women and even people from the fringes of the European countries were seen at various levels of primitiveness, ignorance and intellectual disability. A significant contribution in this direction was made by Feminist scholars. Sandra Harding (1993:4) points out that androcentricism can be found in even such areas like physics and logic, mathematics, abstract

thinking, standards of objectivity and good method by the very assumption that these qualities or capabilities are possible only in certain kinds of humans, namely white and male persons.

The criticism of scientific objectivity and the fallacies committed by western science such as racism and environmental destruction are increasingly being accepted even by the scientific community in the west. According to Harding (1993:6) the National Academy of Sciences of the United States now advocates that the meaning of scientific method should be broadened beyond the accepted and well known parameters of random selection, double blind trials and properly administered controls to include the subjective judgements that scientists make while assessing the reliability of the data and also in analysis. The decisions that are made to prioritise or choose problems for study as well as decisions to end a particular research are also important aspects of research where the political and economic considerations play a critical role, for example US president Ronald Reagan’s refusal to further research to aid HIV and AIDs infected patients and George W. Bush Jr’s stopping of stem cell research. Method also includes the manner in which knowledge is exchanged or made available to others and in the public domain. In other words the embeddedness of science in economic and political as well as cultural contexts is now well recognised.

In the context of the changing perspective about science not only can we recognise anthropology as a science but also the contribution that anthropology can make to the construction of an effective scientific methodology that will move it further towards what Harding has called ‘hard objectivity’. The removal of subjective bias is possible only by its recognition.

Check Your Progress

13) Discuss the criticisms leveled against western science.

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14) What are the changing perspectives with respect to scientific methodology?

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1.7 SUMMARY

In this Unit the students have learnt about the basics of what is conventionally understood as science as well as the historical and political context of this understanding. They have been exposed to the key debates with respect to

scientific methods and the cultural, political and economic influences that shape both the definition of science as well as its methodology.

1.8 REFERENCES

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1.9 ANSWERS TO CHECK YOUR PROGRESS

1. See section 1.1
2. Same as above
3. Refer to 3rd paragraph of section 1.2
4. Refer to the 3rd, 4th, 5th and 6th paragraphs of section 1.2
5. Refer to section 1.2
6. Refer to 1st paragraph of section 1.3
7. Refer to 1st paragraph of section 1.3
8. Refer to 5th, 6th and 7th paragraphs of section 1.3
9. Refer to 5th, 6th, 7th and 8th paragraphs of section 1.3
10. Refer to sections 1.3 and 1.5
11. Refer to 3rd and 4th paragraphs of section 1.2; 6th and 8th paragraphs of section 1.3 and 1st, 3rd and 6th paragraphs of section 1.5
12. Refer to section 1.5
13. Refer to the 4th paragraph of section 1.6
14. Refer to sections 1.4 and 1.6

UNIT 2 ANTHROPOLOGY AS A SCIENCE*

Contents

- 2.0 Introduction
- 2.1 Is Anthropology a Science?
- 2.2 Critiquing the status of Anthropology as a Science
- 2.3 Perspectives on Social Science
- 2.4 Is Science what we think it is?
- 2.5 Anthropology as a Science
- 2.6 Summary
- 2.7 References
- 2.8 Answers to Check Your Progress

Learning Outcomes

After reading this unit, the student will learn to:

- Define the nature of anthropology as a discipline;
- Assess anthropology as a science;
- Critique anthropology's status as a science; and
- Rethink science and situate anthropology in relation to it.

2.0 INTRODUCTION

When anthropology began as a discipline in the early 20th century, it was as a science. Even today it is taught as a science course in some institutions and as part of the social sciences in others. The reason anthropology was first identified as a science was the questions towards which it directed itself as a discipline, namely, the evolution of human species and human variation. Since it was addressing humans, both these aspects had to move beyond the biological to include the cultural and social dimensions and along with biological evolution, the study of cultural evolution gave rise to the third branch of anthropology i.e., archaeology/prehistory. Along with linguistics, anthropology was identified as the scientific study of the human species covering all aspects of being human. A scientific study was a necessary label at the initial stage because one reason for the establishment of anthropology as a discipline was to get rid of myths regarding the various human populations, cultures and societies, especially the perceptions ruled by racism, eurocentrism and the superstitious beliefs originating from misplaced religious ideas. Thus the scientific study of Man as it was then known, was to bring the scientific temperament, attitude and method to the study of humans.

2.1 IS ANTHROPOLOGY A SCIENCE?

The aim of anthropology as a scientific discipline was to dispel all the wrong ideas that were held about human beings such as those that regarded some human

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populations as superior and others as inferior, some humans having characters different from others and cultures being civilised or uncivilised. As a scientific discipline, anthropology was to apply the scientific methodology of being objective, value free, systematic and skeptical; the last one referring to the scientific attitude of accepting something only with proof or evidence.

The most important paradigm shift with respect to humans that made possible the scientific study of humans was to break away from the myth of divine origin of humans. Every culture in the world, no matter where situated and how complex or small scale has one aspect in common, they all have a story of origin of the humans that is located in some other worldly source. To have a science of anthropology was to recognise humans as one of an animal species, part of the biological world and subject to the laws of nature and not of any divinity. The problem was to find out how humans evolved to what they are and to identify the path of their evolution and also diversification. Why do humans look different and why do they have different societies and cultures, even though, and this in the initial stage was the most important statement to make, they *are all the same*.

The justification of considering anthropology as a science was rooted in an immense discovery and ideological shift; to treat human species as one among other animal species. No longer were humans a special creation of a divine being. They had evolved as all other animals from the original living cell. The methods to study humans was the same as that used to study other animal species. Thus the positivist method of science was to be applied to the study of humans and their evolution and society.

The rules of positivism implied that one approached one's object of study with scientific detachment, that is impartially and with no preconceived ideas. One had to remain non-judgmental and rational, not influenced by external causes. Proof or evidence and logical thinking were essential to the scientific method.

The aim of science was to classify, make systemic and logical categories, to make sense of diversities by identifying general principles or rules and answer the questions of how and why; that is explain through making causal equations and also to identify basic underlying principles that will explain a wide range of phenomena. Anthropology began its journey as a discipline by doing exactly this.

In classical evolutionism, diffusionism, structural functionalism and structuralism there was an attempt to make generalised laws, classify and make objective categories by the use of the comparative method borrowed from the biological sciences. The comparative method was seen as appropriate to the subject matter of anthropology as it dealt with human beings who could not be treated as experimental objects in a laboratory. Thus while most aspects of a scientific method was adapted for anthropology, the experimental method was an impossibility to be applied on others like one's self.

To make up for its lack of the possibility of experimentation, anthropology, turned to empiricism and rigour in the collection of data. Fieldwork, recording, making schedules and questionnaires, measuring and weighing, taking photographs and drawing, were all part of the scientific techniques that anthropologists took to the field.

The goal of science was to arrive at objective and irreducible truths. If something was proven by science to be fixed and immutable and if it was refuted by some process or other, it had to be rejected. In other words there is no possibility of flexibility with respect to anything regarded as a scientific truth. Therefore the expectation was that if any anthropologist had written about a particular community, it could be taken as more or less a fixed truth.

But there were two possible avenues of fallacy that were overlooked when it was believed that a scientific approach was possible while dealing with human beings. For one, unlike natural objects, humans have volition and are able to act according to their own wish and can flout norms. This is probably what Radcliffe-Brown meant when he made a difference between social structure and structural form and when Meyer Fortes had advocated for the use of quantitative method in determining structure that actually exists rather than structure that one may expect to exist. Levi-Strauss had also made a distinction between mechanical and statistical models, one that is rule based and one that is action based. However, all of them assumed that some basic rules, norms and principles would operate in an on-going society, especially the kind of ‘cold’ (Levi-Strauss) societies that was the focus of anthropology in its early phase.

The second was that unlike the natural systems (such as the planetary system) societies and cultures changed and sometimes did so rapidly. For example if we try to apply Radcliffe-Brown’s principles of kinship to traditional Indian society, we often find to our delight, that it applies very well. Students are happy to recognise the joking relationships that exist between *devar* and *bhabi* in their families or the deference that needs to be shown to one’s mother-in-law. Yet in an urban nuclear family in India, many of these relationships are rapidly changing. A daughter-in-law no longer may observe avoidance from her father-in-law but the duo may happily go on a picnic together wearing jeans. Thus nothing in society need to remain an immutable law like the laws of mechanics.

But even more important are the questions of subjectivity that arises not just with respect to the informants but also with respect to the fieldworker or the researcher. In fact this subjectivity has now been extended to not only the social sciences and humanities but to the hard sciences as well, an issue to which we shall return later in this unit. But let us first see what shook the foundations of regarding anthropology as a science.

Check Your Progress

1. What were the methodological rigours that were applied to anthropology to validate its status as a science?

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2. What paradigm shifts were necessary before a science of man could be thought of?

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3. What are the reasons for which anthropology cannot be treated as a natural science?

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4. What is the positivist approach? Can it be applied to anthropology? Critically evaluate.

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2.2 CRITIQUING THE STATUS OF ANTHROPOLOGY AS A SCIENCE

The initial doubts about the status of anthropological observations and data as having the status of science came about with the re-studies that were carried out in the same field areas as the works of famous scholars like Margaret Mead, Bronislaw Malinowski and Robert Redfield, to name some of the major debates. Derek Freeman, a middle aged male anthropologist who visited the same field area as Margret Mead in Samoa, came out with the startling disclosure that his informants told him that they had deliberately misinformed the ‘young girl’ who came asking “silly” questions. They had also added, according to Freeman, that since he (Freeman) was a man as well as more mature, they were giving him more reliable data. This debate issued when Freeman began to write about his criticism of Mead after his own fieldwork in the early sixties, where he disagreed with Mead’s proposition of cultural determinism of adolescence trauma and sexuality among the Samoans.

Freeman supported psychological and biological unity of all human populations and therefore disagreed with Mead’s more cultural explanation that emphasised difference rather than unity. But what clearly emerged was the fact that the same

field can be analysed differently by two or more different scholars, if they hold different theoretical positions. What also emerged during this debate was the question of gender and other characters of the researcher herself or himself; a question that precipitated with the publication of Annette Weiner's (1976) restudy of the Trobriand Islands that disclosed that the master fieldworker and great scholar, Malinowski had erred in one respect: he never paid any attention to the contribution of women to the economy of the society. Published in the seventies, Weiner's book followed up on earlier controversies like that between Robert Redfield and Oscar Lewis on Tepoztlan and between Marshall Sahlins and Gananatha Obeyesekere on Captain Cook and the rationality of non-western people (Sahlins 1995).

If anthropology had to defend its position as a science in the truly positivist sense then it could not afford to have different scholars come up with different analysis of the same data, even if it was done after a period of time. During the Mead-Freeman controversy, one major pointer was to the time lapse between the two studies, Mead's in the thirties and Freeman's in the sixties that may have led to significant changes in the society, as the Samoans had also undergone considerable culture change because of the influence of Christianity. It is possible that over time they had become closer to the western people in outlook as they were introduced to a conservative religion. But then it opened up the issue of temporality or the role of time in the study of societies and cultures.

Thus to be defined as a science, anthropology had to look for some core principles, that would not be changed by either time lapse or by the subjectivity of the researcher, Freeman tried to do that by emphasising on biology and psychology and Levi-Strauss by his focus on the universal structure of the human mind based on dichotomies or oppositions. Yet one aspect of anthropology always remained that set it apart from hard core science, *the writing of anthropological texts*.

From Malinowski to Clifford Geertz, from the earliest anthropological texts to the most recent, one dimension that sets anthropology apart from other sciences like Physics and Biology is that all anthropological data and analysis has to be written out as a text. Even the positivists like Radcliffe-Brown and Levi-Strauss have written beautiful texts. In fact one criteria of becoming a successful anthropologist is to be able to write well. The anthropologists have to present their field to the reader in a way that they visit it vicariously. Even if there is quantitative or statistical data, such data rarely makes sense without a description to accompany it. As far as human societies are concerned, the mere description of behaviour or the statistical occurrence of any kind is incomplete or even not understandable, if one does not know the reason behind such an occurrence or action. For example, if one comes to know that the sex ratio in a particular population, this information is not of sufficient anthropological interest, unless one is able to decipher the reasons that lie behind such a situation. As all social and cultural anthropologists, and even biological anthropologists, understand, human behavior cannot be analysed in an essentialist manner. In other words, there is likely to be complex and multiple reasons that underlie any social phenomenon. Thus to explain the reasons for any social phenomenon one cannot just write a formula, although anthropologist Leslie White, who also belonged to the positivist school, had come up with a formula to indicate the evolution of and culture in relationship to each other. But Leslie White (1939) too had supported his equations with descriptive text and examples.

The attempt by some anthropologists to reduce human behaviour to simple and direct equations of causality, did not work out. To understand even if partially, why humans behave as they do, one has to locate multiple causality of such behaviour as well as go into complex analysis that moves beyond the immediate situation and relationships.

Any science is largely confined to its own subject matter, although for some particular events one has to broaden the boundaries and look at things from an interdisciplinary platform. But by and large, if one is working in Physics, then one keeps to the confines of Physics and if one is studying plant behaviour, then one is confined to the science of Botany. In conformation with this principle of defining a science, Emile Durkheim, often referred to as the father of Sociology or of social sciences, had posited that a social fact can only be explained through other social facts. This principle was adopted by the British School of social anthropologists headed by A.R. Radcliffe-Brown who also drew the boundaries of the discipline exclusively in the manner of a scientific discipline.

But the American School headed by Boas, expanded to include psychological, historical and environmental variables to explain cultural phenomena. In contemporary anthropology we find extensive use of historical and cultural data, like literature, performing arts and poetry. The anthropological text is also increasingly viewed as a product of a subjective interaction of the scholar with the field. This subjective interaction is also situated within a cognitive framework and not an objective backdrop. Let us now examine more minutely the cognitive and subjective dimensions of anthropology as a discipline and how it affects its status as a science.

Check Your Progress

5. What was the Freeman-Mead controversy? How did it affect the status of anthropology as a science?

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6. What kind of criticism was made against Malinowski’s ethnography and by who?

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7. How did Durkheim define a social science?

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2.3 PERSPECTIVES ON SOCIAL SCIENCE

By the mid twentieth century, the scientific method, established by the likes of Renee Decartes and Francis Bacon, in the European Renaissance were being widely questioned (Leaf, 1979). Bacon had put forth the essence of the scientific method as comprising of close observation, exact recording and the framing of generalities that cover the observed facts without recourse to any external source like theology and mythology was being questioned by raising questions such as ‘what constitutes a fact?’, ‘How reliable is observation?’ and what is meant by exact recording? The aspects of human subjectivity, the fallacy of human sight and human technique were already raised but the phenomenologists and interpretative theories of cognition raised further issues pertaining to human understanding of any phenomenon. The main underlying premise being that humans occupy a cognitively constructed world that is a symbolic abstraction from the objective reality, if at all there is any such thing.

Thus as historian Barzun observes (2000: 194) that for science to exist as formulated, there has to exist a pure body, a body free from all subjectivity and purely physical to be able to see and record purely quantitatively. But the human beings do not possess such a body. The dichotomy of mind and matter, or of human mind and human body as speculated by Decartes, does not exist. Peter Winch (1958), writes in his seminal book, *The Idea of a Social Science*, that humans can understand anything they perceive to belong to reality only in terms of the language that they use. Everything comes to us filtered through the language that we use. Without language the world does not exist, for it will lie beyond our comprehension. There is for example no colour that can possibly exist if we do not have a name for it.

Thus when we describe a society, it is in terms of our understanding of it spoken internally in the language that we know. For example on entering a field area, an anthropologist will tell herself, “Well it seems those men are sowing seeds in the field”. But this simple statement is not only spoken, even if internally, in a language, it also presupposes many concepts, again in a speech. One recognises a certain being as sentient, alive, a human and a man, we recognise something as a seed, a piece of land as an agricultural field as so on. One must recognise that all these words refer to a concept, an abstraction from reality, a reality that we can never grasp for we have no word for it.

Thus we live in a world both cognitively constructed and shared by the use of a common language and cosmology. There is no possibility of an understanding beyond or away from this lifeworld. As an anthropologist, one’s efforts at understanding another culture is to enter into this cognitive world, to try to comprehend it by translating it into one’s own language and then to communicate to others in the scholarly community in the language of the discipline. As a simple exercise try to understand the various levels of abstraction that has undergone for a concept such as the ‘joking relationship’ to emerge in the anthropological vocabulary.

Therefore, Winch among others disagrees with J.P. Mills that social and natural sciences follow the same logical structure. A student of social behaviour, even while evolving their own (so called scientific vocabulary), has to draw upon existing concepts. A scholar in the field actually observes things like people

making movements and sounds, but to communicate these to make them intelligible, she will have to convert them to the language of shared concepts. Thus what constitutes for the anthropologist even raw data is derived only from a cognitive field, mediated by the symbolic world of culture and language.

Therefore as Winch puts it (1990: 115), when we understand something in the social sciences, it is in terms of a discourse always and never in terms of an equation. In this sense it involves the subjective self, which also engages in an internal dialogue even as it engages in a dialogue with the informants. What emerges as an understanding is how the subjectively constituted researcher, absorbs and filters the information, through his or her own cognitive screen, to make sense of it in the form of an internal dialogue before it is communicated through a commonly accepted language.

Thus all information that is put out as information in a social science study is filtered through the subjective self. Since no human is only body, this mediation of the self is evident in all that is presented as data. This subjectivity expresses itself in the subject positions expressed as gender, class, ethnicity, political ideology, theoretical stand point and so on; and each one of them enter into the understanding that a scholar has about the field and the data. What is observed and thought fit to be observed is also mediated by these criteria. For example the reason why Malinowski did not observe the women's contribution to Trobriand economy, was not that the women were invisible and that during the long course of his living on those islands he never saw them weaving grass skirts or making ornaments, but it was Annette Weiner who discovered this, and pointed out that women played important social and economic role in Trobriand society. Malinowski must have seen this but he did not observe it because as an early twentieth century European male, he was socialised to understand women as dependent and not capable of making any significant contribution to economy. He must have interpreted their activity as household work and therefore not important enough for his observation and analysis.

More importantly, the anthropological field consists of humans like one's self and therefore, as all fieldworker's experience, there is an expectation that they also are like one's self in the matter of emotions and sentiments as well as needs. It is thus near impossible to maintain the kind of emotional detachment in observing human behaviour that a physicist can maintain while observing the behaviour of atoms in a laboratory or observing the movements of distant heavenly bodies. As fellow human beings it is natural and also normal to be emotionally involved in one's field and in one's informants. In the past, when there was still an illusion or at least an attempt to treat anthropology as a pure science, the matters of emotion were confined to the personal (not field) diary and as the publication of Malinowski's diary, long after his death, indicated, he had an intersubjective relationship with this field, which was far from the objective observer, he projected himself to be.

In contemporary anthropology, especially after the publication of books like Clifford and Marcus's *Writing Cultures*, there is the recognition that if at all one still defends the status of anthropology as a science, then there is a need to foreground the subjective involvement of the researcher, and make clear the kind of intersubjective relations one has with one's informants in the field. Von Furer-Haimendorf, had done so in his book, *The Naked Nagas*, but not with obvious intention, but later ethnographers such as Trawick (1996: xix) views herself as

“co-constructors of culture at culture’s boundaries” and striving for a symmetrical relationship between the anthropologist on one side of this boundary and the informants on the other.

The present ethnographies and anthropological texts are likely to include more narratives than explanations, as the anthropologists believe that what people actually said, is a more powerful conveyor of meaning than what has been abstracted by the scholar. Science especially the hard sciences do not have the subject matter of study who can speak for themselves or with one feels a common emotional and subjective bond of identity.

Having said that it is increasingly becoming evident, even as far as hard sciences are concerned that there is now a changing perception regarding them as far as objectivity and ethics are concerned. In the next section we shall examine the changing perception with respect to science and then reconsider anthropology’s status as a science.

Check Your Progress

8. What do you understand by a cognitively constructed world?

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9. Discuss the role of subjectivity in anthropological observations.

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10. What changes in method is required to overcome the subjectivity of anthropological research?

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2.4 IS SCIENCE WHAT WE THINK IT IS?

Barzun (2000:217) puts forward a very succinct criticism of the weightage given to science or Western science (in the terms of feminists like Harraway). He says that all truths cannot be arrived at by the so-called scientific method, “to know and to know about express the difference between intimate awareness and things learned”. The role of intuitive understanding, the sudden flash of understanding that made Newton formulate the Laws of Motion by seeing an apple fall, or the accidental discovery that made Marie Curie discover radium, were not just the products of systematic, logical thinking; they were guided by some inner revelation, some inward mechanism that cannot be explained by mere outward rationality. Thus as Barzun has pointed out we may know about something but still never know it. For example one who is an orphan will know *about* mother’s love but will never actually *know* it. Decartes considered geometry to be a pure science based on pure logic, but geometry could not have existed if there was not the real world for the human mind to draw upon, even to make abstract equations. The mere possibility of a line or a triangle is in the last analysis drawn from human observations of the natural world. No one for example can conceptualise a shape that one has never seen or think even in abstract about something never experienced, like a sound, a colour or a smell. The criticism levelled by the feminists was to target the historicity of science, to examine it not as a universal truth but what Harraway refers to as ‘situated knowledge’; a knowledge that is the product not only of a time and place but also of a particular historical situation of power. Western science was privileged (including the initial period of anthropology) not because it was actually the only truth, but because it was accompanied by political colonisation, a brute assertion of power, that tried to prove that its ways were the only way to live in this world.

A true objectivity from the feminist point of view was to highlight the specific situation and context of epistemology as pointed out by Harraway (1988:583) and not about creating a false sense of objectivity by splitting of object and subject but to be “answerable for what we see”. What this means is that there is no absolute reality that is outside of the subjective self of the researcher that any human being can access. Whatever we can know is mediated through us as socialised cognitive beings, who are continuously translating the world around in terms of our learned concepts. Harraway, Harding and other scholars both feminist and post-colonial, have shown how science has been influenced by concepts of race, class and gender and the knowledge that is produced often reinforces the conditions under which it is produced. In other words the knowledge that is produced under conditions of patriarchy will reinforce it and that produced under racism will reinforce it.

The absolute objectivity of science is now being critiqued from within science itself. The quantum theory of physics visualises a world far more abstract and difficult to grasp than was believed earlier. The fallibility of sensory perceptions and the vast expanse of the unknowable that is today recognised as the dark universe have reduced the weight of scientific claims as capable of knowing anything and everything. Expanding frontiers of science are actually creating more doubts and questions than confidence in the pervasive knowledge claims that science had made earlier. Today’s scientists are far more liberal and ready to accept alternate forms of knowledge and epistemology and ready to recognise the fallibility of western science.

Check your progress

11. What has been the criticism of western science from the feminist scholars?

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12. How is contemporary concept of science different from classical positivist concept of science?

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2.5 ANTHROPOLOGY AS A SCIENCE

If we recognise anthropology as subjective and situated then instead of rejecting its claim to be a science we can compare it to the hard sciences, even like physics and chemistry to show that even those are not free from subjectivity and are products of the cognitive and cultural world from which they arise.

What then makes a science? Science as is now clear in anthropological methodology is not only to describe what is seen (observations) but to make clear, honestly and elaborately, the conditions under which such data is collected and by whom. The subjectivity of the situation can only be dealt with if it is known and made a part of the observations. The absent anthropologist is now very much within the ethnography as an integral part of it, sometimes even as an actor (Trawick, 1996; Pandian, 2014). This is not to say that there is nothing factual. A lot of data is factual, for example demographic and census data. But the sense that is made of the data, the classification and analysis are guided by scholarly and lingering personal biases. What cannot be overcome must come out in the open. The consciously self-conscious way of writing has been adopted into ethnographic writing (see Price, 1983, Shoshtak, 1981 as a much cited example). Anthropology's claim to credibility lies in its rigour of description and of situating of the self of the analyst within the framework of explanation and not outside of it. Reality is also understood as polysemic and not just one unified body. For example the experiential world is experienced differently through the location of different bodies, socially constructed through variables like sexuality, gender, ethnicity and disability. Even the laws of gravity are different on the moon than they are on the earth, and perhaps mean nothing in much of the universe. Importantly, therefore what we understand as reality is the reality permeated through the person, located in a particular context, because that is the only reality that is capable of being comprehended. What cannot be comprehended is of no consequence.

At the same time the question of being useful is important. If knowledge that is gained is useful then it is true knowledge for the ultimate goal of science is to answer questions about humans living and make such living better. If anthropological knowledge can be harnessed for human betterment then that is good science.

2.6 SUMMARY

In this unit we have taken up some critical and philosophical issues that have to do with the nature of science and the historical evaluation of science over the years. It has become clear that what is science is not only to be understood in terms of its methods and its objectives but also in terms of the power relations that have gone into the definition of science. Looking through a critical lens directed on the body of knowledge that evolved in Europe at a particular time of history and the political conditions responsible for its near global acceptance as a superior body of knowledge, we are now certain that this is not the only science available to humans. There have been and there are multiple bodies of knowledge that were and are still available. The status of science too has changed and there is acceptance of its fallibility as well the recognition that human knowledge is still very insignificant and limited and there are far more possibilities as well as impossibilities with respect to not only what we can know but how we know it.

Anthropology has long since replaced positivism with inter-subjectivity and rejected the false dichotomy of the objective and the subjective, the inner and the outer and the center and the periphery. As Clifford points out (1990: 5), the areas excluded by western science, such as rhetoric, fiction and subjectivity have all been returned to ethnographic writing. Knowledge is viewed as holistic, politically situated and bound by norms of ethics and humane values. In this sense anthropology is still a science albeit a humane one.

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2.8 ANSWERS TO CHECK YOUR PROGRESS

1. Refer to the 1st paragraph of section 2.1
2. Refer to the 2nd paragraph of Section 2.1
3. Refer to the 9th and 10th paragraphs of section 2.1
4. Refer to the 3rd and 4th paragraphs of section 2.1
5. Refer to the 1st, 2nd and 3rd paragraphs of section 2.2
6. Refer to the 2nd paragraph of section 2.2
7. Refer to the 7th paragraph of section 2.2
8. Refer to the 1st, 2nd, 3rd and 4th paragraphs of section 2.3
9. Refer to the 1st and 2nd paragraphs of section 2.3
10. Refer to section 2.3
11. Refer to section 2.4
12. See sections 2.2, 2.3 and 2.4

UNIT 3 HISTORY OF RESEARCH IN ANTHROPOLOGY

Contents

- 3.0 Introduction
- 3.1 Colonial Period
- 3.2 Post-colonial Period
- 3.3 Moving into the Sixties and Seventies
- 3.4 Moving Ahead
- 3.5 Diversification of Anthropological Research
- 3.6 Applied and Action Research
- 3.7 Summary
- 3.8 References
- 3.9 Answers to Check your Progress

Learning Outcomes

After reading this unit, the student will learn to:

- Define research objectives and methodologies developed in social anthropology;
- Explain the divergent trends that developed in America and in Great Britain;
- Describe how present anthropology is globally applicable;
- Learn how the history of research is classified into colonial anthropology, post-colonial anthropology and contemporary anthropology;
- Identify how it has been and is influenced by post modernism and post-structuralism; and
- Classify its role in the development of humanist goals.

3.0 INTRODUCTION

The primary goal of anthropology as a discipline was to formulate a scientific explanation for both human evolution and human diversity, biological (race) and cultural. Over the years, with the development of human genetics and with the human genome project, the racial divisions are being seen as superficial differences, more in the line of family resemblances and the focus has remained on physical and cultural evolution as well as social and cultural diversity.

It is no secret that much impetus to anthropology came from the Colonial administrators who needed to understand the societies they were going to govern. In India, anthropological investigations began with British administrators like J.H. Hutton, J.P. Mills, H.H. Risley and others; who combined raids and other means of coercion of the native populations with collection of trophies and also

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data about lifestyles. There was no specific academic focus except the urgency felt by these officials that a way of life was disappearing and the least they could do was to preserve the records in their writings and in their museums.

3.1 COLONIAL PERIOD

The early part of this period saw the development of two major schools of thought, evolutionism and diffusionism. Both of these were based on the collection of secondary data, from travelogues, reports of missionaries and anything else that could be utilised to create grand theories of human diversity. Since the scholars were convinced that they were developing a science, they made use of the comparative method as used in natural sciences to build typologies, classify and aim towards one grand generalising theory that would explain everything. Research meant the comparison of enormous quantities of secondary data in order to classify and attempt explanations. The evolutionists explained similarities by parallel emergence of ideas based on the premise of a psychic unity of humankind and diffusionists were more inclined towards limited creativity and more of contact. In India, diffusionism was quite popular and many scholars such as Irawati Karve and B.S. Guha were under the influence of the German school of Diffusionism. Karve used the comparative method to create a regional typology of kinship in India, while Guha tried to explain physical characters through diffusion such as his work on the “Negrito” problem in India.

Lewis Henry Morgan in America and A.C Haddon in England led the path in doing field research. Morgan began to study the Native Americans near his home in order to study their kinship terminologies and came to be known as the father of kinship studies and at the same time was established as a renowned evolutionist by giving his theory of ethnical periods. Morgan had also used the questionnaire method and study of secondary sources to carry out a comparative study of kinship terms that enabled him to establish the existence of regular patterns of kinship terminologies that he named as kinship systems. A.C. Haddon of Cambridge University in England went on a trip to Torres Strait islands initially to collect biological specimen. But he was so impressed by the islanders that in his next trip he took with him some distinguished psychologists, namely W.H.R Rivers, C.S. Myers, W. Mc. Dougall and C.S. Seligman of the London School of Economics to conduct psychological tests on these islanders. On this second expedition, that took place in 1898, Rivers developed his famous Genealogical Method. He was trying to make family trees in order to trace the psychological types in a family but later realised the great potential of this method to collect all kinds of data.

In India, among the first to do fieldwork and collect first hand data about aboriginal populations was Sarat Chandra Roy, an aristocratic scholar with deep love for the people of his land. S.C. Roy not only recorded in details the life styles of the communities such as the Birhors and the Baigas, he also emphasised on their humanity and also their sufferings and marginalisation. In many ways Roy was a pioneer of ethnographic research in India and while following the general trend of doing research in those times, like recording all aspects of the physical, social, cultural and material aspects of life nevertheless had a native perspective on the plight of the tribals and did not subscribe to the view that they were primitive or backward.

In the initial period of research, anthropology established its research by hit and trial methods, like the Torres Strait expedition and then the famous ethnographic fieldwork by Malinowski that too was result of a historical circumstance and not a well thought out plan. Malinowski's forced exile in the Trobriand Islands during the First World War led to the establishment of what is now known as participant observation. Anthropologists realised that it was no use trying to reconstruct histories and past of cultures that only led to speculations. After Malinowski, it was considered better to observe and understand a society as it could be studied in real time. A.R. Radcliffe-Brown, under the influence of French functionalists formulated his structural-functional approach, wherein every aspect of society was viewed as one part of an overall structure, called as social structure, and contributed to its functioning as a harmonious system. Thus research became focused on a deep and long term association with a particular society and individual scholars by virtue of spending long periods of time with 'their people' became kind of authorities on specific communities so that one would talk about the Nuer of Evans-Pritchard and Andaman Islanders of A.R. Radcliffe-Brown, as if they had intellectual ownership of these people. The emphasis on stability and social solidarity was also seen as the ideal condition towards which the colonial regime aspired.

An alternate stream developed in America led by Franz Boas, that of historical particularism. This school was a by-product of American form of colonisation where entire societies of the Native Americans had been either decimated or the people put into reservations. Unlike the functional school Boas stressed on history, psychology and environment, in the study of cultures. There was also great concern with folklore and material culture as in the absence of the people themselves, which were seen as cultural elements that survived the human communities. Alfred Kroeber, a famous student of Boas postulated his definition of culture as 'super-organic' and 'superhuman'. Boas was interested in psychology and encouraged his students, Margaret Mead, Ruth Benedict, Alfred Irving Hallowell, Ralph Linton and others to develop the culture and personality school. Unlike British social anthropology that kept to social and cultural variables, exclusively in their explanations, American cultural tradition incorporated psychology, biology and environmental variables in their theory and explanation. It was through this tradition that different branches of anthropology such as folklore studies, ecological anthropology, psychological anthropology and medical anthropology first developed and were later accepted globally as different branches of anthropology. These formative years of research were also devoted to search for methods, seeking answers to questions and pushing the boundaries of the discipline to seek new horizons.

Yet there were deep flaws in these researches as they projected an ideal picture of static, ahistorical societies forever in a state of harmony. The assumption that stability is the natural condition of any society was challenged by later researchers. But functionalism was prevalent for a long time as even scholars focusing on conflict looked for the functions of conflict or projected conflict as a natural state of society. It was only in the post-colonial period, when anthropological research began to be done from those regions and by those earlier providing 'objects' for study, such as the natives of the colonies earlier forming the 'field' of the anthropologist that new and critical perspectives emerged in anthropological research.

Check Your Progress

- 1. How did anthropology gain recognition as a discipline during the colonial period? Who were the early anthropologists?

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- 2. What were the two major directions of anthropological research during this period?

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- 3. What were some of the major criticisms directed towards research done during the colonial period?

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3.2 POST-COLONIAL PERIOD

Scholars like Edward Said critiqued the western construct of non-western societies to say that what was constructed and projected was more about what the western people imagined these ‘other’ cultures to be , than what they were actually like. The Feminist critique too was directed against both euro-centrism as well as the predominance of androcentric perspectives. These critiques were generally directed towards the creation of knowledge from centers of power and the neglect of voices from the margins. With more scholars joining from those societies that were earlier treated as objects of study and constituted the ‘other cultures’ of anthropology, the changes in perspective were inevitable. The functional anthropologists were criticised for neglecting history, of turning a blind eye to the havoc caused by colonial rule when they were describing societies as harmonious and in equilibrium. With his classic work, *Europe and the People without History* (1982), Eric Wolf, described the history that people all over the world had, before they came in contact with Europe. It was euro-centrism that had prevented the western scholars to realise that these societies had a history that was independent of Europe. That cultures had interacted, engaged in trade

and travelled and migrated. Some of the labels that had been created during the colonial period such as that of 'acephalous' society, or societies without rulers, was attributed to the impact of colonial rule. Earlier prosperous and populous kingdoms as in Africa, were reduced to headless and depopulated communities that were scattered in the bushes when the anthropologists came to study them. By freezing these communities in the time period in which they were studied, the anthropologists had robbed them of their history and humanity.

The critical transitions in the post-colonial period was when the 'natives' of the colonies became anthropologists and began to study their own societies. M.N. Srinivas was a student of A.R. Radcliffe-Brown and followed the structural-functional model in his study of the Coorgs in India. But as an indigenous anthropologist he formulated theories about caste that provided an insider's insights including reviving the native terms 'jati' and 'varna'. The British school had strong influence on Indian academics and the structural functional school influenced many anthropologists but at the same time the Indian anthropologists made some significant contributions developing concepts and ideas that were specifically related to the local context. One such contribution was the concept of 'sacred complex' given by L.P. Vidyarthi (1961) with respect to Gaya, Bihar. Vidyarthi was influenced by the work of Robert Redfield and the Chicago School. The concept of 'sacred complex' brings together the interrelated concepts of sacred geography, sacred specialists and sacred performances. It shows how these sacred complexes form nodal points for meeting of different classes, castes and communities are also points of creation. Following Vidyarthi, the sacred complex concept was used by other scholars for other sacred centers of India, including the work on Gaya by Baidyanath Saraswati.

However anthropology in India retained its positivist character and although there was strong influence of both British classical theories and American cultural tradition, the anthropologists attempted to focus on those aspects of Indian society that were relevant in the Indian context. Thus following caste studies there was a plethora of village studies that gave rise to concepts such as universalisation and parochialisation, referring to the interaction between rural and urban societies in India through the prevalence of the caste system. As shown by scholars such as McKim Marriott, M.N. Srinivas, Robert Redfield, S.C. Dube and others, there was a continuity of social interaction through marriage and kinship as members of the same caste were spread in both cities and villages and were connected by the rules of caste endogamy. This has led to a free flow of cultural elements from the rural to the urban centers and even tribal elements have been incorporated into mainstream religion and cultures and vice-versa. Thus the icons of Jagannath and his siblings in the famous temple at Puri have strong resemblance to tribal deities while many tribal gods are only tribalised versions of higher Hindu gods like Shiva. Redfield's concepts of 'Great' and 'Little' tradition were also applied to the Indian scene with great success.

The preoccupation with caste and tribes led to the concept of Tribe-Caste continuum, and was developed by many eminent Indian scholars like Nirmal Kumar Bose and D.N. Majumdar. Majumdar had done fieldwork among many tribes of Eastern India and apart from showing how they change, he was also of the opinion that the category of tribe was a flexible and historical entity and not fixed. This observation has also been corroborated by many later scholars.

Check Your Progress

4. What were the important premises on which colonial anthropology was criticised by the feminist anthropologists?

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5. Name the Indian scholar who was a student of A.R. Radcliffe Brown.

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6. What was the contribution of Indian anthropologists to the study of caste?

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7. Who gave the concept of 'sacred complex'. Discuss and mention some other scholars who worked on the same concept.

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8. What kind of research was done on tribes by Indian scholars? What concepts emerged out of this research?

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3.3 MOVING INTO THE SIXTIES AND SEVENTIES

By the middle of the last century that is by the sixties and seventies, there was a great diversity in anthropological research across the globe. After the initial period of divergence, there was emergence of a global anthropological culture made possible by increased interaction between scholars as well as the movement by scholars from one academic institution to another. The differences between British and American anthropology reduced as new theories and approaches as well as new fields of research opened up.

The theories and perspectives that informed research in this period were Marxism that had considerable influence on French scholars such as Claude Meillasoux, Maurice Godelier and Emmanuel Terrey among others. Pierre Bordieu's theory of practice was widely appreciated and used by anthropologists. Although not a Marxist, the influence of Marxism on his conceptualisation of habitus, is clear. Fieldwork remained the forte of anthropologists at all times. The Marxist scholars looked for history and secondary sources for their constructions of social history, ethno-history and oral traditions which were widely used in addition to field observations. Marxism and Structuralism (Levi-Strauss and Edmund Leach) were still rooted in positivism. Levi-Strauss's Structuralism had binary opposition as a basic tool of analysis and he considered it an infallible character of the human mind. Levi-Strauss looked for the deep underlying structures of society at the level of human thought rather than in the overtly expressed behaviour. According to him all societies were in the last analysis systems of exchange that held people together.

The post-colonial critique challenged the existing euro-centrism of anthropological theory and many concepts that had a distinct euro-centrism were rejected or replaced. The dichotomous way of thinking was gradually being replaced by a fuzzier, less structured way of looking at social reality. Thus as we have already seen the scholars who studied Indian society in depth, soon realised that tribe and caste could not be seen as opposed or distinct from each other but had porous and often fuzzy boundaries. Also neither was bound and definable in any specific way and communities designated as tribes or castes occupy a wide range of possible organisations and ways of life.

Structuralism was followed by Post-structuralism and Phenomenology. Anthropological research became more reflexive and less structured and objective. It was realised that while dealing with other human beings it was not possible to be completely objective. The field situation was one of inter-subjectivity and the subjective self of the anthropologist was an integral part of the analysis.

The Feminist approach gained ground as it was demonstrated that women anthropologists brought in a different perspective in both data collection and analysis. Many established academic works were deconstructed, so to say, to show that their research was informed by a male bias. Feminist scholars also indicated the bias and subjectivity of the scientific method, showing that most scientific studies that claimed objectivity were in fact methodically substantiating existing power hierarchies, racial, sexual and others. Prominent among such scholars are Donna Haraway and Sandra Harding.

In India Feminism was introduced by Leela Dube along with scholars such as Pat Caplan, Maria Mies, Bina Majumdar and others who began to bring the anthropological focus on women as well as the construction of gender in Indian society. Scholars such as Leela Dube and before her Irawati Karve had shown the relationship of caste and gender as well the influence of Hindu texts on Indian women's roles and aspirations.

Phenomenological theories that although of some antiquity, found favour only towards the later part of the twentieth century once the obsession with positivism and objectivity was discarded in view of the accepted subjective nature of social sciences. The focus shifted from identifying structures of human behaviour and their classification to understanding the social reality through embodied experience. These researches proceeded on the premise that society is a construct and also experienced differently by actors in different historical and subjective position. Instead of power hierarchies the concept of power fields, where power is a diffuse and flexible and can only be understood through engagement. Noted phenomenological works are those by De Certeau, Dsordas and others. In India this approach has been used to understand the situation of marginal groups like the Dalits, for example in the collection by Channa and Mencher (2013). It has also been used by anthropologists such as Margaret Trawick and Karin Kapadia. Kapadia's study of untouchable Tamil women also includes considerable factual data on women's contribution to agricultural labour. But the strength of her work is in recording the subjective narratives of marginal women in a comprehensive way that gives a deep insight into their lives. Some like Sharmila Rege have left it to the reader to understand from her recordings of narratives of Dalit women. The experiential research was extended to medical anthropology to formulate the concept of social suffering put forward and developed by Arthur Kleinmann and Veena Das. In the Indian context it was used to analyse the sufferings of the victims of the Bhopal gas tragedy.

Biographical and autobiographical research, the latter known as auto-ethnography is a development from the earlier works done on life-histories, made famous by Oscar Lewis's monumental work, *Pedro Martin- A Mexican Peasant and His Family* (1964). Ever since anthropologists emerged from the earlier 'native' communities auto-ethnographical research is gaining in popularity. A recent work by Indian origin anthropologist Anand Pandiyan (2014) can be cited as an example. Pandiyan merges his grandfather's life history into his own to give a three generational depth to the ethnography that merges biographical and autobiographical narratives.

With the expansion of the field of anthropological research the anthropological foray into urban and global studies must be mentioned. Urban studies had made a beginning in the fifties in the USA and later became popular all over the world. The sacred complex studies in Gaya and Kashi also involve urban areas. Sylvia Vatuk in the seventies did commendable research on urban kinship in India. R.S. Khare did work among the Lucknow Chamars and Owen Lynch among the Jatavs of Agra. Both used ethnographic methods to study a specific community and that too, a marginalised one, in a medium sized city. Not much work has been done in mega cities by anthropologists that field being monopolised by sociologists and urban geographers.

Check Your Progress

9. Discuss the contribution of Feminist scholars to Indian anthropology.

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10. Name some of the important works done in anthropology from a Phenomenological perspective.

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11. What do you understand by auto-ethnography? Give some examples.

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12. Do anthropologists do research in urban areas? What kind of methodology do they use?

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3.4 MOVING AHEAD

By the end of the twentieth century however anthropologists could no longer ignore the transformations in the world around them in terms of rapid migrations, the flow of capital and information around the globe and research began on globalisation and its many processes. As soon as the interest shifted to this field it was realised that the traditional ethnographic methods and concepts could no longer yield results. One was no longer dealing with a localised universe and a more or less bound population or community. The methodology then had to incorporate multiple sites and concepts such as landscapes emerged to supplement

or replace area or region. This is known as multi-sited research. Space was seen as active and alive and not merely as a backdrop to action. Research was directed towards what is known as multi-sited ethnography that could keep count of people's movements through time and space. An example of such research is Pandian's work that traces his family through three countries, Burma (Myanmar), India and USA.

Research on globalisation also revealed that whatever happens at the local level, for example the rise of female work force in Bangladesh is affected by global forces. This connection and interchange between the global and the local has become the focus of research in all parts of the world as it is becoming more and more difficult to disengage a particular field from the wide network of global forces, economic, political and cultural within which it is set

Check Your Progress

13. Discuss the emergent trends in anthropological research in the 21st century.

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3.5 DIVERSIFICATION OF ANTHROPOLOGICAL RESEARCH

Anthropology as a discipline has diversified into many sub-branches as the interests of the scholars was extended to many fields. In the early phase of the discipline there was interest in the fields of psychology, medical anthropology and environment. An interest in human beings naturally supported an interest in the workings of the human mind as evinced in Franz Boas' book *The Mind of the Primitive Man* (1911) and the development of the Culture and Personality school by his students. Later the branch of psychological anthropology developed as a fully developed field of anthropology. Medical anthropology had its roots in the study of indigenous healers and rituals of healing like Clyde Kluckhohn's work about witchcraft among the Navajo Indians. Although the branch of psychological anthropology did not develop too far in India, medical anthropology has become a major area of research. Medical anthropology drew inspiration from the early works of scholars such a P.O. Bodding whose work on Santal medicine done in the late nineteenth century is now considered as a classic. Medical anthropologists began with studying indigenous medical practices such as shamanism, and while these still remain an important aspect of research they also study health seeking behaviour in many different locations and are engaged in the cognitive aspects of health and wellness. In India medical anthropologists work in areas of tribal health but also in more generalised fields like Malaria eradication programmes and multiple dimensions of HIV AIDS and disaster management.

Third world countries in the post-colonial era were deeply concerned about questions of development and national progress. Many anthropologists such as

Nirmal Kumar Bose and D.N. Majumdar were involved with such issues from the beginnings of the discipline in India. The post-modernist trends of critical anthropology have taken a back seat in India in favour of research to address urgent social and economic issues. In this respect a large amount of research has been directed towards dealing with problems related to development. In fact development anthropology forms an essential part of most anthropology syllabus.

However there are two trends in doing research in development anthropology in India. One kind treats the development programs as compulsory (and also essential) and then directs research towards the best form of implementation of these programs. These may involve those dealing with health issues like immunisation, malaria eradication, family welfare, violence against women and so on. The other kind of research is more critical in nature and interrogates the nature of development such as the building of dams and mining in forest areas and forcing tribals to adopt alien ways of life. A lot of research on these lines has been done by eminent anthropologists like Von-Furer Haimendorf, B.K. Roy Burman, Felix Padel, Walter Fernandes, B.D. Sharma and others. Most of these works have highlighted the deplorable state of tribals under the impact of development projects that blindly follow the classical western model that have long been rejected by the west.

In line with development related research, from the last part of the twentieth century and at present, considerable research interest has been directed towards environmental issues. Many of these that focus on environmental degradation due to so-called development projects overlap with the critical research done by those who try to show the negative aspects of conventional economic models of development that is only directed towards exploitation of resources and building up of capital gain.

Environmental research is also done in conjunction with medical anthropology to identify native uses of plants and herbs and also the philosophies of health that tie humans to the environment. A special branch of anthropology focused on indigenous knowledge systems has also emerged and is finding a key place in research. There is now a sea change in attitude towards tribal and indigenous societies and their systems of knowledge including that of non-western systems of medicine and indigenous modes of conservation and preservation of biodiversity. A category of people earlier considered as primitive and their knowledge as superstition has been replaced by respect and also a realisation that the tribals have better understanding of human environment relationships than do people belonging to industrial and capitalist societies. Such realisation has also been triggered by the environmental movements happening globally that wish to shift from a human centric world view to a nature centric one and to treat humans not as a privileged species but only among many. The reality that tribals and forest dwellers have lived for centuries in harmony with nature has refocused attention on their ways of life with a different lens. It is no longer felt that the tribals need to be developed but that others can learn from them as to how to live well and in a sustainable manner.

In view of the many pressing problems faced by a developing society like India, need has been felt to focus research on certain key areas where the ethnographic methods used by anthropologists are seen as yielding excellent research. In the next section we shall examine a few such emergent fields.

Check Your Progress

14. Describe some of the areas in which anthropologists are now doing research.

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15. What is understood by medical anthropological research and what is its relevance?

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16. What are the paradigm shifts in understanding of development from an anthropological perspective?

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3.6 APPLIED AND ACTION RESEARCH

Human rights are an area where anthropologists working most often with marginal and deprived communities have found themselves directed. As already mentioned the engagement of Indian anthropologists with the tribal populations led them to study of injustice and violence perpetuated on these people right from S.C. Roy onwards. Apart from throwing light on the structural conditions for the perpetration of exploitation and violence against those situated at the bottom or margins of society, many anthropologists also highlighted the subjective suffering of these people with a goal of disseminating information and also influencing policy making with respect to them. Although anthropology had begun as a discipline to help the colonial administrators rule over the so-called colonies, most anthropologists by virtue of their situation coeval with the people they studied, soon turned their sympathy to the ruled rather than the rulers. Since then anthropological research has served the cause of many indigenous communities all across the globe like the Native Americans, Maoris, Australian aborigines and African tribes.

Anthropologists have also taken up research with other marginalised communities such as racially marginalised, sexually and ethnically marginalised communities.

Other fields of applied research are extensions of medical anthropological research in areas of implementation of health programs and providing inputs for strategies of dealing with issues of poverty and sickness. Disaster management is another area in which anthropological research is making its contribution.

Anthropologists have provided methods such as participatory research for implementation and evolution of welfare programs. In this anthropology has emerged as a major discipline to provide support to work on displacement, rehabilitation and doing all kinds of demographic research.

Some fresh areas of anthropological inputs are in management and public sector enterprises. They help generate policy making and through their research also act as critics of existing policies.

Genetic and Forensic research conducted by biological anthropologists helps criminal investigations and legal processes.

Anthropological research is guided by its first principle of putting humanity first but in the contemporary world they are also showing concern for environment and the global community of all the species. Anthropologists have deconstructed and situated the concepts such as welfare, development and human happiness in a context away from the narrow materialistic and instrumentalist definition given by the classical economists. In this sense anthropological research is guided by the principles of equity, justice and sustainability of this planet.

Check Your Progress

17. Describe some of the applications of anthropological research.

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3.7 SUMMARY

This unit provides a detailed description of how anthropological research has passed through different stages of development. It kept growing with the changing scenarios of societies and communities studied along with scholarly insight on conducting anthropological research. The unit helps the learner gather that as the subject grew so did the ways of researching people progressed. Anthropological research has had scholars from working for the colonisers and their governments, to studying villages to broadening their horizons by including more than one site in their enquiry to applying their knowledge to bring about change in society. Research and ways of doing it is an ever evolving process and the aim of this lesson is the assist learners to identify how anthropological investigation has been and can be used divergently in varied situations to scoop out the best possible results.

3.8 REFERENCES

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3.9 ANSWERS TO CHECK YOUR PROGRESS

1. See section 3.1
2. The major directions of anthropological research during this period were evolutionism and diffusionism.
3. Refer to last paragraph of section 3.1
4. Refer to the 1st paragraph of section 3.2
5. M. N. Srinivas
6. Refer to the 2nd paragraph of section 3.2
7. Refer to the 2nd paragraph of section 3.2
8. Refer to the 2nd paragraph of section 3.2
9. Refer to the 6th paragraph of section 3.3
10. Refer to the 7th paragraph of section 3.3
11. Refer to the 8th paragraph of section 3.3
12. Refer to the 9th paragraph of section 3.3
13. See section 3.4
14. See section 3.5
15. Refer to the 1st paragraph of section 3.5
16. Refer to 2nd, 3rd and 4th paragraph of section 3.5
17. See section 3.6