MSO 401: RESEARCH METHODOLOGY

BLOCK I

Vision

To grow to be a leading centre for human resource development through distance, open and universal learning system.

Mission

To provide quality higher education at door step through barrierless, flexible and open learning mode in conformity with national priority and societal need.

Objective

- To offer degree, diploma, certificate level programme of study through distance learning in various emerging subjects across the disciplines.

- To offer job oriented and vocational programmes in flexible terms in the line of the national and regional level demand of manpower.

- To offer various programmes under lifelong learning contributing to the local and regional level requirements and as per the need of the society at large.

- To undertake various research and academic activities for furtherance of distance education in the region.

- To contribute to conserve and promote cultural heritage, literature, traditional knowledge and environment conducting short programmes, workshops, seminars and research in interdisciplinary field.

MSO 401: RESEARCH METHODOLOGY

CENTRE FOR OPEN AND DISTANCE LEARNING

TEZPUR UNIVERSITY (A CENTRAL UNIVRESITY)

TEZPUR, ASSAM-784028

INDIA

MSO-401: RESEARCH METHODOLOGY

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BLOCK I

MODULE I: INTRODUCING SOCIAL RESEARCH

MODULE II: APPROACHES TO SOCIAL RESEARCH

UNIT 1: PHILOSOPHICAL FOUNDATIONS OF SOCIAL RESEARCH

UNIT 2: HISTORY OF SCIENCE

UNIT 3: SUBJECTIVITY AND OBJECTIVITY

UNIT 4: POSITIVISM

UNIT 5: INTERPRETIVISM

TABLE OF CONTENT

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COURSE INTRODUCTION

This course introduces the learners to the fundamentals of social science research methodology. It begins with a discussion on some important philosophical ideas underlying the emergence of different methodologies in social sciences. The learner will be able to acquire the fundamental data collection and analysis skills along with a good understanding of the research process as a whole. The fundamentals of both quantitative and qualitative techniques of research are covered in this course.

The course is divided into four modules, each consisting of multiple units. This has been done to discuss the major concepts more elaborately and in a learner-friendly way.

Module I gives an introduction to social research. It consists of three units. **Unit 1** deals with the philosophical foundations of social research. The unit introduces the learner to the two crucial concepts in understanding the philosophy of social research, i.e. ontology and epistemology along with the ideas of realism, empiricism, positivism, idealism, rationalism and interpretivism. **Unit 2** discusses the history of science. The learner will also get introduced to the sociological contexts of scientific thought as well as the various philosophical positions of science. **Unit 3**, on the other hand, deals with subjectivity and objectivity. The learner will get introduced to the subjectivity-objectivity debate and the relevance of both subjectivity and objectivity in social science research.

Module II is about the approaches to social research. **Unit 4** deals with positivism. The unit explores the meaning of positivism and its role in research. On the other hand, **Unit 5** gives an overview of interpretivism. The unit will help the learner know the importance of the method of interpretative understanding in social research.

Module III focuses on qualitative research. **Unit 6** covers ethnography. The unit explores the meaning of ethnography both as a method and methodology. The learner will get a clear understanding of the process, analysis, interpretation and presentation of ethnographic data. **Unit 7** will help the learners to understand case studies. Along with the historical background and evolution of case study, the unit explores how to conduct a case study, focusing on the selection of cases and the analysis of data. **Unit 8** deals with qualitative methods. **Unit 9,** on the other hand, discusses qualitative data analysis.

Module IV is dedicated to research design and quantitative approaches. **Unit 10** explores quantitative research design while **Unit 11** explores quantitative methods. **Unit 12** introduces the learner to sampling techniques. The learner will have an idea of the meaning of sampling, the process involved in sampling and the types of sampling techniques adopted. **Unit 13** deals with quantitative data analysis. On the other hand, **Unit 14** deals with report writing. The learner will get an insight into the structure of a report and the steps involved in writing a report.

The complete course is divided into two Blocks. **Block I** contains Module I and II. **Block II** will have Module III and IV.

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MODULE I: INTRODUCING SOCIAL RESEARCH

UNIT 1: PHILOSOPHICAL FOUNDATIONS OF SOCIAL RESEARCH

UNIT STRUCTURE

1.1 INTRODUCTION

Let us first have a brief introduction on the idea of social science philosophy. Social science has an important dimension and that is the philosophical study of social research. It caters to the analysis of problems of social science description and its relationship. There has been a continuous attempt in social research over the need for legitimate study through philosophical approaches. Social science's philosophical underpinning deals with people's different perspectives in experience sharing about the social world. In this regard, generalisation also matters.

As social science has a multidisciplinary approach, there are multiple vantage points of understanding the social world.

Philosophical perspectives are crucial as they reveal the different assumptions that researchers make about their research. Such perspectives lead to choices that are applied to the purpose, design, methods and methodology of research as well as to data analysis and interpretation.

1.2 OBJECTIVES

By the end of the unit, you will be able to:

- Explain the basis of philosophical approaches to social research;
- Discuss the ideas of ontology and epistemology;
- Discuss realism and empiricism;
- Analyse rationalism and intepretivism in social research philosophy.

1.3 OVERVIEW OF SOCIAL RESEARCH

Pauline V. Young describes social research as a method of exploring, analysing and conceptualising social life to extend, correct, or verify knowledge so that it can be seen whether or not that knowledge aids in the construction of a theory or the practice of an art. Social science research cannot be what it claims to be without having a scientific temperament. There is a systematic and step-by-step process of enquiry starting with the recognition of the problem to drawing necessary conclusions. In this process, there are other sub-steps like verifying and testing old facts, discovering new ones, sequence analysis, establishing interrelationships and also establishing causal explanations. On additional note, it can also be described in terms of being a systematic mode of enquiry which seeks to find out varied explanations of social phenomena, the latter being diverse and triangulated. As such, there is also the development of different

concepts and theories/hypothesis. Yet social research can be explained in terms of it being a structural observation of human behaviour.

Social research has two primary vantage points. Both are based on scientific reasoning and they are inductive reasoning and deductive reasoning. While the former makes broad generalisations from specific observations, the latter deduces existing theories for a specific application. Both inductive and deductive reasoning form an integral part of any social science research.

1.4 BASIS OF PHILOSOPHICAL APPROACHES TO SOCIAL RESEARCH

Having discussed an overview of social research, now let us understand the basic philosophical approaches to social research. They include mainly what we call realism, empiricism, positivism, idealism, rationalism and interpretivism. Two other crucial concepts in understanding the philosophy of social research are ontology and epistemology. While ontology refers to the theory of reality and theory of being/of existence, epistemology refers to the theory of knowledge and its origination. Brief ideas of the above-mentioned terms shall be given after which we shall discuss each of them in detail.

Regarding realism, it may be noted that it relies on the idea that reality is independent of the human mind. It assumes a scientific approach to knowledge development. Empiricism is another important philosophical underpinning. It deals with relying only on that knowledge which is gathered from a real-life experience like through observation. It presupposes that the mind is in a blank state so knowledge enters our mind through observation of the outside world. Positivism is a philosophy that deals with real-life knowledge as against intuitive knowledge or knowledge based on human instinct. In social research, positivism caters to the principle that human behaviour like the behaviour of matters of natural science can be objectively measured and that human behaviour is simply

about a reaction to external stimuli. Idealism is a philosophical view that is suggestive of the fact that the world is constituted mainly by the mind and hence ideas are already there in the mind. So the psychic perception gives knowledge. Rationalism is a theory that recognises reason as the unique source of true knowledge and for rationalists, knowledge is possible through reason alone. Lastly, interpretivism is associated with the philosophical position of idealism and is used to group diverse approaches like constructivism, phenomenology as well as hermeneutics. It directly rejects an objectivist attitude to the interpretation of the social world and rather relies on the sociological meaning-making process.

1.5 ONTOLOGY AND EPISTEMOLOGY

Ontology, or the 'study of being', is concerned with the question of what exists in the world about which humans can gain knowledge. It helps researchers recognize how certain they can be about the nature and existence of objects they are researching and philosophical questions like the kind of truth claims that a researcher can make about reality. The question of who shall decide the legitimacy of what is real is also important. As social science is concerned with the social world and social beings, the researchers have to devote a great deal managing different and conflicting levels/phases of reality. The main concern of realist ontology is to consider the primacy of one single reality as existing which can be experienced as 'truth'. On the other hand, a relativist ontology is based on the belief that reality is constructed within the human mind so that there is no one single 'true' reality.

Now coming to epistemology, it is the 'study of knowledge'. It is concerned with all aspects of the validity, scope and methods of acquiring knowledge, such as:

 a) What constitutes a knowledge.

 b) How knowledge can be acquired or produced.

Epistemology's importance lies in the fact that it influences how researchers frame their research in their attempts to discover knowledge. We can talk of epistemology in the context of three terms: Objectivist epistemology, constructionist epistemology and subjectivist epistemology.

Objectivist epistemology believes that reality exists outside, or independently, of the individual mind. Objectivist research is useful in providing reliability and validity. Reliability is about maintaining consistency in obtaining results whereas validity means applicability of the results to other contexts. Constructionist epistemology rejects the idea that an external objective 'truth' exists. Instead, 'truth' is a very subjective notion whose meaning arises out of our engagement with the realities of this world. Hence, a real world does not simply pre-exist but is actively created. Subjectivist epistemology is related to the constructionist epistemology; it relates to the idea that reality can be expressed in a range of symbol and language systems The value of subjectivist research lies in the fact that an individual's experience shapes his/her perception about the world.

1.6 REALISM AND EMPIRICISM

To talk about realism, we can start with philosophical realism. It is the view that entities exist independently of being perceived. Scientific realism views theories as referential of the real world features. It assumes that the world is the way it is and also acknowledges that there can be more than one scientifically correct way of understanding reality. Here, the idea of 'reality' is about the presence/existence of different universal forces which cause our senses to perceive a phenomenon. In the philosophy of the social sciences, realism has been important and has established itself as a dominant approach. There is another variety of realism which we can call as the ontological realism, i.e., the belief that

there is a real world that exists independently of our perceptions, theories, and constructions.

However, it must be noted that a large number of philosophical accounts of social science research are anti-realist in nature.

Now let us discuss empiricism. It is a philosophy that views that all knowledge/concepts have their origin in sense experience and that all rationally acceptable beliefs or propositions are justifiable/ knowable only through experience. Here two concepts are very important—"a posterior" and "a priori". While "a posteriori" is a term used for concepts which can be applied only on the basis of experience, "a priori" applies to those concepts which can be applied independently.

Empiricism stresses on experience and opposes any claim of intuition and imagination or abstract knowledge. Experience is related to all forms of sense perception.

John Locke is an important empiricist who applied the concept of *tabula rasa* or blank slate in work *An Essay Concerning Human Understanding* (1689). He argued that the mind is initially a resemblance to an empty state or a blank white paper where all knowledge arrives from experience. He was deeply influenced by Baconian philosophy which is explained briefly in the box below.

STOP AND READ
Francis Bacon—The Father of Empirical Philosophy

Francis Bacon is known for popularising the method of inductive reasoning. As deductive reasoning was the dominating epistemology then, the Baconian inductive method that relied on

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observation, measuring and experimentation for hypothesis testing became a new way of looking at science.

CHECK YOUR PROGRESS
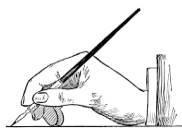
1. What is philosophical realism?

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2. What is ontological realism?

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3. Explain 'a posteriori' and 'a priori' knowledge.

1.7 POSITIVISM AND IDEALISM

Positivism refers to that ideological approach in sociological epistemology which relies on empirical and scientific evidence such as observation and experimentation to understand human society. It was August Comte, the founder of modern sociology who initiated this philosophy in the 19th century through his books *The Course in Positive Philosophy* and *A General View of Positivism.* Comte believed that the human world can be examined just like the physical world as there are laws lying in the human society similar to natural laws which can be uncovered for further understanding of how society operates. In the process of developing a

positivist philosophy, Comte formulated the Hierarchy of Sciences by claiming that Sociology would be the most complex science of all due to its complex subject matter, i.e., society. In this regard, Comte introduced the Law of Three Stages and here he placed the positivist stage at the most advanced phase as this would be a phase that would rely on underlying social laws for understanding human society. Whereas the first stage would be the theological stage where a belief in the supernatural would be supreme, the second stage would be the metaphysical stage where explanations would be based on a reliance on abstract concepts.

Now let us move to idealism. Idealism stands for a general belief about the nature of reality. In epistemology, it represents the belief that the human mind can understand only a certain kind of reality. For all idealists, logical structures rather than matter or physical bodies constitute the foundation of reality. Such structures are ideal entities like conceptual structures, laws, principles, values. In this sense, idealism is opposed to realism in epistemology.

It is best to understand idealism by referring to Hegel who was a German idealist. According to him, reality exists in the mind. What we know as the dialectic or the contradiction lies in the mind and history progresses through these contradictions in what he refers to as the *thesis-antithesis-synthesis* phenomena.

Stop and Read

Plato's Idealism:

Plato was a primary advocate of idealism. He asserted that the experiential world or the empirical reality is fundamentally unreal and is a mere appearance. What is ultimately real is constitutive of

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abstract universal essence of things. This is because the empirical world has concrete objects in it and no concreteness can be real.

Stop and Read

Durkheim's Positivism:

Emile Durkheim was a French sociologist who belongs to the positivist school of thought. He too believed that sociology is a scientific study of the society. According to him, sociology in order to be a science, has to be about the study of social facts. Social facts are those objective entities that are external, general and coercive to the individual. His positivist approach highlights what we know as his rules to the observation of social fact. Two main rules here are:

a)We have to consider social facts as things. By things, we would mean objects that lie outside the individual and have an independent reality.

b) We need to discard all preconceived notions and start afresh by uncovering those underlying facts from the society.

Hence, he too gave primacy to social facts as well as the society over the individual and indicated the society's existence as a separate entity rather than as a mere sum of individuals.

1. How is idealism opposed to realism?

1.8 RATIONALISM AND INTERPRETIVISM

One is a rationalist if one holds that certain necessary truths can be justifiably believed independent of empirical evidence for their truth. In other words, to be a rationalist is to adopt at least one of the three claims:

1) The *Intuitionist and Deductionist Thesis* claim that we know about some propositions only by our intuition. Intuition is a form of rational insight and is about intellectually grasping a proposition, Deduction is a process in which we derive conclusions from premises based on valid arguments. Intuition and deduction thus provide us with knowledge *a priori (*knowledge gained independently of sense experience).

2) The *Innate Knowledge Thesis* claims that we have knowledge of some truths purely out of our own rational nature. It offers our rational nature— our innate knowledge is not learned through either sense experience or intuition and deduction but is just part of our nature.

3) The *Innate Concept Thesis* claims some of our concepts are not gained from experience. They are part of our rational nature in such a way that, while sense experiences may trigger a process by which they are brought to consciousness, experience does not provide the concepts or determine the information they contain.

Coming to interpretivism, it assumes access to social reality is only through the active process of meaning making and interpretation through social constructions such as language, consciousness, shared meanings, and instruments. So naturally, it criticises positivism. It emphasises qualitative analysis over quantitative analysis. Some remarkable philosophies related to interpretivism are social constructivism, phenomenology and hermeneutics. They all reject directly an objectivist view to our social world. In interpretivist approach, consciousness is very important. While hermeneutics refers to the philosophy of interpretation and understanding, phenomenology is the philosophical tradition that attempts to understand the world through a direct experience of phenomena. Symbolic interactionism is the backbone of interpretive approach as it mainly relies on construction of social reality by developing shared meanings.

CHECK YOUR PROGRESS

1. Analyse how interpretivism can be a critique of positivism.

1.9 SUMMING UP

We can sum up the discussion into the following points:

- The basic philosophical approaches to social research include mainly what we call realism, empiricism, positivism, idealism, rationalism and interpretivism.

- Two other crucial concepts in understanding the philosophy of social research are ontology and epistemology. While ontology refers to the theory of reality and theory of being/of existence, epistemology refers to the theory of knowledge and its formulation.

- Realism relies on the idea that reality is independent of the human mind. It assumes a scientific approach to knowledge development.

- Empiricism deals with relying only on that knowledge which is gathered from a real-life experience like through observation. It presupposes that the mind is in a blank state so knowledge enters our mind through observation of the outside world.

- Positivist philosophy deals with real life knowledge as against intuitive knowledge or knowledge based on human instinct. In social research, positivism caters to the principle that human behaviour like the behaviour of matters of natural science can be objectively measured and that human behaviour is simply about a reaction to external stimuli

- Idealism suggests that the world is constituted mainly by the mind and hence ideas are already there in the mind. So the psychic perception basically gives knowledge.

- Rationalism is a theory that recognises reason as the unique source of true knowledge and for rationalists, knowledge is possible through reason alone.

- Interpretivism is associated with the philosophical position of idealism and is used to group diverse approaches like constructivism, phenomenology as well as hermeneutics. It directly rejects an objectivist attitude to the interpretation of the social world and rather relies on the sociological meaning-making process.

1.10 QUESTIONS

1. How would you compare and contrast rationalism and idealism?

2. What is the significance of interpretive philosophy?
3. Discuss the relevance of realist philosophy in today's world.
4. Discuss the contributions of Comte and Durkheim to the positivist tradition of thought.

1.11 RECOMMENDED READINGS AND REFERENCES

Henderson, D. (2007). Rationality and Rationalist Approaches in Social Sciences. In Turner, S. and Outwaite, W., editors, *Handbook of Social Science Methodology.* Sage Publications, UK.

Kincaid, H. (1996). *Philosophical Foundations of the Social Sciences.* Cambridge University Press, UK.

Sayer, A. (2000). *Realism and Social Science.* SAGE Publications Ltd., UK.

Young, P.V. (1966). *Scientific Social Surveys and Research*. PHI Learning Private Limited. 2014, Delhi.

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UNIT 2: HISTORY OF SCIENCE

UNIT STRUCTURE

2.1 Introduction

2.2 Objectives

2.3 Before Science: Prehistoric Origins

2.4 Birth of Natural Philosophy: The Precursor to Science

    2.4.1 Greek Cosmology

    2.4.2 Christianity and the Medieval University

2.5 The Scientific Revolution

    2.5.1 The Scientific Method

    2.5.2 Key Features of the Scientific Method

2.6 Paradigms of Science: The Influence of Thomas Kuhn

2.7 Summing Up

2.8 Questions

2.9 Recommended Readings and References

2.1 INTRODUCTION

In this Unit, we will discuss the history of science. It will enable us to understand how science evolved. In other words, we will learn how scientific thought passed through long stages of development across historical periods to give birth to modern science. In this Unit, we will look at the evolution of science mostly through the lens of the Western philosophical tradition, as the tenets of modern science are primarily rooted in it.

The Scientific Revolution was a watershed in developing an understanding of science that was conceptually different from previously-held opinion. Aristotelian metaphysics that laid undue importance to final causality—a

living Deity as the Prime Mover of natural phenomena—which was widely accepted in the medieval era, fell out of favour. The newfound scientific discourse argued that natural phenomena are largely governed by general mathematical laws that can be arrived at via observation and rigorous experimentation. This, in turn, paved the way for the epistemology of science to shift its focus to the 'scientific method'. It became the fundamental standard against which all scientific hypotheses were to be tested for legitimacy. Science increasingly came to be recognised as an enabler of the progress of the human race. The claim was that it would open the path to prosperity by bringing in real material changes. In the words of Francis Bacon, science attempts to discover 'the knowledge of Causes, and secret motions of things; and the enlarging of the bounds of Human Empire, to the effecting of all things possible' (Christie, 1990: 6). This statement of Bacon bore much significance, for it linked science with the ideas of progress and growth. Thus, science was endowed with the power to control nature and push the boundaries of a human enterprise beyond what was imaginable. Such thinking essentially set the premise for science to chart the course of human history that was to follow. Science no longer remained an activity of private fascination. How it achieved its global and near-ubiquitous significance as a unique sphere of activity central to the advancement of humankind has been discussed in the following sections.

2.2 OBJECTIVES

By the end of this Unit, you will be able to:

- Trace the historical origins of modern science;
- Discuss the sociological contexts of scientific thought;
- Explain the various philosophical positions of science.

2.3 BEFORE SCIENCE: PREHISTORIC ORIGINS

Humans have always been driven by the desire to know. Prehistoric people were no less curious about nature than us. As time progressed, humans developed the faculties of cognition and communication. They gained knowledge about their environment and learned to distinguish between useful and harmful things. They could classify the objects of nature according to their uses, e.g., fire and water. Ancient humans could perceive the movement of time by gazing at the position of the stars and the change of seasons. Palaeolithic era artwork in the caves of Lascaux, France serves as evidence to this claim (Fig 1). The natural world threw a lot of challenges to the prehistoric people. However, they learned to adapt to them by devising tools and techniques that ensured their survival. Indigenous knowledge systems that were mostly oral grew out of their observations of their natural environment. Since knowledge was transmitted orally, the recorded experiences had a mythical character to them. Unable to 'theoretically' explain why nature behaved the way it did, the prehistoric people often resorted to finding answers within their cultural framework. They sought meaning in the familiar objects and rituals of birth, death, sex, etc., e.g., the interpretation of the origins of the universe as sexual activity between Gods and Goddesses. Complex oral knowledge was recorded in the form of myths, songs, dance rituals, etc. This was done to ensure that the body of knowledge is instantly accessible in memory when confronted with a problem, like navigating during high tide in the seas. Knowledge of the world in preliterate societies was hence more of a survival strategy than a pursuit of truth.

With the invention of the letter, there was a dramatic shift in attitude. The knowledge that for long was passed only via oral means could now be recorded and stored outside of memory. Writing opened the doors to intellectual activities that required higher-order thought processes. Multiple accounts of events were written down that could be compared with one another. Thus, people could think of whether a particular narrative was true or merely a myth/legend. It helped "create the distinction between truth, on

the one hand, and myth or legend, on the other; that distinction, in turn, called for the formulation of criteria by which truthfulness could be ascertained; and out of the effort to formulate suitable criteria emerged rules of reasoning, which offered a foundation for serious philosophical activity" (Lindberg, 1992: 48). The ability to reason, although at its nascent stage then, allowed people to raise questions. They learned to doubt and be sceptical of orally received knowledge. Meanwhile, those societies that had developed elaborate writing systems and thereby, knowledge repositories, further enhanced their capacities of thought. In them, the first seeds of philosophy and critical enquiry were planted.

Stop and Read:

Egypt and Mesopotamia were central to the growth of mathematics and astronomy. Both civilizations developed number systems and intricate geometrical tools. Their knowledge systems were built for practical purposes, like surveying lands, marking days, recording solar cycles, etc. Yet, these systems stood at a borderline between magic and science. The healing arts or the practice of medicine in those days regarded diseases as a result of the invasion of the body by evil spirits. These spirits had to be warded off by applying preparations made from wild vegetables, animals, minerals (such as lime) while performing prayers and incantations. Similarly, astronomical phenomena such as the changing position of the stars were regarded as heavenly messages by the Gods. The task was to decipher these messages using geometry and computational astronomy.

Fig 1. *The Shaft Scene*. Archaeologists believe that it is a picture of a dying man that was made to commemorate a comet strike on earth around 15,200 B.C. (Image credit: © Ministère de la Culture / Centre National de la Préhistoire / Norbert Aujoulat).

CHECK YOUR PROGRESS

1. How did the invention of writing cause a shift in the attitude towards knowledge*?*

2.4 BIRTH OF NATURAL PHILOSOPHY

The Greeks were fascinated with cosmology. Greek mythological thought centred around characters that were personifications of the natural universe. For example, Zeus, who was considered the most powerful god in the

Greek pantheon, was the god of the sky and thunder. Poseidon, his brother, was the god of the seas and earthquakes. Thus, natural phenomena were implied in terms of one or the other god's act of intervention. The Greek people were culturally attached to the mysteries of the universe through their mythologies. And this constant engagement led to the appearance of the first Greek philosophers in the sixth century. This early breed of philosophers moved away from attributing human characteristics to Nature. It was Thales of Miletus (640-546 BCE) who first explained natural phenomena without adhering to supernatural beliefs. Explanations began to be sought not in tales of supernatural divine intervention but systematic thinking of the nature of Nature.

2.4.1 Greek Cosmology

The word cosmology is derived from the Greek word *kosmos*. It meant that the universe had an orderly arrangement, which could be explained by studying the nature of things. We know that all things are made up of matter. The early Greek philosophers were occupied in understanding the fundamental characteristics of matter— can matter be bent or distorted to form the infinite variety of things found in Nature? These were the materialist philosophers of Ancient Greece. Later on, the Pythagorean philosophers argued that numbers preceded matter. They believed that every phenomenon can be explained mathematically. The above lines of thought changed with the founding of the metaphysical approach by Heraclitus. This approach started the discourse on change and permanence of matter which further led to the origins of epistemology (the study of knowledge).

The early epistemological problems were best exemplified in the works of Plato, the illustrious disciple of Socrates. Plato's philosophy was based on the notion of the two realms: the realm of the idea and the realm of the material world. The former nurtures the perfect form (idea) of everything in the universe, whereas the latter gives shape to those ideas in material reality. Plato placed sense experience and true reality (of forms) in

opposition to each other. Although he acknowledged the existence of both, he believed that one had a primary existence while the other had only secondary (temporary) existence. Therefore, sense experience is to be relied upon only as a vehicle that makes the remembrance of these ideas possible. But to gain knowledge of the essential reality, man has to depend solely on reason without taking the aid of the senses. Plato demonstrated exceptional command in geometry. He could visualise that the celestial bodies moved in ecliptic paths. The biggest contribution of the early philosophers was in setting up the conceptual vocabulary of the universe.

Aristotle, who followed Plato, improved upon the former's ideas in instrumental ways. Natural philosophy, considered as the precursor to modern science, begins with Aristotle. He was not in agreement with Plato on the question of ascribing a higher value to eternal forms. He believed that sensible objects had an existence independent of the eternal forms. That is, the essence of the object was to be found in the object itself. He used this difference between the form and objects to highlight the difference of gender between male and female. This doctrine formed the crux of his metaphysics. He argued that knowledge is born out of sense experience that is observable (empirical). When multiple such experiences of an individual object come together, it leads the observer to arrive at universal truths or features. Aristotelian empiricism can be considered among the first building blocks of a rudimentary scientific method. Aristotle was passionate about cosmology. He was intrigued by the planetary motions and tried to find the underlying cause. What caused the celestial objects to move? He thought that since these objects move eternally, the force that makes it possible has natural origins rather than forced. This natural cause is unmoved one, for if it moves then it will require another mover. He called it the Prime Mover, or the ultimate mover of reality— the God of Gods. In Aristotle's scheme of natural philosophy, biology too occupied an important place. His studies of animal physiology and marine life were unparalleled during those times. He was one of the first persons to extensively classify living organisms according to their

features. Aristotelian thought survived many centuries and was eventually passed on to the Middle Ages, only to be challenged during the Scientific Revolution.

2.4.2 Christianity and the Medieval University

The Roman Empire provided Christianity with a fertile ground to flourish. The Romans patronised Christianity as the official religion of the Empire by helping build churches. The Roman conquest of Greece brought Christianity into contact with Greek natural philosophy. However, Greek theoretical science was of little interest to the Christian Romans. But those who were amazed at wonder on the intellectual achievements of the Greeks endeavoured to absorb the knowledge left behind. The Romans started an encyclopaedic tradition by which they compiled the information in Greek works and brought out handbooks. Seneca and Pliny were two Roman authoritative figures who took it upon themselves to explain Greek science through their voluminous compilations. We get to read often that the rise of Christianity was antithetical to the study of natural philosophy. This is not quite so, especially when we consider the fact that some branches of Greek natural philosophy aided the Church in its evangelical missions. Take for example the teachings of Plato. His defence of divine providence found a taker in the Church as it aligned with their doctrine. On the other hand, there were compatibility issues in Aristotle's natural philosophy regarding the Christian doctrine. Despite the initial signs of discord, Aristotelian thought got support from Augustine, who believed that philosophy can be tamed to suit the Christian use. Thus, natural philosophy continued to be studied, but under the jurisdiction of religious faith. During this period, knowledge inherited from natural philosophy saw no major expansion in the form of new ideas.

Medieval universities played a major role in the development and expansion of Western Science. By the beginning of the twelfth century, political conditions improved from the lawlessness that gripped Europe after the fall of the Roman Empire. Economic activity picked up and living

standards rose. People flocked to the urban centres and cities started growing. Tradesmen organized themselves into guilds where they could learn their craft. These guilds were called *universitas*. The masters and students later adopted this organizational idea to form their own organizations. They formed educational guilds and were the only group to retain the usage of the term *universitas*. In a later time, *universitas* changed to *university* and became synonymous with educational institutions of higher learning. The members of the medieval university were given the same rights as the clergymen and thereby they commanded immense influence in society. With the establishment of the universities at Bologna, Paris, and Oxford, the Latin translations of Greek natural philosophy that were carried out in the eleventh and twelfth centuries were incorporated into the curriculum. Unlike today, reading in metaphysics, natural philosophy, logic, geometry, astronomy, etc., constituted the *arts* subjects. Aristotelian natural philosophy quickly became a staple of the university curriculum. The emergence of a class of individuals trained as theologians believed that natural philosophy went hand-in-hand with their profession. These theologians applied Aristotelian metaphysics in scriptural explanation and other scriptural examination of natural phenomena. The top-most methodological priority of the universities was to question knowledge using Aristotelian metaphysics. Such authority this branch of metaphysics wielded that all university graduates had to be well-versed in the subject. The above discussion goes on to show that religion did not exactly pose a threat to the study of natural philosophy but instead helped disseminate it, although in a passive manner.

CHECK YOUR PROGRESS

1. What was the basis of Aristotle's metaphysics?

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2. How many realms does Plato talk about?

2.5 THE SCIENTIFIC REVOLUTION

The Scientific Revolution created a new way of looking at the enterprise of scientific knowledge. It had a profound influence on Western thought and apart from fundamentally changing the orientation of the natural sciences also gave rise to a type of literature that reflected this change in the wider culture. Several key historical events facilitated the creation of an environment where the Revolution could thrive. The Renaissance, which was accompanied by the Protestant Reformation, brought wide-ranging changes to society by marking a transition to modernity. Afterwards, during the Age of Enlightenment, there was a growing significance of scientific rationality in Europe. The Enlightenment Era initiated drastic changes across society at the turn of the eighteenth century. The Enlightenment thinkers were key proponents of these changes. Their firm insistence on human liberty and equality sought in science a unique model of enquiry that would disengage human history from the remnants of the Dark Ages. Science, as they advocated, was to liberate humans and the society at large from the clutches of outmoded beliefs and religious superstitions. To this effect, a radical restructuring of society followed suit to fit in with the scientific worldview. The scientific method soon became the hallmark of authenticity, of science's truthfulness. It demanded that any natural phenomena be tested through experimentation and observation to ascertain its validity. The focus was on deriving simple mathematical laws via inductive reasoning to explain natural phenomena. Isaac Newton (law of gravitation and force), Johannes Kepler (motions of planets) and Galileo Galilei (motions of terrestrial objects) were early exemplars of the scientific method and inductive reasoning. Thus, a radically new doctrine of science took shape.

> **Stop and Read:**
>
> The Scientific Revolution emphasised upon experience and observation (empirical evidence) as a means of arriving at the truth. It held that knowledge of nature should be useful for the improvement of human life—the practicality of knowledge.

2.5.1 The Scientific Method

The scientific method was the first move towards giving the practice of science a formalized structure. Rene Descartes's work *Discourse on Method* (1637) outlined four steps in his approach to knowledge. These four approaches were: (a) to accept nothing as true until it is self-evident, (b) to split problems into manageable parts, (c) to solve problems starting with the simplest and then moving to the complex, and (d) review and re-examine the solutions. This often-quoted phrase "Cogito ergo sum" which stands for "I think, therefore I am", established the notion of the doubting self. The logic of the scientific method necessitated the formulation of hypotheses via induction, experimentation of the deductions inferred from these hypotheses, and consolidation of the hypotheses based on the findings. Karl Popper argues that "once a hypothesis has been proposed and tested, and has proved its mettle, it may not be allowed to drop out without 'good reason'. A 'good reason' may be, for instance: replacement of the hypothesis by another which is better testable; or the falsification of one of the consequences of the hypothesis" (Popper, 2007, p.32). According to Popper, genuine scientific theories are never finally confirmed and therefore are falsifiable. For example, Einstein's theory of relativity. The formation of a hypothesis is a creative process of the imagination that feeds on a priori knowledge. Behind every observation is a hypothesis that is formed in the mind. A scientific test consists of a search

for falsifiable traits in the hypothesis. If on observation it is seen that the predicted effect is not present, then the theory is discarded. For example, if Stephen Hawking's predictions on the black holes come out as true after being tested using falsifiable tools, it will signify that his theory has survived the test of falsifiability. Thus, the core tenet of a scientific hypothesis is that it must have the capacity of being proven false. Non-scientific or pseudo-scientific theories cannot pass the test of falsifiability. Because there is no way that they can be tested. There will always be a theoretical explanation to hold up. Popper devised the criteria of falsifiability to demarcate between genuine science and pseudo-science.

2.5.2 Key Features of the Scientific Method

- Empirical: It is based on direct observation, not on subjective factors or ideas.
- Replicable: Scientific experiments are replicable and not unique to a particular group.
- Provisional: Results are provisional and falsifiable.
- Objective: It relies on facts rather than on personal opinions, whims, etc.
- Systematic: It is carefully planned and systematically organized. It abides by protocols.

2.6 PARADIGMS OF SCIENCE: THE INFLUENCE OF THOMAS KUHN

Thomas Kuhn was an influential figure in the history of science. In his magnum opus *The Structure of Scientific Revolutions* (1962), he questions the linearity of the scientific progress. He argues that revolutionary science does not emerge from an objective, gradual process of data accumulation and experimentation. Instead, the history of science is a series of progressions or jumps from one paradigm to the next. The first phase of

development starts with the pre-paradigm phase. In this phase, there is no consensus on scientific theory. Furthermore, theories are highly incompatible. When a conceptual framework is finally put in place by working out a consensus, normal science begins. In this phase, researchers share a common paradigm or framework having internal equilibrium. However, they may be confronted with anomalies while solving puzzles within the paradigm of normal science. The anomalies can occur if there is an incongruity in the prediction of the paradigm and the result of the puzzle-solving. When anomalies go unresolved, the paradigm of normal science enters a crisis period where every measure is tried out to prevent the paradigm from collapsing. The crisis gets resolved by replacing the weakened paradigm with a newer one. This process can be termed as a paradigm shift. The new paradigm brings a new framework of concepts and methods and takes the place of the old paradigm, eventually settling down as normal science. And the cycle continues. Kuhn's sudden realisation upon encountering the scientific material of Aristotle was that if one were to understand Aristotelian science, one must know about the conceptual framework within which Aristotle worked. He also added that paradigms are incommensurable, which is why no two paradigms could be compared. There was simply no objective standard to judge paradigms. Hence, Kuhn's intellectual position left no room for falsification of hypotheses as proposed by Popper. He argued that scientific change came through paradigm shifts and not via falsifications.

There were others like Paul Feyerabend who was also sceptical about methodological monism and thought of s singular scientific method as a hindrance to scientific progress. But it was Thomas Kuhn who delivered the most brutal assault to the debate on the method. Unanticipated ideas always occur outside of normal science—this was Kuhn's central thesis.

2.7 SUMMING UP

In this Unit, we have discussed the beginnings of science in prehistoric societies, the role of mythology and religion in the spread of science, the contribution of Enlightenment thought in giving science a new meaning and purpose, and the methodical problem in science. The history of science is fraught with multiple convergences and divergences of philosophical positions. Every age provoked a different reaction to the bedrock of ideas that constituted the philosophy of science. For a long time, science was seen in terms of God's relationship to the natural universe. In the aftermath of the Scientific Revolution, science became a body of theoretical knowledge and divorced itself from philosophy, the great split that has continued until today. However, the breakthrough for science was provided by the Enlightenment philosophers who prophesied that science will be the most potent force to bind humanity in a shared future.

2.8 QUESTIONS

1. Why did Plato consider sense experience to be secondary in nature?
2. How did the Scientific Revolution change the fate of science?
3. What is the underlying logic of the scientific method?
4. State the key features of the scientific method.
5. Discuss Thomas Kuhn's conception of the paradigm.

2.9 RECOMMENDED READINGS AND REFERENCES

Cantor, G. N., Christie, J. R. R., Hodge, M. J. S., & Olby, R. C. (1990). *Companion to the History of Modern Science*. Routledge, London.

Flom, P. (2019, October 1). Five Characteristics of the Scientific Method. sciencing.com. Retrieved from https://sciencing.com/five-characteristics-scientific-method-10010518.html

Grossman, D. (2018, November 30). Cave Paintings Reveal How Ancient Humans Understood the Stars. Retrieved September 30, 2019, from https://www.popularmechanics.com/science/archaeology/a25350475/cave-paintings-suggest-ancient-humans-undersood-the-stars-much-better-than-we-thought/.

Henry, J. (2002). *The Scientific Revolution and the Origins of Modern Science*. Basingstoke: Palgrave.

Kuhn, T. S. (2012). *The Structure of Scientific Revolutions*. The University of Chicago Press, Chicago.

Lindberg, D. C. (1992). *The Beginnings of Western Science: The European Scientific Tradition in Philosophical, Religious, and Institutional Context, Prehistory to A.D. 1450*. University of Chicago Press, Chicago.

Popper, K. R. (2007). *The Logic of Scientific Discovery*. Routledge, London.

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UNIT 3: SUBJECTIVITY AND OBJECTIVITY

UNIT STRUCTURE

3.1 INTRODUCTION

Subjectivity and Objectivity are two contesting ideas in social research, both of which are equally important. Both argue on the idea of reality. While subjectivity deals with the idea of multiple realities created by people, objectivity deals with the idea of external reality; a reality lying out there. The idea of subjectivity is dealt with by many sociological approaches like Weber's interpretive sociology or the social construction of reality proposed by scholars like Berger and Luckmann. The idea of objectivity is reflected in the ideas of Comte and Durkheim. While Comte coined the term social physics and viewed sociology as a positivist scientific discipline, Durkheim gave the concept of social facts which, according to him, should be the main subject matter in sociology.

The subjectivity-objectivity debate has been well handled by Max Weber who maintains a well-balanced view on the rationality of both. He mentions value-free sociology as well as the role of the researcher in intervening in the field; the level of subjectivity and objectivity that he should maintain as an outsider.

3.2 OBJECTIVES

By the end of the unit, you will be able to:

- Analyse the relevance of subjectivity and objectivity in social research;
- Discuss Comtean and Durkheimian Positivism;
- Explain social constructivism and Weber's Interpretive Sociology;
- Analyse the subjectivity-objectivity debate.

3.3 RELEVANCE OF SUBJECTIVITY AND OBJECTIVITY IN SOCIAL RESEARCH

Subjectivity and objectivity are relevant matters in social research. At every step of social research, researchers are constantly faced with the question of maintaining both subjectivity and objectivity. There is also the question of maintaining value-free ideology whereby the researcher's individual position on any issue should not affect the outcome of the study by creating a sense of bias. On the other hand, a fair amount of objectivity is also necessary to maintain some standardisation, scientific average and bias-free experimentation followed by observation.

Qualitative methodology recognizes that the subjectivity of the researcher is intimately involved in scientific research. Subjectivity guides everything from the choice of topic that one studies to formulating hypotheses, and from selecting methodologies to interpreting data. In qualitative methodology, the researcher is encouraged to reflect on the values and objectives he brings to his research and how these affect the research

project. Other researchers are also encouraged to reflect on the values that any particular investigator utilizes. A key issue that arises with the recognition of subjectivity is how it affects objectivity. Two positions have been articulated. Objectivity is said to negate subjectivity since it renders the observer a passive recipient of external information, devoid of agency. And the researcher's subjectivity is said to negate the possibility of objectively knowing a social psychological world. The investigator's values are said to define the world that is studied. One never really sees or talks about the world per se. One only sees and talks about what one's values dictate. A world may exist beyond values, but it can never be known as it is, only as values shape our knowledge. Subjectivism is often regarded as the *sine qua non* of qualitative methodology. However, this is untrue. The qualitative methodology has an objectivist aspect as well. Objectivism states that the researcher's subjectivity can enable her/him to accurately comprehend the world as it exists in itself. Of course, subjectivity can bias the researcher and preclude objectively understanding a subject's psychological reality. However, this is not inevitable. In fact, one of the advantages of recognizing subjectivity is to reflect on whether it facilitates or impedes objective comprehension. Distorting values can then be replaced by values that enhance objectivity.

Objectivism integrates subjectivity and objectivity because it argues that objective knowledge requires active, sophisticated subjective processes—such as perception, analytical reasoning, synthetic reasoning, logical deduction, and the distinction of essences from appearances. Conversely, subjective processes can enhance objective comprehension of the world. Objectivism was enunciated by Dilthey (1833-1911) in his articulation of the cultural sciences. The key procedure in the cultural sciences was a qualitative hermeneutic interpretation of life expressions. Hermeneutic interpretation requires that the researcher employs an active, sophisticated subjectivity to objectively comprehend subjective experience in life expressions. *Verstehen* is to achieve valid interpretations. Dilthey's objectivist approach to hermeneutics continued its earlier use during the

Reformation when theologists employed it to identify the true original meaning of biblical texts. The objectivist sense is also contained in the etymological origin of hermeneutics. The term derives from Hermes, the Greek messenger god who helped humans understand what the gods were trying to say. Hermeneutics, in social science, similarly helps an observer clearly understand what the subjective experience of another is, i.e., what their expressions mean. Objectivity presupposes an independent reality that can be grasped. If there is no independent reality, or if reality cannot be held or if reality is merely the concoction of the observer, then the notion of objectivity is subject to debate or uncertainty.

3.4 TENETS OF OBJECTIVITY: COMTEAN AND DURKHEIMIAN POSITIVISM

Positivism is the term used to describe an approach to the study of society that relies specifically on scientific evidence, such as experiments and statistics, to reveal the true nature of how society operates. The term originated in the 19th century when Auguste Comte described his ideas in his books *The Course in Positive Philosophy* and *A General View of Positivism.*

First and foremost, Comte was interested in establishing theories that could be tested with the ultimate goal of improving our world once these theories were clearly laid out. He was eager to discover natural laws that applied to society. He viewed the natural sciences, such as biology and physics, as a necessary step in the development of a science of society. Just as gravity is a universal truth we all experience in the physical world, Comte believed sociologists could uncover similar laws operating on the social level of people's lives. These early thinkers laid the groundwork for a social science to develop that they believed would have a unique place among the sciences. This new field would be distinct and have its own set of scientific facts.

Comte gave the idea of a hierarchy of sciences where be the last one to emerge yet would occupy the topmost position to become the 'queen science' that held more importance than the other natural sciences that had come before it. It is also to be noted here that before coining the term 'sociology', he came up with the term 'social physics' to describe a science of society. This reflects his inclination towards modelling a science of society after the natural sciences. In its basic ideological posture, positivism is worldly, secular, anti-theological and anti-metaphysical.
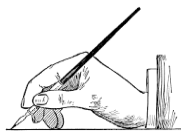
Comte's positivism was based on the law of three stages. There is a parallel, as Comte saw it, between the evolution of thought patterns in the entire history of man on the one hand, and in the history of an individual's development from infancy to adulthood on the other. In the first stage called the theological stage, natural phenomena are explained as the result of supernatural or divine powers. It does not matter whether the religion is polytheistic or monotheistic; in either case, miraculous powers or wills are believed to produce the observed events. This stage was criticized by Comte as anthropomorphic, i.e. as resting on all too human analogies. The second stage was called metaphysical. 'Meta' means beyond and 'physical' means the material world. The supernatural being is replaced by the natural force. This is in the form of essences, ideas and forms. Rationalism started growing instead of imagination. The dawn of the 19th Century marked the beginning of the positive stage in which observation predominates imagination. All theoretical concepts have become positive. The scientific thinking is thoroughly rational and there is no place for any belief or superstition in it. This stage is governed by industrial administrators and scientific moral guides. At this stage of thought, men reject all supposed explanations in terms either of Gods or essences as unnecessary and baseless.

Durkheim's positivism is based on his idea of sociology as the study of social facts. According to him, social facts are 'things'—they are external, general and constraining on individuals. They lie outside the individual and hence have a larger reality than individuals. He also introduced certain

rules of sociological method. *Rules of Sociological Methods* was published in the year 1895. According to Durkheim, there are five rules of observation of social facts:

a) Social facts should always be treated as if they are things.
b) We should never assume the voluntary nature of a social fact beforehand.
c) All pre-conceptions should be eradicated.
d) When social facts are observed, this observation should go beyond that of their individual manifestations.
e) Observation should seek always those external distinguishing characteristics which can be objectively perceived by others?

CHECK YOUR PROGRESS

1. Fill up the gaps:

a. The key procedure in the cultural sciences was a qualitative _____ interpretation of life expressions.

b. Objectivity presupposes an _____ reality that can be grasped.

c. Comte's _____ was based on the law of three stages.

d. Durkheim's positivism is based on his idea of sociology as the study of _____.

2. Who is the author of *The Course in Positive Philosophy*?
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3. What according to Durkheim, are the five rules of observation of social facts?

Stop and Read

Suicide as a Social Fact:

Emile Durkheim's seminal work on Suicide deals with the idea that the act of suicide is a social fact rather than an individual act because its causes lie in the larger external forces of the society. While psychology explains it as caused purely by personal/psychic issues, Durkheim saw it as caused by issues of integration and regulation. In terms of integration, there are two types of suicide—egoistic and altruistic. While the former deals with very less integration with society, the latter deals with the idea of excessive integration, both conditions lead to suicide. In terms of regulation, there are two types— anomic and fatalistic. While the former deals with less regulation, the latter deals with excessive regulation leading to suicide.

3.5 TENETS OF SUBJECTIVITY: SOCIAL CONSTRUCTION OF REALITY AND WEBER'S INTERPRETIVE SOCIOLOGY

The idea of the social construction of reality was introduced by Peter L. Berger and Thomas Luckmann in their seminal book named *The Social Construction of Reality* (1966). According to them, the reality is constantly constructed and language is a medium that constructs reality. Everyday reality is a shared experience. People share a common reality in everyday life. This everyday reality is about face-to-face reality. Language objectifies this everyday reality. This is called objectivation. Society can have both objective and subjective reality. Every individual reality is a

subjective reality but all of them, when manifested through language, becomes an objective reality. Everyday reality is the most basic reality.

Weber's interpretive sociology is a notable concept in sociology. According to him, sociology involves an interpretive understanding of society. This theoretical approach and the research methods that go with it are rooted in the German word *verstehen*, which means "to understand". To practice interpretive sociology, in short, is to attempt to understand social phenomena from the standpoint of those engaged in it. Interpretive sociology is thus focused on understanding the meaning that those who are studied give to their beliefs, values, actions, behaviours and social relationships with people and institutions. Interpretive sociology basically studies how groups they study actively construct the reality of their everyday lives through the meaning they give to their actions. For this, it is often important to conduct participatory research with engaging sessions and conversations.

As we have already understood, the idea of *verstehen* has been derived from the concept of *hermeneutics* which is about the historical interpretation of Bibles. Other than Weber, Georg Simmel was also involved in this idea of interpretive sociology as he was a proponent of micro-scale sociology which deals with agency and actions instead of structures dealt with by macro sociology.

CHECK YOUR PROGRESS

1. Fill up the gaps:

a. According to Berger and Luckmann, _____ is a medium that constructs reality.

b. German word _____ means "to understand".

c. Other than Weber, _____ was also involved in the idea of interpretive sociology.

3.6. THE SUBJECTIVITY-OBJECTIVITY DEBATE

Does social research require subjective or objective interpretation? Which side of the pole is more relevant to social research? This debate on subjectivity and objectivity is going on for a long time. The ones taking a side on subjectivity claim that reality is constructed and they stand against any standard external reality. On the other hand, the ones taking a side on objectivity claim that it is the appropriate means of understanding society and its issues. For example, as discussed earlier, while Weber takes a subjectivist stand, Durkheim takes an objectivist stand.

While both of these stands ultimately lead to research, debates and different pedagogies, they are equally crucial to understanding reality. While social constructivism results in a subjective understanding of society, positivism leads to an objective understanding of the same. The debate continues as to which is a better perspective. However, we need to keep in mind that social research can never be completely objective. Therefore, the key to better social research lies in the proper blend of both objectivity and subjectivity.

3.7 SUMMIMG UP

We can summarise this discussion as:

- Subjectivity and Objectivity are two polar ideas in social research but both are equally important. Both argue the idea of reality. While subjectivity deals with the idea of multiple realities created by people, objectivity deals with the idea of external reality; a reality lying out there.

- Auguste Comte and Emile Durkheim are associated with the idea of positivism. Weber as well as Berger and Luckmann are associated with the idea of subjective interpretation and establishing reality.

- For Durkheim, suicide is a social fact because it is caused either due to less/more integration and regulation with the society rather than having individual reasons/causes/factors.

- The idea of the social construction of reality was introduced by Berger and Luckmann in their seminal book named *The Social Construction of Reality* (1966). According to them, the reality is constantly constructed and language is a medium that constructs reality. Everyday reality is a shared experience.

- Weber's interpretive sociology is a notable concept in sociology. According to him, sociology involves an interpretive understanding of society. This theoretical approach and the research methods that go with it are rooted in the German word *verstehen*, which means "to understand".

3.8 QUESTIONS

1. Analyse the subjectivity-objectivity debate. Discuss the relevance of subjectivity and objectivity in social research.

2. Discuss who is more relevant in terms of the objective stand—Comte or Durkheim?

3. Explain Weber's Verstehen method and value-free sociology.

3.9 RECOMMENDED READINGS AND REFERENCES

Babbie, E. (2007). The Practice of Social Research. Thomson Wadsworth, USA.

Henderson, D. (2007). Rationality and Rationalist Approaches in Social Sciences. In Stephen Turner, S. and Outwaite, W., editors, *Handbook of Social Science Methodology.* Sage Publications, UK.

Morrison, K. (2006). *Marx, Durkheim, Weber: Formations of Modern Social Thought*. Sage Publications Ltd, India.

Young, P.V. (1966). *Scientific Social Surveys and Research*. PHI Learning Private Limited.

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MODULE II: APPROACHES TO SOCIAL RESEARCH

UNIT 4: POSITIVISM

UNIT STRUCTURE

4.1 Introduction

4.2 Objectives

4.3 Positivism

    4.3.1 Positivist Approach

4.4. Logical Positivism

    4.4.1 Logical Positivist Sociology

4.5 Anti-positivism

    4.5.1 Limitations of Positivism in Research

4.6 Summing Up

4.7 Questions

4.8 Recommended Readings and References

4.1 INTRODUCTION

Looking for something new is indeed an interesting task. This is what we call research. We tend to indulge in finding something that concerns our minds and thus attain satisfaction once we get the result. In social research and especially in sociology, positivism holds an important place. In the social sciences and the philosophy of the social sciences, positivism has supported the emphasis on quantitative data, on formulating theories, the doctrines of behaviourism, operationalism and methodological individualism. It has also emphasized the doubts among philosophers that meaning and interpretation can be scientifically adequate. It focuses on conceptual analysis. In positivistic sociology, the scientific study of the social world is identified with empirical research, statistical methods and

often the pursuit of general laws of social life which can be tested against experience. Here, in this unit, we will look into positivism tracing to Auguste Comte and the use of positivism in social research.

4.2 OBJECTIVES

After going through this unit you will be able to:

- Discuss the rise of positivism;
- Explain the meaning of positivism;
- Explain the use of positivism in research.

4.3 POSITIVISM

Positivism is an approach which makes experience the foundation of all knowledge as opposed to metaphysics. Auguste Comte (1798-1857) believed that the study of sociology should be scientific. He was of the opinion that the study of social phenomena should embody the same scientific approach as is embodied in natural sciences. He developed his scientific view, 'positivism', or 'positive philosophy' to provide a solution to the negative effects or anarchy resulting from the Enlightenment and the French Revolution.

Comte is credited with developing social physics or what he had called in 1839 as Sociology. The use of the term social physics by Comte conveyed that he tended to model sociology after the 'hard sciences'. This new science, which in his view would ultimately become the dominated science, was to be concerned with both social statics which means existing social structures and social dynamics which means social change. It was a feeling of Comte that social dynamics had a more important place than social statics. The focus of Comte on social dynamics reflected his interest in social reform, and particularly the reform of the ills that were brought by Enlightenment. Comte believed that sociology would become the dominant

scientific force in the world because of its distinctive ability to interpret social laws and to develop reforms aimed at patching up problems within the system.

CHECK YOUR PROGRESS
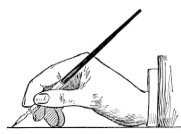
1. What is positivism?

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2. Fill up the gap: _____ is credited with developing social physics.

Comte's idea of positivism must be seen as a critique of what he calls the theological or metaphysical systems of thought. The positive philosophy, according to him, directs our efforts toward the discovery of laws governing the phenomena of the universe. Just as the natural world is governed by some universal laws, the social world is also governed by similar laws which need to be discovered. However, according to Comte, at the time of his writing, the study of social phenomena, which is later termed as sociology, was yet to achieve the positive character that the other sciences had already achieved. Here, Comte gives his idea of the hierarchy of sciences in which the lower sciences develop first. Comte presents a vast review of contemporary knowledge to show that astronomy, mechanics and chemistry and biology or physiology arrived in the positive stage in that order. Once the study of social phenomena achieves this positive character, it will complete the system of natural sciences.

Comte regarded sociology as the queen of the sciences, for without the guidance of its laws, the discoveries of the lower sciences could not be utilized to their maximum advantage for humanity. Comtes's positive philosophy has three parts and it provides the first three conceptions of positivism. The three parts are stated as follows: Positivism is a theory of

historical development in which improvements in knowledge are both the motor of historical progress and the source of social stability. Secondly, positivism is a theory of knowledge according to which the only kind of sound knowledge available to humankind is that of science, grounded in observation, thirdly, positivism is a unity of science thesis, according to which all sciences can be integrated into a single natural system.

Emile Durkheim, even though had rejected much of Comte's philosophy, he did retain and refined Comte's method and held that the social sciences are a logical connection of the natural ones into the realm of human activity and insisted that they may retain the same objectivity, rationality and approach to causality. According to Durkheim, sociologists could use the methods of natural sciences Comte was the first to give the positivist position for sociology, focusing on scientific analysis of natural sciences whereas Durkheim emphasised a distinctly sociological scientific methodology.

The methods of induction and deduction are crucial in social research. An understanding of these methods will assist in grasping the ideas of science in research. The method of **induction** can be defined as the derivation of a general principle which is inferred from specific observations. Induction concerns expectations about the uniformity of nature. There are three conditions that must be satisfied in the process of induction. First, the number of observation statements forming the basis of the generalization must be sufficiently large. Secondly, the observation statements must be repeated under a wide variety of conditions and thirdly, no accepted observation statement should conflict with the derived universal law. But we need to note that scientific laws are based on induction yet no inductive argument can be true always. Like any form of induction, there is no guarantee that what is true now will remain so in the future and also because we cannot the know the future, and cannot be sure of the probability to assign to particular circumstances. The method of **deduction or deductive logic** depends on analytic truths. A deductive statement is

where the conclusion must follow from the premises. A deductive approach is concerned with developing a hypothesis based on existing theory and then designing a research strategy to test the hypothesis. It is involved in reasoning from particular to the general i.e. deducing conclusions from premises or propositions. The advantage of deduction rests in the possibility to explain a causal relationship between concepts and variables, in the possibility to measure concepts quantitatively and in the possibility to generalize research findings to a general extent. Like the inductive method, even the deductive arguments are no guarantee of truth.

### 4.3.1 Positivist Approach

Positivists compare sociology to natural sciences and therefore apply scientific methods to their research which they assume will yield objective results. Natural sciences are governed by laws which positivists believe can be applied to human behaviour. They concede that human behaviour is patterned and predictable and can, therefore, be studied in an objective manner. The positivists also maintain that the natural sciences data is reliable because it can be repeated producing the same results and that data obtained from participant observation lacks generalizations.

Scientific methodology is used by Positivists such as Marxists and Functionalists. Positivists research is supposedly based on objective methods. They believe that positive facts produce valid evidence from which generalizations can be made. Methods like using questionnaires and interviews are applied which provide data that can be graded statistically. This supposedly objective theory of sociology should be value-free, that is there must be no bias or subjective opinions in the sociologist's research. As it is argued by many sociologists in line with Auguste Comte that procedures and methods used in the natural world can be applied to the study of man.

CHECK YOUR PROGRESS
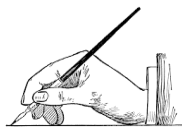
1. Fill up the gaps:

a. Comte's idea of positivism must be seen as a critique of what he calls the _____ or metaphysical systems of thought.

b. In 1800, the world is said to enter the _____ characterized by the believe in science.

c. A deductive statement is where the conclusion must follow from the _____.

4.4 LOGICAL POSITIVISM

The philosophical legacy of Comte remains only as part of the rich 19th-century sediment out of which grew 20th-century developments in philosophy, particularly the remarkably revitalized form of positivism that appeared in the 1920s and 1930s in the works of a group called the Vienna circle. Members of this circle included Rudolf Carnap, Herbert Feigl, Hans Hahn, Otto Neurath and Friedrich Waismann. The Vienna Circle's positivism was scientific but not progressivism or social reformist. They believed that the growth of science would benefit humankind, but not that it

would do so necessarily. They were naturalistic, believing that all sciences could be unified because they took the same form.

The Vienna Circle sought to highlight the ways in which their positivism differed from Comte's positivistic philosophy by giving the name 'logical positivism'. They stressed the centrality to their ideas of two characteristics: First is empiricist and positivist which implied that there is knowledge only from experience, which rests on what is immediately given. This sets the limit for the content of legitimate science. Second, the scientific world conception is marked by the application of a certain method, namely rationalism or logical analysis. The aim of scientific effort is to reach the goal of a unified science by applying logical analysis to the empirical material.

The concept of logic and empiricism has a place of discussion in logical positivism. Logic which was the study of argument and sound reasoning had a dilemma as to whether was its topic the human activity of interfering or the formal relationship of implying. So a solution to the dilemma about the status of logic became available through developments in formal logic from the middle of the 19th century onwards. Logic was conceived as the analysis of the properties of different sorts of relations in addition to the syllogism (Syllogism is a kind of logical argument that applies deductive reasoning to arrive at a conclusion based on two or more propositions that are assumed to be true). The new logics provided ideal languages in which the meanings of the operators or logical connectives relating variables were precisely defined. Vienna Circle believed that issues were to be investigated by reconstructing them in a formal language, which clarifies the relations between the sets of propositions that constitute the issues.

Empiricism, on the other hand, is the doctrine that experience is the basis of all knowledge of matters of fact as distinct from knowledge of logical actions. The logical positivists or the Vienna Circle used the new idea of the logical analysis to reformulate the classical empiricism of Hume. Vienna Circle was influenced by two ideas of Ernst Mach (1838-1916) who

following Hume, maintained that the experiences that are the foundation of science are experiences of elements of scientist's own sensations, such as colours, sound, flavours and not of purported real objects inaccessibly beyond experience. Secondly, Mach insisted that scientists restrict themselves to attempting to achieve the most complete, precise and emotional descriptions of their diverse experiences, collecting them into simple formulae. Logical positivism was thus scientistic, naturalistic and empiricist and by incorporating the new logic, they became logistic whereas the 19th-century positivism had been reformist. Just as logic was separated from the empirical study of reasoning, positivistic philosophy became separated from social philosophy, from comprehensive visions of how society ought to be.

4.4.1 Logical Positivist Sociology

Otto Neurath, one of the original members of the Vienna circle, focused on the question as to how sociology might be made to conform to the principles of logical positivism, in particular to his preferred physicalist variant, in which the experiences that are foundational for unified science are described in the spatial-temporal language of physics as publicly observable physical objects. According to him, sociology like all other sciences aims to establish regularities between spatial-temporal observables, the ultimate aim of unified science is to connect together all logically compatible laws. Within sociology, positivism remained the description of a set of practical techniques for the collection and manipulation of social data, in particular, the use of sample surveys to generate descriptive social statistics which are then analysed using multivariate and inductive statistics to induce generalizations or test hypothesis. With the logical positivists, however, positivism came to be a programme for demarcating science from metaphysics by deploying the principle of verifiability and unifying the special sciences around a common syntax.

CHECK YOUR PROGRESS
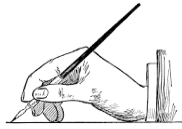
1. Fill up the gap:

a. _____is the doctrine that experience is the basis of all knowledge of matters of fact

b. The concept of _____ and empiricism has a place of discussion in logical positivism.

4.5 ANTI-POSITIVISM

Unlike Comte or Durkheim, many sociologists favoured an approach of the study of social phenomena that was advocated by Max Weber. According to Weber, social phenomena were not merely determined by some universal social laws, rather they were the product of human action. Of course, he did not undermine the role of the methods of the natural science in social research but he did not attribute an exclusive role to it. He regarded sociology as the study of social action. Since a sociologist may be a member of the group s/he is studying, there is a possibility of a direct understanding which is evident in Weber's idea of *Verstehen*. This is absent in the case of physical science. Sociologists like Georg Simmel, George Herbert Mead and Charles Cooley contributed to the development of an anti-positivist approach where the focus is put on the subjective perspective. Phenomenology and hermeneutics, therefore, do not advocate the positivist approach of Comte and Durkheim. Observation, ethnomethodology, case study, etc. tend to follow an approach similar to Weber's than to Durkheim's. Thus, we can see that not all social research is conducted within the tradition of Durkheimian positivism.

4.5.1 Limitation of Positivism in Research

Having seen what has traditionally been called positivism and what is today considered positivists, there are limitations and shortcomings of this approach. The first limitation of positivism is its claim to certainty. Karl Popper criticized, unconvinced by the logic of scientific discovery and the statements of the Vienna Circle, argued that every scientific statement must remain tentative for good. For him, the belief that universal laws could be established through repeatedly experiencing an event was an illogical one. Quine argued that a further weakness of positivism lies in the discrepancy between the theory and practice of the scientific method. Perhaps positivism's greatest shortcoming with particular reference to the social sciences is in its failure to distinguish between the natural and the social worlds. The difference between natural and social world lies in the principles that social structures do not exist independently of the activities which they shape or are the product of and social structures also do not exist independently of the agents' views; they reflect upon the institutions to which they belong and alter their behaviour accordingly.

4.6 SUMMING UP

- Positivism is an epistemology which makes experience the foundation of all knowledge as opposed to metaphysics.
- The positivist approach advocates that sociology can and should use the methods of the natural sciences to study social phenomena.
- It holds that just as the natural world is governed by some universal laws, the social world is also governed by similar laws which need to be discovered.

- The Vienna Circle sought to highlight the ways in which their positivism differed from Comte's positivistic philosophy by giving the name 'logical positivism'.

- The concept of logic and empiricism has a place of discussion in logical positivism.

- Empiricism is the doctrine that experience is the basis of all knowledge of matters of fact as distinct from knowledge of logical actions.

- According to Weber, social phenomena were not merely determined by some universal social laws, rather they were the product of human action.

- The views of Weber and other sociologists like Georg Simmel, George Herbert Mead and Charles Cooley contributed to the development of an anti-positivist approach where the focus is put on the subjective perspective.

4.7 QUESTIONS

1. What is meant by Positivism? Discuss its importance in social research.

2. Explain the inductive method and deductive method in social research.

3. Discuss logical positivism. How is it different from Comtean positivism?

4.8 RECOMMENDED READINGS AND REFERENCES

Bryant, G.A. C (1985). *Positivism in Social Theory and Research.* Macmillan Publishers Limited, London.

Halfpenny, P (2015). *Positivism and Sociology: Explaining Social Life*. Routledge, New York.

Ritzer, G & Goodman, D.J (2013). *Sociological Theory*. McGraw Hill publication, London.

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UNIT 5: INTERPRETIVISM

UNIT STRUCTURE

5.1 Introduction

5.2 Objectives

5.3 Max Weber and Verstehen

    5.3.1 Interpretative Research

    5.3.2 Hermeneutics

5.4 Quantitative Methods and Interpretivism

    5.4.1 Interpretation

    5.4.2 Interpretive Inquiry

5.5 Conceptual and Practical Issue

    5.5.1 Positivism vs Interpretivism

    5.5.2 Advantages and Limitation of Interpretivism

5.6 Summing Up

5.7 Questions

5.8 Recommended Readings and References

5.1 INTRODUCTION

In the previous unit, the concept of positivism has been dealt with at length. Here, on the other hand, we are going to deal with what poses as opposite to positivism, i.e. interpretivism. It is known that society is a bigger space comprising people and objects. Whereas the nature of any physical object can be studied in a way convenient to the researcher but to study people or social actors, the matter is different. People have emotions and feelings who are different from any material object, therefore, studying the former requires an in-depth understanding and an interpretation of the understandings of both the researcher and the subject i.e. social being(s) under study. Thus, this unit which emphasizes on interpretivism will enable

the readers to know and feel the importance of the method of interpretative understanding in social research.

5.2 OBJECTIVES

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

- Explain Max Weber's concept of Verstehen;

- Discuss interpretivism and interpretive inquiry;

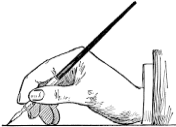- Analyse the advantages and disadvantage of interpretivism.

5.3 MAX WEBER AND VERSTEHEN

Verstehen is said to be derived from a field known as hermeneutics as has been mentioned earlier. Hermeneutics was a special approach to the understanding and interpretation of published writings. It is the science of interpretation and maintains an interest in the content as well as the form of what is being interpreted. Its goal was to understand the thinking of the author as well as the basic structure of the text. The term itself originated with the practice of interpreting sacred texts. It works on the principle that we can only understand the meaning of a statement concerning a whole discourse or world-view of which it forms a part: for example, say, we can only understand patriarchy in the context of all other gender relations of a different culture to which they are related. We have to refer to the whole to understand the parts and the parts to understand the whole- the so-called hermeneutic circle.

Max Weber, Wilhelm Dilthey, and Hans-Georg Gadamer sought to extend this idea from the understanding of texts to the understanding of social life. Weber sought to use the tools of hermeneutics to understand actors, interaction, and indeed all of human history. Dilthey's essay 'the Rise of Hermeneutics' speaks that it is possible to understand using objectification. According to him, hermeneutics is the theory of

interpretation that relates to all human objectification, i.e. not only speech and writing but also the visual artistic expressions, more casual physical gestures as well as observable actions or deeds. Dilthey took hermeneutics as a methodology for the recovery of meaning that is essential to the understanding within the human or historical sciences. Gadamer, on the other hand, develops a philosophical hermeneutics that provides an account of the proper ground for understanding. He did not reject the methodological concerns of hermeneutics but rather insisted on the limited role of method and the priority of understanding as a dialogic, practical and situated activity.

CHECK YOUR PROGRESS

1. What do you mean by verstehen?

5.3.1 Interpretative Research

Interpretative research is a framework and practice within social research that is invested in philosophical and methodological ways of understanding social reality. It is widely viewed as a practice and a set of paradigms embedded in different theoretical fieldworks ranging from ethnomethodology to critical feminist theory. As an epistemological framework, it has been used widely across the social and human sciences, especially anthropology, sociology, communication, cultural studies, social work and education. Central to the interpretative framework is the notion of verstehen or understanding as has been described by Max Weber. Since

Weber, several philosophers and social scientists have focused the inseparability of understanding from interpretation. At some level then, all social research is interpretative because all such research is guided by the researcher's desire to understand and therefore interpret social reality. Whether the focus is on qualitative or quantitative, at the bottom it is still understanding that is being sought by researchers across the board. However, the kind of understanding being sought is usually determined by researchers based on the varying ontological, epistemological and methodological beliefs to which they subscribe.

All social researches are supposed to be interpretative in nature. It becomes important to somewhat disentangle what interpretative research means within the larger complex web of qualitative research. Within qualitative research, interpretative paradigms, practices and methods have become central and constantly shaping and reshaping research methods. This framework of interpretivism focus on understanding and meaning-making instead of simply explaining.

5.3.2 Hermeneutics

Verstehen is said to be derived from a field known as hermeneutics as has been mentioned earlier. Hermeneutics was a special approach to the understanding and interpretation of published writings. It is the science of interpretation and maintains an interest in the content as well as the form of what is being interpreted. Its goal was to understand the thinking of the author as well as the basic structure of the text. The term itself originated with the practice of interpreting sacred texts. It works on the principle that we can only understand the meaning of a statement concerning a whole discourse or world-view of which it forms a part: for example, say, we can only understand patriarchy in the context of all other gender relations of a different culture to which they are related. We have to refer to the whole to understand the parts and the parts to understand the whole-the so-called hermeneutic circle.

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Stop and Read

According to Hans-George Gadamer, hermeneutics recognizes that our being and doing are intimately connected.

5.4 QUALITATIVE METHODS AND INTERPRETIVISM

In qualitative methods of research, the interpretive pattern is used where meaning is disclosed, discovered and experienced. The emphasis is on sense-making, description and detail which are parts of qualitative research. Here, human action constitutes the subjective interpretations of meanings.

Therefore, making meanings is regarded as the primary goal of interpretive research in the understanding of social phenomena.

It is necessary to approach sociology in this manner to conduct participatory research that engages the researcher in the daily lives of those they study. Interpretive sociologists work to understand how the groups they study construct meaning and reality through attempts to emphasize with them and as much as possible to understand their experiences and actions from their own perspectives. This means sociologists who take an interpretive approach work to collect qualitative data because taking this approach helps them to approach a subject matter of research with different kinds of assumptions, questions about it, and require different kinds of methods to respond to those questions. The methods employed by an interpretive researcher are in-depth interviews, focus groups and ethnographic observations. The researcher here believes in inter-subjectivity in which individuals interact and communicate with each other. Interpretive researcher's ague that they should absorb himself or herself into the group under study in order to interpret their interactions.

5.4.1 Interpretation

We need to understand that data or information collected in research do not necessarily speak for themselves. The process by which a researcher construes meaning from research findings is referred to as interpretation. It involves helping the readers to make sense of the findings produced in a research study. Qualitative research may use theoretical orientations to provide interpretations of findings or may generate interpretations a priori. Interpreting qualitative findings begins with a researcher's own assumptions regarding the world, life and people. In this manner, worldview tends to influence how one comes to make meanings or make sense of data acquired from a research study.

There is a considerable debate that exists among qualitative contemporary researchers regarding the role of interpretation, particularly with respect to

ground theory. Traditional models posed that researchers must work vigilantly to hold their own life paradigms at bay when viewing qualitative research results. But interpretation is viewed as an apt part of the qualitative process and researcher are free to explore a variety of perspectives on the study's findings. Qualitative researchers sometimes argue that everyone possesses assumptions about life and to deny these is simply to deny one's humanity. Consequently, rather than attempting to stay in their interpretive bent, a qualitative researcher's role is to explicitly state the perspective used to make interpretations. Also, the qualitative researcher's role is to interact with findings based on their theoretical orientation while clearly informing the readers how that orientation was used to generate conclusions.

5.4.2 Interpretive Inquiry

As is the case with all other forms of qualitative inquiry, interpretive inquiry, focuses on the understanding (interpreting) the meanings, purposes and intentions (interpretations) people give to their own actions and interactions with others. What distinguishes interpretive inquiry from the other approaches to qualitative research is the desire to step aside from various issues that have long been central to discussions about the nature and purposes of social and educational research. Seen in the light of work of philosophers like Richard Rorty, interpretivists believe that researchers should drop their concerns about theories of knowledge, abandon the philosophical doctrine of realism/neorealism; recast major concepts such as objectivity, subjectivity, and relativism; and rethink the role of research in the research process.

Interpretive inquirers do not see social and educational research as scientific in the conventional sense of that term. To the contrary, they emphasize the idea that research is a moral and practical activity that shares much in common with other forms of inquiry such as those practised by novelists, journalist and ordinary people in their day-to-day life's.

5.5 CONCEPTUAL AND PRACTICAL ISSUES

The actual inquiry procedures employed by interpretivists are the same as those used by other qualitative researchers. The major difference is that most qualitative researchers (and all quantitative researchers) hold that certain methods must be employed to obtain a valid study. Interpretivists do not accept that certain techniques are necessary minima and argue that exactly what an inquirer does or when in the field or how field notes are analysed can vary from situation to situation. The goal of interpretive inquiry is the interpretation of the interpretations that the people give to the actions of others (double hermeneutics). This is a process that is very much like an ordinary conversation.

For the process of interpretation and understanding, there are no fixed criteria, as presumably is the case for other research approaches, for making such decisions. Interpretivists hold that such judgements are practical accomplishments, taken through dialogue and persuasion that are worked out as we go along. There are three points of interests to be taken note of. First, interpretive criteria are not rules that determine judgements but rather characterizing traits, expressed as values, that influence judgement. This allows that any particular criterion can variously be interpreted at different times and under different conditions. Second, the traits that are expected from the inquiry are gathered into lists that are open-ended in that they are constantly subject to change and modification. And lastly, judgements about the quality of inquiry are not only a practical activity but also a moral endeavour.
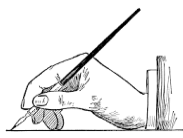
1. Fill up the gap:

The goal of interpretive inquiry is _____ that the people give to the actions of others (double hermeneutics).

5.5.1 Positivism vs Interpretivism

A brief analysis of the difference between the two approaches will set the way for a clear understanding of the two. Positivists compare sociology to natural sciences and therefore apply scientific methods to their research which they assume will yield objective results. Natural sciences are governed by laws which positivists believe can be applied to human behaviour. They believe that human behaviour is patterned and predictable and can, therefore, be studied objectively. They also maintained that natural sciences data is reliable because it can be repeated producing the same results and that data obtained from participant observation lacks generalization. On the other hand, interpretivists believe that humans cannot be treated in the same manner as the objects are treated in the natural sciences. They believe that people act in the manner they wish or act in their free own will. Human behaviour that is constantly being interpreted by other humans can take on different meanings through social interactions.

5.5.2 Advantages and Limitation of Interpretivism

Interpretivism has its advantages of using it as an approach. The first advantage can be identified as that with the diversifying views to look into phenomena, interpretivist researchers cannot only describe objects, humans

or events but also deeply understand them in a social context. In addition to this, researchers can also conduct this type of research in natural setting via utilizing key methodologies as grounded theory, ethnography, case study or life history to gain the insider's insights of research objects. The second advantage of the interpretivist method can be said as leveraging key method of the interactive interview which allows a researcher to investigate and prompt things that we cannot observe, researchers can probe into an interviewee's thoughts, values, prejudices, perceptions, views, feelings and perspectives.

Interpretivism is also subjected to criticism in spite of its uses in research. The first limitation is that the interpretivists aim to gain the deeper understanding and knowledge of phenomena within its complexity of the context rather than generalize these results to other people and other contexts, hence it tends to leave out a gap in verifying validity and usefulness of research outcomes with using scientific procedures. The second criticism levelled against interpretivism is that its ontological view tends to be subjective rather than objective. Thus, for this reason, the research outcomes are unquestionably affected by the researcher's own interpretation, own belief system, ways of thinking or cultural preferences which tend to cause too many biases. Another limitation of interpretivism is about the lack of addressing the political and ideological impact on knowledge and social reality. This paradigm or approach tends to understand the current phenomena rather than focusing on the problems related to the empowerment of individual and societies. It is also said that this approach of interpretivism tends to ignore or neglect the issues of power and agency, which are features of our society.

CHECK YOUR PROGRESS

1. Point out two differences between positivism and interpretivism.

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2. Write two limitations of interpretivism.

5.6 SUMMIMG UP

- Verstehen is a German word which means 'understanding' and is derived from a field known as hermeneutics.

- Weber distinguishes descriptive understanding and explanatory understanding. Both of these require an interpretation of what is happening.

- Interpretative research is a framework and practice within social research that is invested in philosophical and methodological ways of understanding social reality.

- Hermeneutics was a special approach to the understanding and interpretation of published writings. It is the sciences of interpretation and maintains an interest in the content as well as the form of what is being interpreted.

- Weber sought to use the tools of hermeneutics to understand actors, interaction, and indeed all of human history.

- In qualitative methods of research, the interpretive pattern is used where meaning is disclosed, discovered and experienced.

- Interpreting qualitative findings begins with a researcher's own assumptions regarding the world, life and people.

- Interpretive inquirers do not see social and educational research as scientific in the conventional sense of that term.
- Interpretivists do not accept that certain techniques are necessary minima and argue that exactly what an inquirer does or when in the field or how field notes are analysed can vary from situation to situation.

Glossary

- **A priori:** relating to knowledge which proceeds from theoretical deduction rather than observation or experience
- **Dialogue:** a conversation between two or more people to resolve a problem
- **Intuition:** the ability to understand something instinctively without the need for conscious reasoning
- **Leverage:** use something to maximum advantage
- **Ontology:** the branch of metaphysics dealing with the nature of being
- **Paradigm:** a typical example or pattern of something
- **Persuasion:** the action or process of persuading or convincing someone

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5.7 QUESTIONS

A. **Short type questions:**

1. What does Max Weber mean by Verstehen?
2. What is Hermeneutics?

B. **Essay type questions:**

1. Briefly describe about interpretation and interpretative inquiry.
2. Explain what is meant by interpretative research and state the limitations of interpretivism.

5.8 RECOMMENDED READINGS AND REFERENCES

Given, L.M (2008). *The Sage Encyclopaedia of Qualitative Research Methods.* Sage Publication Limited, London.

Ritzer, G & Douglas, D.J (2013). *Sociological Theory.* McGraw Hill Publication, London.

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