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Epistemology

SEMESTER - V

PHILOSOPHY

BLOCK 1



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COURSE INTRODUCTION:

This course deals with Epistemology, which is an important branch of Philosophy. The term epistemology is derived from two Greek words 'episteme' (knowledge) and 'logos' (reason, science). Thus, it is concerned with the science of knowledge and discusses the issues like nature and scope of knowledge, origin of knowledge, sources of knowledge, theories of knowledge etc. Epistemology, thus, is the "theory or study or science of knowledge".

BLOCK INTRODUCTION

This course consists of fifteen units and divided into two blocks. The first block comprises of eight units and the second block of seven units.

The first unit starts with "Epistemology: Nature and Scope". It includes the concepts like Nature of epistemology, Scope of epistemology, Utility of epistemology, Epistemology and psychology of knowing, and Subject matter of epistemology

The second unit is 'Philosophical Methods: Descartes and Kant". The concepts included in this unit are: Meaning and Nature of Philosophical Method, Descartes Mathematical Method, Kant's Critical or Transcendental Method

The third unit is 'Nature and Kinds of Knowledge: 'Knowing that' and 'Knowing how'. It deals with the issues such as Gilbert Ryle's Analysis of Knowledge, Knowing How and Knowing That, Two Distinct Type of Knowledge, Knowing How over Knowing That, and Critical Estimation

The fourth unit is "Nature and Kinds of Knowledge: Knowledge by acquaintance and Knowledge by description". It basically discusses the concepts like Knowledge by Acquaintance, Knowledge by Description, and Relation between "knowledge by acquaintance" and "knowledge by description"

The fifth unit is Gettier's problem". The concepts included in this unit are- The Gettier Problem, and Responses to the Gettier problem

The sixth unit is "Distinction between a priori and a posteriori knowledge". The concepts included in this unit are A priori judgments, A posteriori judgments, Distinction between a priori and a posteriori Analytic a priori and Synthetic a posteriori, Kant's view, Anti-Kantian views

The name of the seventh unit is 'Theory of knowledge: Rationalism'. It deals with the issues like Origin and Sources of Knowledge, Theories of Knowledge, Rationalism, Standpoints of Different Philosophers

The name of the eights unit is 'Theory of Knowledge: Empiricism'. It discusses Empiricism, Standpoints of Different Philosophers, Critiicism, and Kant's viewpoint on knowledge

While going through this course you will come across some boxes which are put on the left side or right side of the text. These boxes will give us the meanings of some words and concepts within the text. Apart from this, there will be some broad and short questions included under Activity and Check Your Progress in every unit. Activities will increase our thinking capacity because questions put in Activity are not directly derived from the text. But answers to the short questions are put in the section Answers to Check Your Progress. Besides, there are some text-related questions which are put in Model Questions. These questions will help you in selecting and mastering probable topics for the examination so that you can prepare for the examination with confidence.

UNIT: 1 EPISTEMOLOGY:NATURE AND SCOPE

UNIT STRUCTURE

1. 1 Learning objectives

1.2 Introduction

1.3 Nature of epistemology

1. 4 Scope of epistemology

1.5 Utility of epistemology

1.5.1 Epistemology and psychology of knowing

1.6 Subject matter of epistemology

1.7. Let sum up

1.8 Further Readings

1.9 Answers to check your progress

1.10 Model questions

1.1 LEARNING OBJECTIVES

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

- define epistemology;
- discuss nature of epistemology;
- explain the different Issues of epistemology,
- discuss different sources of knowledge,
- discuss the importance of epistemology;
- explain the subject matter of epistemology

1.2 INTRODUCTION

This unit introduces to you the term epistemology and its nature and scope. Epistemology is the theoretical or philosophical study of the nature, origin, and limits of human knowledge. The term epistemology is formed from two Greek words episteme (knowledge) and logos (reason, science). Epistemology, thus, is the "theory or study or science of knowledge". At this juncture it is important to note that logos is the root of all terms ending in "-ology" - such as psychology, anthropology - and of "logic". Even "Logos"

has many other related meanings. It is clear that the term epistemology is referred to as the theory of knowledge. Thus, epistemology may be defined as that science which inquires into the nature, conditions and factors, the limits and validity, of human knowledge. It is the criticism of knowledge. Truly speaking, epistemology has a long history within Western philosophy, beginning with the ancient Greeks and continuing to the present. Moreover, along with metaphysics, logic and ethics, epistemology is one of the four main branches of philosophy and so nearly every great philosopher has contributed to it.

1.3 NATURE OF EPISTEMOLOGY

In the introduction of this unit we have defined and outlined the term epistemology. Epistemology may be restated briefly as a branch of philosophy "commonly known as the theory of knowledge" (Woozley, 1982: 10). The derivative meaning of the term epistemology (Epistemology = episteme (knowledge), logos (science)) hinges that it is the science of knowledge. It deals with knowledge and the problems concerning knowledge. Accordingly, it is a theory of knowledge. Epistemology attempts to define knowledge and tries to distinguish valid knowledge from invalid knowledge, ignorance or opinions and so on. Moreover, epistemology is concerned with the sources, foundations, methods, conditions, validity, limits and factors of knowledge. Epistemology or theory of knowledge allows us to ask and answers a number of questions: What is knowledge? How we know? What the ways of knowing are? What knowledge is valid? What are the necessary and sufficient conditions of knowledge? What are the sources of knowledge? How is knowledge related to belief? Is knowledge possible? There are many more questions that fall under the theory of knowledge. In short, epistemology is primarily concerned with the problems and issues of human knowledge.

It may be noticed that there are many different theories of epistemology. There is "no one and only theory of knowledge, but an immense variety of

rival theories" (Ibid) of knowledge. Since traditional philosophers, all theories of knowledge fall into one of two camps, namely, empirical or rational. Rationalism has its birth in the thought and philosophy of Rene Descartes, the father of modern western philosophy. According to rationalism, knowledge originates through intellect or reason. Thus, knowledge is rational and develops from innate ideas are self-evident and universally true. Socrates and Plato were the earliest rationalistic philosophers. For them true knowledge originates in reason. In the modern period rationalism received an articulated form in the hands of Descartes, Leibnitz and Spinoza. They are called continental rationalists. Descartes advocate mathematical rationalism. For Leibnitz, all our ideas are innate. Like Descartes, Spinoza claimed that some of our ideas are innate.

Empiricism, on the other hand, is the permanent strand in philosophy that attempts to tie knowledge to sense experience. Unlike rationalism, empiricism holds that knowledge originates in experience. "Experience is thought of either as the sensory contents of consciousness, or as whatever is expressed in some designated class of statements that can be observed to be true by the use of the senses" (Blackburn, 1996: 119). It seems clear that sense experience is the only source of knowledge according to empiricism. Empiricism as a theory of knowledge rejects the view that there is any apriori part of knowledge. In the Greek period the Atomists and the Sophists were the most ancient promulgator of empiricism. In the modern period Locke, Berkeley and Hume are the chief exponents of empiricism as the theory of knowledge.

It seems clear from the above consideration that empiricism is quite opposite to rationalism on the question of knowledge. However, neither rationalism nor empiricism can be accepted as a complete and satisfactory theory of the origin of knowledge. Both rationalism and empiricism are one sided. They are no more than partial reflections of knowledge. That is why Immanuel Kant has introduced the theory of Criticism or Critical theory, synthesis of rationalism and empiricism, of the origin of knowledge. Kant,

after a critical analysis of theories of empiricism and rationalism, righteously points out that concepts without percepts are empty and percepts without concepts are blind. This makes the sense to say that knowledge is a joint product of the sense experience and the unifying function of the intellect. For Kant, elements of knowledge is provided by the senses and these sensations are ordered and synthesized by the categories of understanding to give the form of knowledge in the mind of rational beings. Here it is important to note that this position of Kant is known as Critical philosophy or Transcendentalism. Thus, in a nutshell, it can be said that true knowledge is empirico-rational or true knowledge is rationalized experience.

Thus, we have three most important theories of the origin of knowledge, namely, rationalism, empiricism and critical theory. Besides, there are other theories of the origin of knowledge, such as, Intuitionism, Idealism, Realism, Pragmatism etc. This is, in brief, all about the nature of epistemology.

1.4 SCOPE OF EPISTEMOLOGY

It is already stated that epistemology is the study of human knowledge. The domain of epistemology contains the problem of knowledge and associated issues are as old as philosophy is. The epistemological issues such as way to acquisition knowledge, i.e., opinions, beliefs, tradition, commonsense, mental constructs etc. have been a central point of debate and discussion in all philosophies since time immemorial. Time and again people have tried to theorize about epistemology raising questions like- What is the nature of knowledge? What are the means of acquiring it? What are the methods of arriving at valid knowledge? How are we to know the validity of valid knowledge? Precisely speaking, the central questions of epistemology include the "origin of knowledge; the place of experience in generating knowledge, and the place of reason in doing so; the relationship between knowledge and certainty, and between knowledge and the impossibility of error; the possibility of universal skepticism; and the changing forms of knowledge that arise from new conceptualizations

of the world" (Blackburn, 1996: 123). Thus, epistemologists concern themselves with a number of tasks, which we might sort into two categories as under:

First, we must determine the nature of knowledge; that is, what does it mean to say that someone knows, or fails to know, something? This is a matter of understanding what knowledge is, and how to distinguish between cases in which someone knows something and cases in which someone does not know something. While there is some general agreement about some aspects of this issue, we shall see that this question is much more difficult than one might imagine.

Second, we must determine the extent of human knowledge; that is, how much do we, or can we, know? How can we use our reason, our senses, the testimony of others, and other resources to acquire knowledge? Are there limits to what we can know? For instance, is some things unknowable? Is it possible that we do not know nearly as much as we think we do? Should we have a legitimate worry about skepticism, the view that we do not or cannot know anything at all? These are, in brief, some of the important issues of epistemology.

From the above issues of epistemology we can form an idea of its province or scope or area. The scope or boundary of epistemology is what epistemology asks or seeks to answer basic questions about how human beings perceive the world and gain knowledge about it. Epistemology is the branch of philosophy concerned with the nature and scope of knowledge and justified belief. It analyzes the nature of knowledge and how it relates to similar notions such as truth, belief and justification. It also deals with the means of production of knowledge, as well as skepticism about different knowledge claims. It is essentially about issues having to do with the creation and dissemination of knowledge in particular areas of inquiry. Hence epistemology must include within its scope the problem of knowledge, validity of knowledge, different sources of knowledge, i.e., beliefs, opinions and so on.

1.5 UTILITY OF EPISTEMOLOGY

Philosophy deals with many problems. Knowledge is one of the main problems of philosophy. Epistemology is the investigation of the nature of knowledge itself. It mainly highlights on our means for receiving knowledge and how we can make a clear distinction between truth and falsehood or reality and unreality or valid and invalid knowledge. The dominant idea in this connection is that the study of epistemology is fundamental to understanding how and why we think. Even it is necessary for us in support of how we acquire knowledge, how we rely upon our senses, and how we build up concepts in our minds and so on. A sound epistemology is considered necessary for the development of sound thinking and reasoning, which is why so much philosophical literature can involve seemingly arcane discussions about the nature of knowledge. Some questions given below frequently addressed by epistemologists:

- What can we know?
- How can we know it?
- Why do we know some things, but not others?
- How do we acquire knowledge?
- What is the nature of knowledge?
- Is knowledge possible?
- Is knowledge of reality possible at all or not?
- Can knowledge be certain?
- Why do we believe certain claims and not others?

These are some of the questions which epistemology seeks to answer. We think that epistemology will continue to be an area of philosophical discussion as long as these questions remain.

1.5.1 Epistemology and psychology of knowing

It is important to note here that epistemology should not be confused with the psychology of knowing. Psychology deals with the origin and gradual development of knowledge in the individual mind. Psychology is concerned with the analysis of the conscious states and processes as mental facts. Psychology does not enquire into the validity, conditions and limits of human knowledge. Unlike psychology, epistemology deals with the nature and possibility of knowledge and its limits. Epistemology, therefore, is concerned with the question whether knowledge of reality beyond the world of appearances is at all possible or not.



ACTIVITY: 1.1

- Write what you know about epistemology?

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- "Epistemology should not be confused with the psychology of knowing" - explain.

  .....

  .....



CHECK YOUR PROGRESS

Q 1: State whether the following statements are True or False

a) Epistemology is criticism of knowledge (True/False)

b) Epistemology literally means 'science of knowledge' (True/False)

Q 2: Fill in the blanks

a) _____ is the root of all terms ending in "-ology".

b) _____ is one of the four main branches of philosophy.

c) _____ is the investigation of the nature of knowledge itself

1.6 SUBJECT-MATTER OF EPISTEMOLOGY

In the broad sense of the term epistemology or theory of knowledge means the science of the material and formal principles of knowledge; in its narrower sense, it is the discipline which is exclusively concerned with the material principle of knowledge. But the epistemology in general, the kind of knowledge usually discussed is propositional knowledge, also known as "knowledge-that" as opposed to "knowledge-how". For example, in Arithmetic, it is known that 2 + 2 = 4, but there also knowing how to add two numbers. A number of philosophers therefore think there is an important distinction between "knowing that" and "knowing how" with epistemology primarily interested in the former. This distinction is recognized linguistically in many languages, though not in modern Standard English.

In personal knowledge, Michael Polanyi articulates a case for the epistemological relevance of both forms of knowledge using the example of the act of balance involved in riding a bicycle. He suggests that the theoretical knowledge of physics involved in maintaining a state of balance substitute for the practical knowledge of how to ride, and that it is important to understand how both are established and grounded. If we look recent back, some epistemologists like Sosa, Greco, Kvanving, Zagzbski and many more have argued that we should not think of knowledge this way. Epistemology should evaluate people's properties, i.e., intellectual virtues instead of proposition properties. This is, in short, because higher forms of cognitive success, i.e., understanding involve features that can't be evaluated from a justified true belief (JTB) view of knowledge.

For the ancient epistemology did not exist as a separate discipline. It was Plato, who included epistemological investigations under what Plato calls dialectics, and we find them also in Aristotle's metaphysics, but there is no sharp line of division between epistemology on the one hand, and the properly metaphysical or specifically logical discussions on the other. The principal epistemological questions in ancient philosophy are those which revolve around the truth and universal validity of knowledge. There is hardly

any trace of the problems which have loomed so large in modern thought - the relation between the subjective and objective factor in knowledge, the parts played by object and by knowing subject in the process of perception of knowledge and the determination of the limits of knowledge and of the nature of pure experience.

In the period of European Renaissance and the early part of the modern period, though marked by sporadic spirit of criticism and doubt, systematic review of epistemology as a distinct and separate discipline did not appear on the scene until Locke wrote his An Essay Concerning Human Understanding in 1690. This is the reason why the English philosopher John Locke regarded as the real founder of epistemology or theory of knowledge. His great work is the first and systematic enquiry into the origin, nature and limits of knowledge. Locke was led to undertake an investigation of the kind by the experience that in matters of metaphysics, moral philosophy and religion, agreement of opinions were hardly to be obtained. The universal source of knowledge lies for him in external and internal perception 'sensation' and 'reflection' and a comprehensive classification of the 'ideas' which are derived from these two sources leads him to assume a certain limited number of elementary constituents, which in manifold connection and combination make up our developed knowledge. The distinction between primary and secondary qualities of physical bodies, whereby certain attributes of things are looked upon as permanent and necessary, other as transitory and contingent, due to our own special organization. In other words, the doctrine of the subjectivity of the qualities of sense, of colors, tones, tastes etc. is raised by Locke to the epistemological antithesis of outer and inner subject and object. Quite truly, since Locke, epistemology progressed steadily up to Kant.

It was Immanuel Kant, the German philosopher, who looked at the problem of knowledge from an entirely different angle of vision. Instead of taking knowledge as a fact, he went afar and enquired into the anterior logical conditions that make knowledge possible. Hence, Kant is described

as Copernican in his attitude of knowledge. What it reflects that while Locke was more psychological in his treatment of the problem of knowledge, Kant's outlook was more epistemological than psychological. In a sense, Kant equates epistemology with philosophy. For Kant, epistemology is identical with philosophy. According to Kant, philosophy is the criticism of cognition.

In the same vein of Kant, Fichte made epistemology or science of knowledge to be the soul of philosophy. Quite surprisingly, this critical spirit continued up to German philosopher Georg Wilhelm Friedrich Hegel. It was Hegel who gave finality to epistemology or theory of knowledge in his conception of philosophy as the science of the Absolute Idea, making logic or the science of Mind identical with the science of Reality. Here it is important to observe that in the system of Kant, Fichte and Hegel's theory of knowledge received its culmination or final shape. As a result, intellectualism became the key concept or spirit of philosophy.



ACTIVITY: 1.2

- Explain after Kant epistemology is identical with philosophy.

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  .....

- Write an essay on Subject matter of epistemology.

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CHECK YOUR PROGRESS

Q 3: Fill in the blanks

a) Theory of knowledge means the _____and _____

b) Epistemology is concerned with _____

Q 4: Epistemology or science of knowledge to be the soul of philosophy - who said this?

Q 5: Who gave finality to epistemology?

Q 6: Who is the author of the book An Essay Concerning Human Understanding?



1.7. LET US SUM UP

- Epistemology is the theoretical or philosophical study of the nature, origin, and limits of human knowledge. The term epistemology is formed from two Greek words episteme (knowledge) and logos (reason, science). Epistemology, thus, is the "theory or study or science of knowledge".

- Epistemology is the branch of philosophy concerned with the nature and scope of knowledge and justified belief. It analyzes the nature of knowledge and how it relates to similar notions such as truth, belief and justification. It also deals with the means of production of knowledge, as well as skepticism about different knowledge claims .

- Epistemology is the investigation of the nature of knowledge itself. Its study mainly highlights on our means for receiving knowledge and how we can make a clear distinction between truth and falsehood or reality and unreality or valid and invalid knowledge.

- Psychology deals with the origin and gradual development of knowledge in the individual mind, while epistemology deals with the nature and possibility of knowledge and its limits.



1.8. FURTHER READING

1) Ayer, A. J. 1956, The Problem of Knowledge, New York: St. Martin's Press, Inc.

2) Blackburn, S. 1996, Oxford Dictionary of Philosophy, New York: OUP.

3) Hospers, J. 1999, An Introduction to Philosophical Analysis, New Delhi: Allied Publishers Limited.

4) Nagel, E. and Richard, B. (eds.), 1965, Meaning and Knowledge, New York: Harcourt, Brace & World, Inc.

5) Pradhan, R. C. 2001, Recent Developments in Analytic Philosophy, New Delhi: ICPR.

1.9. ANSWERS TO CHECK YOUR PROGRESS

Ans to Q No 1: a) True b) True

Ans to Q No 2: a) 'Logos' b) Epistemology

c) Epistemology

Ans to Q No 3: a) science of the material and formal principles of knowledge

b) acquisition of human knowledge

Ans to Q No 4: Fichte

Ans to Q No 5: Hegel

Ans to Q No 6: John Locke

1. 10. MODEL QUESTIONS

a) Very short type questions.

Q 1: Define epistemology.

Q 2: Is logos the root of all terms ending in "-ology"?

Q 3: "Philosophy is the criticism of cognition"- name the thinker who is associated with this statement?

Q 4: Who wrote An Essay Concerning Human Understanding?

Q 5: Name two German epistemologists.

Q 6: Name one English philosopher.

Q 7: What is meant by episteme and logos?

Q 8: The science of Mind is identical with the science of Reality - who said this?

Q 9: Write the full name of Hegel.

Q 10: Who included epistemological investigations under dialectics?

B. Short type questions (Answer in about 100-150 words)

Q 1: What do you mean by way to acquisition knowledge?

Q 2: Write a short note on the nature of epistemology.

Q 3: Explain, with example, personal knowledge after Michael Polanyi.

Q 4: Write a note on tasks of epistemology.

Q 5: Explain briefly epistemology should not be confused with the psychology of knowing

Q 6: Write a short note on scope of epistemology

C. Long questions (Answer in about 300-500 words)

Q 1: Explain and examine the view that a sound epistemology is considered necessary for the development of sound thinking and reasoning.

Q 2: "Why epistemology is important?" Discuss

Q 3: Describe the subject matter of epistemology.

Q 4: Do you think epistemology is a theory of knowledge? Give reasons in support of your answer.

Q 5: Explain and discuss the term epistemology.

Q 6: Discuss the nature of epistemology.

Q.7: What are the different theories of the origin of knowledge? Discuss.

*** **** ***

UNIT 2: PHILOSOPHICAL METHODS: DESCARTES AND KANT

UNIT STRUCTURE

2.1 Learning objectives

2.2 Introduction

2.3 Meaning and nature of philosophical method

2.4 Descartes mathematical method

2.5 Kant's critical or transcendental Method

2.6 Let us sum up

2.7 Further reading

2.8 Answers to check your progress

2.9 Model questions

2.1 LEARNING OBJECTIVES

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

- explain the term method
- describe the Mathematical method of Descartes
- discuss the Critical or Transcendental method of Kant.

2.2 INTRODUCTION

Philosophical method is the study of how to do philosophy. Philosophy is distinguished by the ways that philosophers follow in addressing philosophical questions. The general acceptability of any branch of knowledge depends upon the method which is being used for an investigation of the problems of knowledge and experience. For definiteness and universal demonstrability method is necessary.Philosophy is a systematic analysis and critical evaluation of the basic problems of truth and reality, so it needs an enormous amount of sustained and critical thinking guided by a set of definite and unambiguous logical and epistemological principles.Such an endeavour on the part of a philosopher necessitates him to take help of well-founded procedures and methods. So all serious minded thinkers took resort to certain methods in order to arrive at desired

philosophical conclusions. One can better understand and appreciate philosophical writings only by having a clear idea of the methods and procedures adopted in them.

2.3 MEANING AND NATURE OF PHILOSOPHICAL METHOD

Method, in its most general meaning, is a means of achieving an aim, a definite way of ordering activity. As a means of cognition, method is a way of getting a mental reproduction of the subject under study. The word 'method' is used to describe the way in which fruitful starting-points and procedures are determined. It denotes a procedure which is applied in the treatment of a particular subject-matter and which is conducted according to determinate rules. It is a regulated procedure towards certain end. By the method of philosophy is meant the way of investigating the subject-matter of philosophy.

Rene Descartes in his book 'A Discourse On Method' states "The method consists entirely in the order and disposition of the subjects towards which our mental vision must be directed, if we would find out any truth." By method Descartes understood easy rules such that whosoever observes them strictly, will never take anything false for true. Method eliminates contradictions and fallacies of knowledge.

As to the nature of philosophical method it can be said that all philosophical methods are methods of rational inquiry, because philosophy is concerned with something rational. Method is a manner of thinking or procedure of thinking over some problem. By method one can achieve true knowledge of something. Method is a way or procedure to attain philosophical principles which are the conclusion or end of a particular thinking process.

As philosophy deals with certain problems, it applies its methods to solve them and to achieve certain knowledge or truth. Philosophers have

developed certain methods to reach the goals they set before themselves. Different philosophers have adopted different methods which have given rise to different types of philosophy. For example, Rene Descartes applied the mathematical method. Immanuel Kant formulated a distinctive philosophical method known as the critical or transcendental method. For both these philosophers, philosophical method is a way of thinking for attainment of a philosophical end.

2.4 DESCARTES MATHEMATICAL METHOD

Modern philosophy is generally said to have begun with Rene Descartes (1596-1650) in France. Descartes made an attempt to unify all knowledge as the product of clear reasoning from self-evident premises. The fundamental aim of Descartes is to attain philosophical truths by the use of reason. He wished to find and apply the right method in the search for truth, a method which would enable him to demonstrate truths in a rational and systematic order.

Descartes takes mathematics as the model of his philosophical method. According to him, mathematicians alone have been able to find certain and self-evident propositions. The statement that twice two is four, or that the sum of the angles of a triangle is equal to two right angles has been accepted without debate. If such truths could be discovered in philosophy there would be an end of countless disputes and controversies.

Descartes found that due to its unique method mathematics achieves great certitude of its conclusions. But the question is: what is the method pursued in mathematics? In mathematics, axioms or principles which are self-evident are taken as the starting point. And from these principles one can deduce other propositions which logically follow from them, and which are just as certain as the former, provided no mistake has been made in the reasoning.

Descartes applied this mathematical method in philosophy. According to him in philosophy one should proceed from absolutely certain first principles, from propositions which are clear and self-evident, and pass on to new and unknown truth, which are equally certain.

Descartes felt that philosophy had not constructed their philosophies on a firm and solid foundation like that of mathematics. He expected that philosophical knowledge must attain a certitude equal to that of the demonstration of arithmetic and geometry and he thought that such knowledge could be attained by using an appropriate method of enquiry and that is through mathematical method. He believed that it is in mathematics alone that the human mind has reached self-evidence and certainty. Descartes was convinced that the method of mathematics could be extended to other branches of knowledge including philosophy.

It has already been discussed that in mathematics one start with a few self-evident principles or axioms and then reach the whole body of its conclusions by means of simple deduction. But how can one find something self -evident in philosophy? Descartes answer is by deliberate doubt. According to him only doubt will reveal in the end something which is indubitable. Doubt is only a starting point to seek out certain indutiable truth. Descartes doubts everything including sense-experience, scientific knowledge and even mathematical knowledge. The process of doubting comes to an end when Descartes realizes that one may doubt anything but cannot doubt the existence of the doubter. He found that he could not doubt that he himself existed, as he was the one doing the doubting in the first place. He says that one thing is certain, and that is that I doubt, or think; of that there can be no doubt. And it is a contradiction to conceive that, that which thinks does not exist at the very time when it thinks. I think, hence I am; Descartes reasons logically that doubt implies a doubter, thinking a thinker; thus reaching what seems to him a rational self-evident proposition. To doubt means to think, to think means to be. In Latin the phrase is 'Cogito ergo sum', I think, therefore I am or exist. Descartes says that it is the first

and most certain knowledge that occurs who philosophizes in an orderly manner. The Cogito ergo sum is therefore the indubitable truth on which Descartes proposes to base his philosophy.

Thus "Cogito-ergo sum" constitute a definite self-evident starting point in the philosophy of Descartes. Cogito-ergo sum is absolutely true and certain. It is certain because it is clearly and distinctly perceived or realized. This proposition also furnishes Descartes with a criterion or test of truth because according to him it is an ultimate intuition which cannot be denied.

Taking Cogito ergo sum, as the fundamental principle Descartes proceeds on this basis to prove the existence of God. Descartes says that of all the ideas there is one innate idea of a perfect being called God. But what is this idea? By the name God one understands a being which is infinite, independent, all-knowing and all-powerful. Thus the idea of God is the idea of an infinite and perfect being.

Again the question arises: what can be the cause of the idea of God? At least the cause must be equal to the effect. Finite, imperfect being cannot be the cause of a perfect, infinite being. Hence, the idea must have been placed in human being by an infinitely perfect being,called God and God must exist. God must be self-caused, for if he is the effect of another being; than that being is the effect of another, and so on ad infinitum. It leads to an infinite regress and never reach any effect; God does not exist simply in relation to finite being but that he exists necessarily and eternally in virtue of His essence.

Descartes discovered several self-evident truths: I exist; Whatever is clearly and distinctly perceived is true; Nothing can be without a cause; The cause must contain at least as much reality and perfection as the effect; God exists.

Thus, Descartes started with the certitude of the self and deduced the existence of God from the innate idea of God and the existence of the world from the veracity of God. God is the absolute creative substance;

matter and mind are related created substances. Mind and matter exists independently of one another. They can be known through their attributes. The attribute is the quality without which the substance cannot be thought or exist. But the attribute can manifest itself in different ways or modes or modifications. So strictly speaking, there is one absolute substance, God, and two relative substances mind and matter or mind and body.

The influence of Descartes mathematical method was very wide. His emphasis on mathematics led to geometrical method of Spinoza and influenced the methodology of Leibniz and Kant. Even the empiricists Locke, Berkeley and Hume could not ignore the claim of mathematics to be the model of knowledge. With the help of this method Descartes solved some problems which he had formerly considered very difficult.

But the central question is: Can mathematical method be accepted as the sole philosophical method? Although the influence of mathematical method cannot be denied, it cannot be the sole philosophical method. According to philosopher A.D. Lindsay, Descartes profess to be applying the mathematical method to other inquiries, but that method is inapplicable to problems involving existence. For example, in Descartes arguments, he made use of certain conceptions, such as substance and its modes or cause and effect, which apply to existence and not to truths or propositions, and yet the relation between substance and its modes or between cause and effect is conceived of as a mathematical relation.

There are many thinkers who criticize Descartes for his acceptance of only one method for all the three branches of science, viz. mathematics, Natural Science and metaphysics or philosophy. Descartes knew very well that philosophy and mathematics are not identical. So the greatest lack in his methodology is adoption of mathematical method as the sole method in philosophy. Besides mathematical method, Descartes could have adopted a special method appropriate to philosophy.



CHECK YOUR PROGRESS

Q1. What is philosophical method or methodology?

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.....

Q2. What makes the cogito true?

.....

.....

Q3. What , according to Descartes is the starting point for certain indubitable truth?

.....

.....

2.5 KANT'S CRITICAL OR TRANSCENDENTAL METHOD

Immanuel Kant (1724-1804) a German Philosopher is one of the most influential philosophers in the history of Western philosophy. He tried to develop a critical philosophy determining nature and limits of knowledge, categories of consciousness and their ethical and aesthetic consequences.

Modern philosophy began with faith in the power of human mind to attain knowledge; the only thing in question was how,- by what method-it could be reached and how far its limits extended. Failures of some traditional method like dogmatism, skepticism, compelled Kant to introduce a new method called critical method.

Kant's critical method should not be confused with the criticism in the usual sense, for it is not an ordinary criticism of the faculty of knowledge. Criticism for Kant, meant judging as to the possibilities of knowledge before advancing to knowledge itself. Kant's critical method is not a bare criticism, but it is a way of thinking or a way of inquiry. Kant introduced the critical method without dogmatically asserting or denying the certainty of knowledge

but investigates into the nature, origin and extent of knowledge, into its sources and its limits, into the ground of its existence and of its legitimacy. In short, it is enquiry into the "apriori" conditions of knowledge which are necessary and indispensable for it. Kant's method was to start with the 'assumption' of the truth of basic sciences viz. of Euclidean mathematics and Newtonian physics, and then to inquire what is necessarily presupposed by those sciences. These presuppositions are the forms of sensibility, viz. space and time, and the categories of understanding. Kant's method summoned and guided the reason to self-contemplation, to a methodical examination of its capacity to know. He did not ask "whether", but 'how' and 'by what' means knowledge is possible. With the help of his method he distinguished between the 'matter' and 'apriori' forms of knowledge.

According to Kant, knowledge means certain knowledge. Certain knowledge must be necessary: its contradictory must be unthinkable; and it must be universal, i.e. admit of no. exceptions. Kant says that certainty is possible only in synthetic judgments apriori. Now the question is: what is this synthetic judgment apriori? Knowledge appears in the form of judgments. Kant makes a distinction between analytic and synthetic judgments. A judgment is said to be analytic when the predicate merely elucidates what is already contained in the subject. For example "All bodies are extended." A judgment is said to be synthetic when it add something to the predicate, extends one's knowledge, not merely elucidate it. For example, "All bodies have specific gravity." However all synthetic judgment does not give knowledge.Synthetic judgments may be a posteriori and apriori.Synthetic judgments a posteriori i.e. derived from experience merely inform that an object has such and such properties. In other words, such judgments are lacking in necessity and universality. To be knowledge, a synthetic judgment must be necessary and universal. Synthetic judgment a posteriori add to one's knowledge, but are not sure; the knowledge they yield is vague, uncertain. In order to yield certain knowledge a judgment must be apriori. Thus according to Kant knowledge consists in synthetic judgment aprior which adds to one's knowledge. Moreover they are

necessary and universal. Universality and necessity have their source not in sensation and perception, but in reason, in the understanding itself. Kant never for a moment doubted that there are such judgments. They are found in physics, in Mathematics and even in Metaphysics. Kant accepts the existence of universal and necessary knowledge as an established fact, hence he does not ask 'whether' such knowledge are possible, but only 'how' they are possible. What are the conditions of such knowledge? What does such knowledge logically presuppose or logically imply?

Kant called his critical method by the name of transcendental method also since he used this term as synonymous to "apriori" in the sense of universal and necessary. Kant's transcendental method centres its inquiry on those conditions knowing subject that makes knowledge possible.

The method of Kant is not psychological, but logical or transcendental. Kant tells us to examine the real knowledge say the propositions of mathematics, physics or metaphysics and to ask what the existence of such propositions logically pre-suppose.

Kant's transcendental method is that approach to philosophical reflection that has as its major concern the human being as the primordial subject. In employing the transcendental method Kant is, of course, employing human reason with all its categories, he is taking for granted the possibility and validity of knowledge. In this sense, Kant is a dogmatist. But this does not disturb Kant.

Kant's transcendental or critical method had a great effect on subsequent philosophers. His critical method as the search for the essential presuppositions of any body of knowledge is very fruitful. Further, he became successful for the first time showing the limits of human knowledge. Thus Kant's contribution to philosophical method cannot be denied.



CHECK YOUR PROGRESS

Q4. Is Kant's critical method same as ordinary criticism?

.....

.....

Q5. To what term Kant's transcendental method is synonymous?

.....

.....



2.6 LET US SUM UP

- Philosophical method is the study of how to do philosophy. Philosophy is distinguished by the ways that philosophers follow in addressing philosophical questions.

- Philosophy is a systematic analysis and critical evaluation of the basic problems of truth and reality. So it needs an enormous amount of sustained and critical thinking. It necessitates a philosopher to take help of well-founded procedures and methods.

- Method, in its most general meaning, a means of achieving an aim, a definite way of ordering activity. Method is a manner of thinking or procedure of thinking over some problem. By method one can achieve true knowledge of something.

- Descartes takes mathematics as the model of his philosophical method. According to him, mathematicians alone have been able to find certain and self-evident propositions.

- In mathematics, axioms or principles which are self-evident are taken as the starting point. And from these principles one can deduce other proportions which logically follow from them, and which are just as certain

as the former, provided no mistake has been made in the reasoning. Descartes applied this mathematical method in philosophy.

- In philosophy doubt is the starting point to seek out certain in dubitable truth. Descartes reasons logically that doubt implies a doubter. To doubt means to think, to think means to be. In Latin the phrase is 'Cogito ergo sum,' I think therefore I am or I exist. The cogito ergo sum is therefore the indubitable truth on which Descartes propose to found his philosophy. "Cogito ergo sum" constitute a definite self-evident starting point in the philosophy of Descartes.

- Descartes mathematical method cannot be accepted as the sole philosophical method.

- Kant's critical method should not be confused with ordinary criticism of the faculty of knowledge. Kant's critical method is not a bare criticism, but it is a way of thinking or a way of inquiry.

- Kant's critical method was to start with the 'assumption' of the truth of basic sciences. viz. of Euclidean mathematics and Newtonian physics, and then to inquire what is necessarily pre supposed by those sciences.

- Kant did not ask "whether", but 'how' and by 'what' means knowledge is possible.

- According to Kant, knowledge consists in synthetic judgments apriori. For him, certainty is possible only in synthetic judgments apriori which adds to one's knowledge. He never for a moment doubted that there are such judgments. They are found in physics, in mathematics, and even in metaphysics.

- Kant accepts the existence of universal and necessary knowledge as an established fact, hence he does not ask 'whether' such knowledge are possible, but only 'how' they are possible. What does such knowledge logically presuppose or necessarily imply?

- Kant called his critical method by the name of transcendental method also since he used this term as synonymous to 'apriori' in the sense of universal and necessary.

- Kant's transcendental or critical method as the search for the essential presupposition of any body of knowledge is very fruitful.



2.7 FURTHER READING

1) Rai, Chhaya. (1980) Studies in Philosophical Methods. Jabalpur. Publisher University of Jabalpur.

2) Thilly, Frank .(1949) A History of Philosophy. New York: Henry Holt and Company

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2.8 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q No 1: Philosophical method or methodology is the study of how to do philosophy.

Ans to Q No 2: The Cogito is true because it is clear and distinct.

Ans to Q No 3: According to Descartes 'doubt' is the starting point to seek out certain indubitable truth.

Ans to Q No 4 : Kant's critical method is not same as ordinary criticism. His critical method is a way of thinking or a way of inquiry.

Ans to Q No 5: Kant's transcendental method is synonymous to the term 'apriori' in the sense of universal and necessary.

2.9 MODEL QUESTIONS

A. Very short questions.

Q 1: What is meant by method?

Q 2: Who is the advocator of mathematical method in philosophy?

Q 3: What does doubt implies?

Q 4: Who advocated the transcendental method?

Q 5: What does Kant's critical method investigates?

Q 6: Is Kant's critical method same as ordinary criticism?

B. Short questions : (Answer in about 100-150 words)

Q 1: What is the meaning of I think therefore I am?

Q 2: Who was Descartes and what did he do?

Q 3: What is synthetic judgments apriori? Is it accepted by Kant? Why?

C. Long Questions (Answer in about 300-500 words)

Q 1: What is Descartes philosophical method? Discuss.

Q 2: Explain and discuss the significance of 'Cogito ergo sum' in Descartes philosophy.

Q 3: Explain the Critical or Transcendental method of Kant.

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UNIT 3: NATURE AND KINDS OF KNOWLEDGE: 'KNOWING THAT' AND 'KNOWING HOW'

UNIT STRUCTURE

3.1 Learning Objectives

3.2 Introduction

3.3 Gilbert Ryle's Analysis of Knowledge

3.4 Knowing How and Knowing That: Two Distinct Types of Knowledge

3.5 Knowing How over Knowing That

3.6 Critical Estimation

3.7 Let us Sum Up

3.8 Further Readings

3.9 Answers to Check Your Progress

3.10 Model Questions

3.1 LEARNING OBJECTIVES

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

- define what is knowledge
- analyse knowledge in the form of knowing how and knowing that
- explain the relation between knowing how and knowing that
- discuss critically Ryle's account of knowledge.

3.2 INTRODUCTION

Nature of knowledge has always remained the primary concern of philosophical investigations. From the ancient period of philosophical development till the period of the modern philosophers like Descartes, Hume, Locke, philosophical discussions have played important role in developing the epistemological theories defining knowledge from different perspectives. While trying to define knowledge, many philosophers refer to belief with equal significance considering it as somewhat parallel to knowledge. The most widely known definition of knowledge is justified true belief. This definition is backed by the fact that the object of both knowledge and belief

are one and the same. When the belief about something gets ascertained to be true, then it is called knowledge. Thus, something is said to be knowledge when what we know is true. Beliefs that merely happen to be true cannot be regarded as knowledge. Knowledge must be justified by sufficient ground. If firmly believed that something is true on what I take to be sufficient grounds, I am right to say that I know it.

3.3 GILBERT RYLE'S ANALYSIS OF KNOWLEDGE

Gilbert Ryle, the French analytic philosopher offers a somewhat different explanation of the verb 'know'. While according to the earlier epistemologists 'know' and 'belief' are terms descriptive of mental occurrences, Ryle holds that know is not just the name of a mental state. The verbs know and belief are totally different in nature. 'Know' is a capacity verb and 'belief' is a tendency verb. Belief can be fanatical or passionate. Like habit, belief can be given, but it is not possible in case of knowledge. Like devotions, they can be blind. Whereas knowledge cannot be ascribed such characteristics. The aim of knowledge is to get the right information and not to act or react in certain manner. To know is to follow some methods, but belief merely depends on some tendencies.

In epistemology three kinds of knowledge are discussed.

1. According to the first classification, knowledge is competence; when we say that I know the guitar

2. As per the second classification, knowledge is information; when we say that I know Abdul Kalam

3. In the third sense knowledge is action; when we say that I know how to play the guitar.

Ryle has classified knowledge into two types-"knowing how" and "knowing that". He is concerned with the last two types of knowledge as discussed above. He has given a thorough analysis of the classification of

knowledge in the second chapter of his book "The Concept of Mind" (1949), and in his (1946) self-contained article, "Knowing How and Knowing That". Roughly speaking, "knowing that" is propositional knowledge, the factual knowledge which can be presented in the form of propositions. It is also the knowledge of rules principles and criteria following which propositions are expressed. On the other hand, "knowing how" is the knowledge of skills. It is the knowledge which is found in the field of practice. "Knowing how" is basically a matter of intelligent performance. Some of the examples of "knowing how" can be presented as follows:

I know how to drive a car

He knows how to swim

The wit knows how to tell a joke.

Again some of the examples of "knowing that" are as follows:

He knows that Delhi is the capital of India

I know that photosynthesis is necessary for survival of plant life.

He knows that a particular basic principle is involved in the operation of engine of a motor car.



CHECK YOUR PROGRESS

Q 1: State whether the following statements are true or false:

a) Knowledge and belief are one and the same.

b) Russell classifies knowledge into knowing that and knowing how.

c) Knowing that is propositional knowledge.

Q 2: Who is the author of the book "The Concept of Mind"?

……..

Q 3: Give an example of knowing how.

.....

3.4 KNOWING HOW AND KNOWING THAT: TWO DISTINCT TYPES OF KNOWLEDGE

Having known the definitions we can now concentrate on the arguments around these two kinds of knowledge. Among the epistemologists there is a debate regarding the concepts of knowing how and knowing that. The debate revolves around two focal points. The first is regarding the degree to which knowing how is independent of knowing that. And the second is regarding the primacy of knowing how over knowing that. The view that 'knowing how' and 'knowing that' are dependent, that to know how to do something is just to know the propositional facts concerned, is called intellectualism. On the other hand, the view that they are two distinct kinds of knowledge and knowing how no way depends on knowing that is called anti-intellectualism. Gilbert Ryle belongs to this group. Ryle criticises the opinion of the intellectualists and offers his argument against it.

There has always been a philosophical attempt to reduce "knowing how" to "knowing that". While the earlier philosophers or the so called intellectualists claim knowing how to be reducible to knowing that, Ryle strictly denies this thesis and holds that "knowing how" cannot be reduced to "knowing that". Any attempt to do so is to commit a fallacy, which is called the fallacy of "the intellectualist legend". In order to establish it, Ryle uses the example of a chess player. If 'knowing how' and 'knowing that' are to be considered as equal and 'knowing how' as reducible to knowing that, then a grandmaster of chess would be able to teach a laymen how to play chess with equal efficiency. But in reality this is not possible. It is not possible to transfer the exact practical knowledge of something just by telling him the rules to be followed through propositional knowledge. A person who knows how to tell jokes need not necessarily know the principles involved in telling jokes. Again a person who knows 'how to swim' need not necessarily know the principles involved in swimming. Hence, knowledge of rules, principles or criteria need not precede intelligent performance. It establishes that "knowing how" cannot be reduced to "knowing that". Ryle,

of course recognises that there are many points of agreement between "knowing that" and "knowing how". But there are many points of divergence too. Therefore, these two are recognized as distinct ways of knowing.

3.5 KNOWING HOW OVER KNOWING THAT

The second thesis that Ryle tries to establish is that knowing how is primary than knowing that.

After defending the independence of 'knowing how' from 'knowing that' the second thesis that Ryle undertakes to establish is that 'knowing how' is more basic than 'knowing that'. He argues that 'knowing how', which is traditionally seen as the inferior process, is logically prior to knowing that. The propositional facts are actualised through what we do. For example, the knowledge that one can ride a bike is actualised when one really rides a bike. All the theoretical knowledge of riding a bike like holding the handle, keeping balance, kicking for getting it started, all these do not necessarily establish that the person knows how to ride a bike till he really gets on a bike and put all these into practice. Ryle holds that putting propositional knowledge in practice requires a sort of knowledge that could not itself be propositional. Criticising the intellectualists, he says that the intellectualists are so preoccupied with the theories they have missed to notice the priority of performance or action over propositional knowledge. Ryle emphasises that 'know' is a dispositional or a capacity verb. For this reason, it does not only serve in reporting episodes but in showing the performance of something. The expression 'I know' has a performative than descriptive use. Analytic philosophers like Austin and Ayer also found advocating the same sense of knowledge.

Ryle argues that it is not necessary that our rational behaviour is controlled by our internal system of reasoning or reflecting. The failure of the intellectualists, according to Ryle, rests on this assumption only. Rules are often applied without considering the internal theories stating them. Repeating the example of a bike rider, Ryle argues, "one does not revert to

the laws of motion before riding a bike, but nevertheless one is able to propel oneself forward and maintain that motion whilst balancing". Another interesting example Ryle cites is that of smoking. Even after going through all the statutory warnings and negative effects of smoking one use to smoke without obeying the arguments stated in propositions of facts. Hence, it is established that 'knowing how' is not influenced by 'knowing that', rather it is prior to knowing that.



CHECK YOUR PROGRESS

Q 4: Find out the correct answer:

a) Knowing how is all about performance/ factual proposition.

b) Ryle criticises the intellectualists/ Analytic philosophers.

c) According to Ryle knowing that is prior/ posterior to knowing how.

d) The fallacy committed by the intellectualists is called the category mistake/ the intellectualist legend.

Q 5: What is the view of the intellectualists regarding 'knowing how' and 'knowing that'?

Ans:.....

3.6 CRITICAL ESTIMATION

Ryle's argument claiming the priority of 'knowing how' to 'knowing that' is criticized by different philosophers in the contemporary analytic philosophy. Philosophers like Stanley, Rosefeldt and Sax argue that Ryle's claim that 'knowing how' is always independent of 'knowing that' and that the former is more basic than the later cannot be accepted to be correct in every situation. The infinite regress that Ryle claims to be committed by the intellectualist gets opened to Ryle's argument as well.



ACTIVITY: 3.1

Q 6. Discuss how Ryle's analysis of knowledge is different from that of Russell.

Ans:

.....

.....



3. 7 LET US SUM UP

In this unit we have discussed Gilbert Ryle's classification of knowledge as knowing how and knowing that. Let us review the unit through the following points:

- Knowledge is justified true belief. Knowledge must be justified by sufficient ground.
- Gilbert Ryle in his book "The Concept of Mind" classifies knowledge into 'knowing how' and 'knowing that'.
- 'Knowing how' and 'knowing that' are claimed to be equivalent by the intellectualists.
- Ryle is called anti-intellectualist as he considers 'knowing how' and 'knowing that' as two distinct types of knowledge.
- Any attempt to reduce knowing how to knowing that is to commit the fallacy of "the intellectualist legend".
- According to Ryle 'knowing how' is logically prior to 'knowing that'. Propositional facts are actualised through what we do.



3.8 FURTHER READING

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3.9 ANSWERS TO CHECK YOUR PROGRESS

Ans.to Q. No. 1:

a) False

b) False

c) True

Ans.to Q. No. 2: Gilbert Ryle

Ans.to Q. No. 3: "I know how to drive a car"

Ans. to Q. No 4:

a) Performance

b) Intellectualists

c) Posterior

d) "The Intellectualist Legend"

Ans. to Q. No. 5. The intellectualists hold that 'knowing how' and 'knowing that' are not distinct but dependent types of knowledge and to 'know how' to do something is just to know the propositional facts concerned.

3.10 MODEL QUESTIONS

A) Objective questions

Q 1: Who is the author of Concept of Mind?

Q 2: What are the two types of knowledge, according to Ryle?

Q 3: What is meant by 'Knowing that'?

Q 4: What is meant by 'Knowing how'?

Q 5: What is the fallacy of 'Intellectualist legend'?

B) Short Questions: (within 150-200 words)

Q 1: Distinguish between 'knowing how' and 'knowing that' with example.

c) Long Questions: (Answer within 300- 500 words)

Q 1: "Knowing how is more basic than knowing that"-Discuss after Ryle.

Q 2: Critically discuss Ryle's classification of knowledge.

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UNIT 4: NATURE AND KINDS OF KNOWLEDGE: 'KNOWLEDGE BY ACQUAINTANC' AND 'KNOWLEDGE BY DESCRIPTION'

UNIT STRUCTURE

4.1 Learning Objectives

4.2 Introduction

4.3 Knowledge by Acquaintance

4.4 Knowledge by Description

4.5 Relation between "knowledge by acquaintance" and "knowledge by description"

4.6 Let us Sum Up

4.7 Further Reading

4.8 Answers to Check Your Progress

4.9 Model Questions

4.1 LEARNING OBJECTIVES

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

- define what is knowledge
- analyse types of knowledge as "knowledge by acquaintance" and "knowledge by description"
- explain its similarity with related concepts.
- distinguish between "knowledge by acquaintance" and "knowledge by description"

4.2 INTRODUCTION

In this unit we shall discuss two types of knowledge as "knowledge by acquaintance" and "knowledge by description". Keeping in mind the various stages of knowledge, knowledge is classified into two types: "knowledge by acquaintance" and "knowledge by description". In western philosophy this distinction was given a definitive form by Bertrand Russell. Actually, this classification arises as a critical reaction to the theory of idealism

propounded by George Berkeley. There are different classifications of knowledge as specified by different philosophers trying to analyse the nature and types of knowledge in philosophy. Epistemology, being the most significant branch of philosophy, is always concerned with such analysis of the nature and classification of knowledge. What way we may know something and what sort of knowledge we may have from that? What does the expression "I know" stands for? These are some of the issues that epistemology deals with.

While analysing the nature of knowledge we see that knowledge is a relation between the knower and the known. The knower is the subject who knows and the known is the object intended to be known. Philosophy is concerned with the problem of the known or with the nature of the object of knowledge otherwise called reality. It seeks to answer whether reality, for its existence is dependent on the knowing mind or it exists independently. As reply to this problem there occur two basic theories of reality called Realism and Idealism. Russell's division of knowledge is a development of his criticisms labelled against the idealism of Berkeley. Berkeley's idealism denies the existence of the external objects and reduces them to the ideas of the finite minds that perceive them. He claims that the so called external objects are sensations produced in the finite minds by God according to some fixed laws. It is, therefore, called subjective idealism or mentalism.

According to Russell, Berkeley's argument is substantially wrong when he says that whatever we apprehend must be in our mind. There cannot be any reason to maintain that whatever does not have any practical importance for us are not valid. It has to be admitted that everything real which are of theoretical importance may be of equal significance for us. According to Russell, it is false that we cannot know that anything exists which we do not know. Knowledge does not mean only to have direct experience of something. It is quite wider in scope. The word "know" may be used as having two meaning according to Russell.

1) In the first sense the word know may stand for our knowledge of the things, otherwise called the knowledge by acquaintance.

2) In the second sense it may refer to the sense which is applicable to our beliefs or convictions. In this sense of the word we know that something is the case. This type of knowledge is called the knowledge of truth. This is called knowledge by description by Russell.

This difference is called the difference between the conna?tre and savoir in French.



CHECK YOUR PROGRESS

Q 1: Who classifies knowledge into "knowledge by acquaintance" and "knowledge by description"?

Ans: ……

Q 2: The difference between "knowledge by acquaintance" and "knowledge by description" emerges as a criticism to which theory of reality

Ans:……

4.3 KNOWLEDGE BY ACQUAINTANCE

Knowledge acquired through acquaintance are those in which the sense data are cognized directly. Here the knower is immediately aware of such things as colours, sounds, smells, hardness, softness, taste etc. On the other hand, in knowledge by description, there is an element of inference and interpretation. Knowledge by acquaintance is free from all sorts of inference and interpretation. It is the process to get direct knowledge by our sense experience.

Acquaintance, as Russell defines is the converse of presentation. It is the direct and infallible apprehension of some sort of object. All knowledge, be it of things or truth start from the knowledge by acquaintance as

foundation. Even every knowledge of universal also starts from the particular things of acquaintance. Here we can get some details of the things with which we may have direct acquaintance.

According to Russell, sense data are the most significant things that we are acquainted with. These are the most striking and direct examples of knowledge by acquaintance. But, sense data supplies us knowledge of those things that are present to our senses now. Knowledge in this sense becomes restricted as the past cannot be known this way. Russell then moves forward explaining that beyond sense data, the first thing that we may be acquainted with is memory. Whatever was present to our senses in the past gets stored as memory and even being past events, we experience these memories as immediate as present experiences whenever we remember them. This immediate knowledge by memory is the source all our knowledge concerning the past. The second kind of acquaintance is acquaintance by introspection. This is the kind of self consciousness that we experience while getting acquainted with our feelings, desires, thoughts etc. This kind of acquaintance is called self consciousness that helps us to know our mental states.

Thus, Russell holds that as a whole knowledge by acquaintance covers up our acquaintance in sensation with the sense data provided by our outer sense, the data provided by the inner sense through introspection like feelings, thoughts and desires and further, our acquaintance with the past experiences through memory. Furthermore, apart from our acquaintance with the particular sense data we also have acquaintance with the universals or general ideas constructed through the particulars. However, our knowing process is not limited to this kind of direct acquaintance alone. Beyond this, there is another kind of knowledge that Russell emphasises on.



LET US KNOW

In the Nyaya school of Indian philosophy a parallel division of knowledge is found. Here the distinction between "knowledge by acquaintance" and "knowledge by description" is presented as the distinction between Nirvikalpa Pratyaksa and Savikalpa Pratyaksa. While the former is a direct awareness without name and form or any characteristics, the later is awareness with name and form. The former is pre-judgemental knowledge while the later is judgemental knowledge.

4.4 KNOWLEDGE BY DESCRIPTION

Russell here figures out the significance of another kind of knowledge that is knowledge by description. Even if we acquire significant section of knowledge by acquaintance, we are not able to know the physical things or objects directly, rather we are acquainted with the sense data. Further, knowledge by acquaintance provides us with knowledge of oneself through introspection, but it deprives us from having the knowledge of the mental states of others. In such cases we rely on knowledge by description, the second order of knowledge. In this sense knowledge stands for our judgements or our beliefs and convictions. This is otherwise described as knowledge of truths. Russell insists on having not an ambiguous but definite description of a thing, that specifically signifies one thing in particular. A description is definite when it stands for a singular thing as defined as "the so and so". In this sense the thing is known to me by description and that in virtue of some general principle, the existence of a thing answering to this description can be inferred from the existence of something with which I am acquainted. Thus, all proper names, all names of places involve descriptions which again start from some particular sense data which we are acquainted with.

According to Russell, the words with which we refer to things we are not acquainted with can be defined or explained in terms of those connected with objects of acquaintance. This however, Russell prefers to explain as understanding rather than knowledge. Russell's version of theory of acquaintance presents him as an empiricist philosopher. Russell's principle of acquaintance is "Every proposition which we can understand must be composed wholly of constituents with which we are acquainted".

However, even being acquaintance as the basis of almost all knowledge, knowledge by description is significant as it helps us to know and help others know a particular thing with description related to the thing as its name, characters, significance etc. It helps us to have some truths about something which we have never directly experienced but known it through the judgements made by others about it. For example, I have never seen the Great Wall of China, but I truly believe that it exists. This knowledge I have got from the words of other people who have acquaintance with it. This is having a true judgement or knowledge by description without acquaintance. When one explains something using words, they carry some meaning whenever used. These meanings are again attached to these words through acquaintances or direct experiences.

Further, the chief importance of knowledge by description is that it allows us to move beyond our private experiences and imagine and explain the mental states of others. There is no way to directly experience the mental state of others the way we experinece our own feelings emotions etc. However, it can be inferred through knowledge by description when it is conveyed through language. This is possible because knowledge by description is basically a judgemntal knowledge that gets expressed in words.

Thus, Russell presents these two stages of knowledge as having equal significance sharing interdependent nature.



ACTIVITY: 4.1

Q 1: Explain how Russell presents his classification of knowledge as a critical response to the Subjective Idealism of Berkeley.

Ans:.....

.....

.....

.....

4.5 RELATION BETWEEN "KNOWLEDGE BY ACQUAINTANCE" AND "KNOWLEDGE BY DESCRIPTION"

Russell's division of knowledge is to be understood as extension of his empiricist ideals expressed in the form of knowledge by acquaintance as the foundation of our true knowledge. Knowledge by description takes place as the second stage in this process. In the following we discuss the relation between these two types of knowledge as specified by Russell.

1. "Knowledge by acqauintance" and "knowledge by description" are not two totally different types of knowledge but can be termed as two stages of knowledge. The first is acqiaintance with the sense data and the second is the knowledge of something with names, characters etc.

2. Knowledge by acqauintance is the direct knoweledge of sense data and knowledge by description being indirect, involves the element of inference in it. It is not direct knowledge but understanding something in refernce to the data we are already acqauainted with. It is not present in one's experience but propositional kind of knowledge. Hence, it is different from "knowledge by acquaintance".

3. Knowledge by acquaintance is the direct and infallible apprehension of some sort of object that exists. Whereas, the object of knowledge by description need not necessarily exist. It may fail to exist in some case.

4. It is to be noted that while knowledge by acquiantance, being direct knowledge does not depend on any other knowlege, "knowlege by description" depends on acqaunitance. According to Russell, "the fundamental principle in the analysis of propositions containing descriptions is this: Every proposition which we can understand must be composed wholly of constituents with which we are acquainted". Hence, any reference to a particular must involve some reference to a particular with which we are acquainted. All knowledge concerning knowledge by description is reducible to knowledge concerning acquaintance.

5. The most significant feature of knowledge by description is that it allows one to know the mental states of others. The feelings and emotions of other person can be inferred through knowledge by description when it is conveyed through language. Whereas, knowledge by acqauaintance being dierct experience of something does not allow us to move beyond our private experiences.

These are some of the important points expressing the similarlities and differences between knowledge by acqauintance and knoweldge by description discussed by Russell.



CHECK YOUR PROGRESS

Q 3: Find out the correct one

a) According to Russell knowledge by acquaintance gives us knowledge of sense data/ physical objects.

b) Knowledge by description is direct/ inferential knowledge.

c) Knowledge by acquaintance provides us with knowledge of particulars/ universals/both

Q 4: State two points of difference between "knowledge by acquaintance" and "knowledge by description".

.....

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4.6 LET US SUM UP

In this unit we have discussed Russell's classification of knowledge in the form of "knowledge by acquaintance and "knowledge by description". Let us review the unit through the following points:

- Russell classifies knowledge on the basis of two basic themes- knowledge of things and knowledge of truth.
- This classification is his critical reply to Berkeley's subjectivism that reduces everything to ideas of the mind.
- Knowledge of things always proceeds with knowledge by description.
- Knowledge by acquaintance works as the foundation of all knowledge.
- Knowledge by acquaintance is direct knowledge whereas knowledge by description is derived or inferential knowledge.
- Knowledge by description is propositional knowledge that may express one's beliefs and convention etc.
- Knowledge by description depends on knowledge by acquaintance as its foundation.



4.7 FURTHER READING

1) Russell, B. (1984). The Problems of Philosophy. New Delhi: Oxford.

4.8 ANSWERS TO CHECK YOUR PROGRESS

Ans.to Q. No. 1: Bertrand Russell

Ans.to Q. No. 2: Subjective Idealism of George Berkeley

Ans.to Q. No. 3:

a) Sense Data

b) Inferential

c) Both

Ans. to Q. No 4:

The difference between "knowledge by acquaintance" and "knowledge by description" can be discussed as follows:

1. Knowledge by acquaintance is the direct knoweledge of the sense data, whereas knowledge by description involves the element of inference in it. It is not direct knowledge but understanding something in refernce to the data we are already acquainted with.

2. Knowledge by acquaintance, being direct knowledge does not depend on any other knowlege, but, knowlege by description depends on acquaintance. All knowledge concerning knowledge by description is reducible to knowledge concerning acquaintance.

4.9 MODEL QUESTIONS

Q 1: Objective questions

Q 1: What are the two types of knowledge, according to Russell?

Q 2: What is mentalism?

Q 3: What is 'knowledge by acquaintance?

Q 4: What is 'knowledge by description'?

Q 5: What is sense-data?

Q 2: Short questions (Answer in about 100-150 words)

Q 1: What is 'knowledge by acquaintance? Explain briefly

Q 2: What is 'knowledge by description'? Explain briefly

Q 3: Write a short note on sense data.

Q 4: Distinguish 'Knowledge by acquaintance' and 'knowledge by description'.

Q 3: Long questions (Answer in about 300-350 words)

Q. 1. Knowledge by acquaintance is the foundation of all sorts of knowledge. Discuss after Russell.

Q. 2. 'Knowledge by Description' helps us to know other minds. Discuss

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UNIT 5: GETTIER'S PROBLEM

UNIT STRUCTURE

5.1 Learning objectives

5.2 Introduction

5.3 The Gettier Problem

5.4 Responses to the Gettier problem

5.5 Let us sum up

5.6 Further readings

5.7 Answers to Check Your Progress

5.8 Model questions

5.1 LEARNING OBJECTIVES

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

- discuss JTB definition's of knowledge
- explain Gettier's problem
- explain the significance of the Gettier problem
- analyse philosophers' response to the Gettier Problem

5.2 INTRODUCTION

One of the basic problems of epistemology is the problem of defining knowledge. Plato for the first time in Greek philosophy attempted to resolve the problem in a systematic manner.

In his dialogue Theaetetus, Plato had taken this problem and formulated the definition - "true belief accompanied by a rational account is knowledge" (201d). Although Plato himself did not endorse this formulation, two other great thinkers, A.J. Ayer and R.M. Chisholm in the contemporary era have also formulated two other separate definitions of knowledge in this Platonic schematic layout. All such definitions later on have been recognised as the JTB definition's of knowledge. This definition in its simplest form may be outlined as:

'S (a person) knows that p (a proposition)' if and only if:

(i) p is true,

(ii) S believes that p is true, and

(iii) S is justified in believing that p is true.

This means, if

1. The proposition p is "true",
2. The person S "believes" the proposition p to be true, and
3. The person S is "justified" in believing the proposition p to be true,

then it can be said that 'S knows that p'. Since this definition involves 'Belief' (B), 'Truth' (T) and 'Justification' (J) conditions, hence the definition is called JTB definition or the JTB account of knowledge. Most of the thinkers till 1963 thought this definition workable. However, a brief article published in a philosophical journal Analysis (Vol.23, pp. 121-123, June 1963) destroyed the epistemological orthodoxy of this definition. An American philosopher and Professor Emeritus of the University of Massachusetts Amherst, Edmund L. Gettier in that article challenged the JTB account. He in that article proposed two thought-provoking counter-examples called by him 'Case-I' and 'Case-II'. By means of these two cases, Gettier tried to show that despite the fulfillment of the three conditions of JTB account, his two cases cannot be considered to be cases of knowledge; hence, JTB is an inadequate account, for it fails to provide the sufficient conditions for knowledge. So, Gettier raised the question "Is Justified True Belief Knowledge?" being the title of his paper and since then this problem raised by him came to be known to the philosophical community as the 'Gettier Problem'.

5.3 THE GETTIER PROBLEM

Despite the dissatisfaction of the modern critics, most of the contemporary thinkers consider the JTB definition as the 'standard definition' of knowledge, for it serves, at least, as the starting point of any discussion concerning the nature of knowledge. However, Gettier's cases create the problem whether the three conditions of knowledge stated by the JTB account are the sufficient conditions to define knowledge or not. The two cases that Gettier proposed may be paraphrased as follows:

Case-I:

Smith has two strong evidence for believing the conjunctive proposition-

"(d) Jones is the man who will get the job, and Jones has ten coins in his pocket".

Smith's evidences for believing (d) were:

(i) Smith has been given assurance by the company president that Jones will get the job, and

(ii) Ten minutes ago Smith had counted ten coins in Jones' pocket.

Now, the proposition (d) entails the following proposition (e) -

"(e) The man who will get the job has ten coins in his pocket".

Smith sees the entailment from (d) to (e), and accepts (e) on the ground of

(d). Smith, therefore, is justified in believing that (e). But, further, Gettier holds two other conditions:

(iii) Unknown to Smith, Smith himself, not Jones, will get the job, and

(iv) Unknown to Smith, Smith himself has ten coins in his pocket.

Holding these two conditions, Gettier argues that Smith's belief in (e) cannot be said to be knowledge although Smith believes (e), (e) is true and

Smith is justified in believing (e) ; for, "(e) is true in virtue of the number of coins in Smith's pocket, while Smith does not know how many coins are in Smith's pocket, and bases his belief in (e) on a count of the coins in Jones's pocket, whom he falsely believes to be the man who will get the job". (Gettier, 1963, p. 122)

Case-II:

Smith believes falsely, however, with good reason that -

"(f) Jones owns a Ford".

Smith has no idea where his another friend Brown is, but Smith randomly selects three place names, and constructs the following three disjunctive propositions-

"(g) Either Jones owns a Ford or Brown is in Boston"

"(h) Either Jones owns a Ford or Brown is in Barcelona"

"(i) Either Jones owns a Ford or Brown is in Brest-Litovsk"

However, Gettier says, it happens that "Jones does not own a Ford" and entirely unknown to Smith it happens by chance that "Brown is in Barcelona". When these two conditions hold, Gettier argues, one cannot say that Smith knows that (h) is true although (h) is true. This is because, the disjunctive proposition (h) happens to be true not by virtue of the truth of (f), rather for the fact "Brown is in Barcelona". Since, Smith has no reason to believe this fact that "Brown is in Barcelona", hence, though -

(i) (h) is true,

(ii) Smith does believe that (h) is true, and

(iii) Smith is justified in believing that (h) is true."

Smith cannot be said to know that (h) is true. (Gettier, 1963, pp. 122-123)

Gettier, thus, on the basis of these two cases tried to establish that despite the fulfillment of the three conditions of the JTB account, his subject Smith cannot be said to have knowledge. This implies that the conditions stated by the JTB account are not sufficient to define knowledge.



CHECK YOUR PROGRESS

Q 1: What do you mean by JTB account?

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Q 2: What is Gettier Problem?

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.....

5.4 RESPONSES TO THE GETTIER PROBLEM

Since the appearance of the two Gettier's cases, epistemologists have been engaged themselves to resolve the problem that Gettier raised. Some thinkers tried to add a fourth condition with the three conditions of the JTB account, and some others engaged themselves to defend the JTB account by their own ways in order to resolve the Gettier problem.

Norman Malcolm, for example, in his paper "Knowledge and Belief" makes a distinction between a "strong" and a "weak" sense of knowledge. For him, a person can be said to know a proposition p in "strong" sense when the person's "statement 'I know that p is true' implies that the person who makes the statement would look upon nothing whatever as evidence that p is false". But the person can be said to know the proposition p in its "weak" sense if the person claims that he knows that p, but accepts the possibility of rejection of his claim. Malcolm by means of this weak sense of knowledge tried to defend the JTB account. He, moreover, asserts that "Being confident is a necessary condition of knowing".

Thomas Paxson and Keith Lehrer (1969), on the other hand, in a joint paper "Knowledge: Undefeated Justified True Belief" attempted to resolve the problem of defining knowledge with the addition of a fourth condition that might be called a 'Fourth condition (JTB+G) approach'. In that paper, they added the "defeasibility condition" to the traditional definition of knowledge and defined knowledge as "undefeated justified true belief". According to them, a justified true belief may be counted as knowledge if there arises no other truth that would have defeated one's present justification for the belief.

Similarly, Alvin Goldman in 1967 proposed the addition of a 'causal condition' in his paper "A Causal Theory of Knowing". Goldman thought that the Gettier Problem arises due to the absence of a causal relation between truth of a proposition and the person's believe in that proposition as true. With reference to Gettier's Case-II, Goldman states that in this example, (h) is true due to the fact that 'Brown happens to be in Barcelona'; however this fact has nothing to do with Smith's believe on (h). In other words, in between Smith's believing in (h) and the fact that 'Brown happens to be in Barcelona', there is no causal connection. According to Goldman, it is important to add this causal connection to the traditional analysis.

However in this proposal, Goldman faced the problem of finding a principled explanation of distinguishing between 'appropriate' and 'inappropriate' causal relationships. Thus he replaced this account with a different one in 1979 in another paper "What is Justified Belief?". This paper, in fact, may be said to propose a theory of epistemic justification which in contemporary epistemology well known as 'process reliabilism'. Roughly speaking, this theory proposes that a belief may be said to be justified provided the belief is produced by 'a reliable cognitive process', and such a belief only may be counted as knowledge. For example, a belief, say a perceptual belief, may be called justified provided 'perception' is considered as 'a reliable cognitive process'. Similarly, beliefs deduced from other justified beliefs would also be called justified provided 'deduction' is considered as

'a reliable cognitive process'. But, as 'wishful thinking' is 'not a reliable cognitive process', so beliefs produced by wishful thinking, according to this approach, cannot be considered justified. But such an attempt of Goldman even faced several problems that Goldman himself had stated in the last part of this paper.

An American philosopher Robert Nozick also tried to define knowledge by adding two other conditions with the traditional 'truth' and 'belief' conditions in the following way:

"S knows that p if and only if: 1) p is true, 2) S believes that p is true, 3) If p weren't true, S wouldn't believe that p; 4) If p is true, S will believe that p."

But due to certain difficulties occurred in condition (3) and (4), he presented these conditions with certain modifications in his paper "Conditions for Knowledge".

Responding to Gettier, Chisholm also in his later writings (1989/1994) followed the fourth condition approach as follows:

"h is known by S = Df (1) h is true; (2) S accepts h; (3) h is evident for S; and (4) if h is defectively evident for S, then h is implied by a conjunction of propositions each of which is evident for S but not defectively evident for S." (p. 98)

Hence, it seems that time and again philosophers have been trying to defend the JTB account either by re-enumerating a set of necessary and sufficient conditions of knowledge or by defending the said account in their own ways. However, both attempts met new Gettier-styled counter instances which result other new responses and further Gettier-like scenario reappears. In the post-Gettier era the following situation emerged in relation to the Gettier Problem:

In Gettier's paper, both his cases were based upon the following 'principle of justification' (PJ) that -

"for any proposition P, if S is justified in believing P, and P entails Q, and S deduces Q from P and accepts Q as a result of this deduction, then S is justified in believing Q." (Gettier, 1963, p. 121)

But, I. Thalberg (1969) argues against this principle, and claims that Gettier's two cases are inadequate to refute JTB. Against Case-I, Thalberg (1969, pp. 797-799) argues that in it, Smith has evidence only for two "unrelated" "singular propositions" - (p1) "Jones will get the job", and (p2) "Jones has ten coins in his pocket". But Gettier, in the first step, tacitly assumes that Smith is justified by his evidence for '(p1)' and '(p2)' in believing the conjunctive proposition '(p1) and (p2)' i.e. "(d) Jones is the man who will get the job, and Jones has ten coins in his pocket". Secondly, Gettier argues that since Smith is justified in believing (d) hence Smith is justified in believing the "general proposition" "(e) The man who will get the job has ten coins in his pocket", for (d) entails (e). But, Thalberg (1969, p. 803) argues that "justification for accepting a proposition is not always transmissible to propositions that it entails". So the 'PJ' in Gettier functions illogically. Moreover, being a 'general' proposition, (e) can be true in many different ways, whereas (d) can be true just when Jones is hired and has ten coins. Hence, Gettier's rejection of JTB account due to his two cases cannot be called sound one, for his "second attempt", Thalberg (1969, pp. 802-803) observes, "is as dubious as his first counterargument".

Thinkers like G. Meyers and Kenneth Stern (1973) have also rejected Gettier's PJ by saying that "it mistakenly treats justification as a hereditary property". Catherine Lowy (1978), on the otherhand, argues that "Gettier's renowned examples are not in fact counter-examples to the traditional analysis of knowledge", for his 'PJ' is wrong and it is wrong, at least in the case where 'P' is false.

Of course, Richard Feldman (1987) argues that though thinkers like Meyers and Stern (1973) hold the view that "one proposition, p, can justify another, h, only if p is true", yet it is possible to show that a proposition even if true, may fail to justify another. Hence, the fulfilment of this condition

can neither avoid Gettier-like scenario nor establish the adequacy of JTB account, for there may be Gettier-type examples despite the fulfillment of this condition. Feldman by making certain modification of the famous 'Nogot-Havit Case' has shown this. Feldman (1987) states:

"even if a proposition can be justified for a person only if his evidence is true, or only if he knows it to be true, there are still counter-examples to the justified true belief analysis of knowledge of the Gettier sort." (p. 266)

Michael Clark (1963) and J. L. Pollock (1986) also hold a view like Feldman. Clark (1963) argues that if a belief in order to become knowledge is to be based on some ground, the ground in turn may involve a chain of grounds. And if any ground in this chain of the grounds is false, then the subject's belief in that situation cannot be said to be a case of knowledge. Hence, a belief in order to become knowledge must not only be based on some true grounds, rather each ground in the chain of grounds needs to be true and then only the belief may be said to be "fully grounded". Hence, for Clark, to repair the 'JTB' definition the addition of the fourth condition that "S's belief that p is fully grounded" seems to be a necessary condition. So from Clark's point of view it may be said that -

A person, S, may be said to know a proposition, p, if and only if,

a) p is true,

b) S believes that p,

c) S is justified in believing that p, and

d) S's belief that p is fully grounded.

These four conditions, for Clark, are necessary as well as jointly sufficient conditions for knowing that p. Hence, if it is found that a case satisfies all these four conditions, Clark says, the case is to be counted as knowledge.

But Clark's view has been rejected by J. T. Saunders and N. Champawat with two counter-examples (1964). Their first counter-example which is a modified form of Gettier's Case-II, shows that despite fulfilling all the conditions of Clark's definition, the case fails to be a case of knowledge. Their second counter-example that may be called 'Explosion Case' shows that a belief without being fully grounded can become a case of knowledge. Hence, they commented that Clark's definition of knowledge is on the one hand "too weak", while on the other hand "too strong".

Thus, it seems that the attempt to resolve the problem of defining knowledge or to resolve the Gettier Problem made by one thinker is rejected by another. This clarifies that in epistemology, no thinker can be found who has succeeded in resolving the problem that Gettier raised. The attempts made by some thinkers though able to meet certain Gettier cases, new Gettier-like cases destroy these constructions and the necessity for new definition of knowledge re-appears. So keeping aside this issue of resolving the Gettier Problem, one can see whether the problem can be interpreted differently.

Stephen Hetherington, (2001, p. 80), for example, argues that though the usual interpretation of Gettier cases is standard, yet not mandatory and true interpretation. He asserts (2001, p. 80, F.N. 9) that there is no controversy regarding the view that knowledge is absent in each Gettier cases if it is considered that knowledge needs to be infallible. But, if it is considered that knowledge need not be infallible, then such cases contain knowledge, although they are "failable" knowledge. A fallible knowledge may be defined in terms of Trent Dougherty(2011) as "S fallibly knows that p = df. (i) S knows that p, but (ii) p might (epistemically) be false".

A philosopher named Jianbo Cao (2006), on the other hand, goes against ascribing universal significance to Gettier's counter-examples. He argues that the JTB definition is "neither an important nor a comprehensive one that covers all knowledge". It is "only a definition of propositional knowledge about experience"; hence the significance of Gettier's two cases

also is "limited to empirical propositional knowledge" only. He, moreover, points out that there is an important distinction between "contextual" and "non-contextual" knowledge; the truth values of contextual knowledge "are changeable when the contexts of evidence and subject change." But Gettier fails to realise the distinction and makes a confusion of both these two kinds of knowledge in his counter-examples.

So, by these sorts of interpretations also, some thinkers attempted to meet the Gettier problem in the epistemological literature.



CHECK YOUR PROGRESS

Q 3: Write the principle on which Gettier's cases were based.

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Q 4: Write two other definitions of knowledge proposed by the post-Gettier thinkers.

. .....

Q 5: Write the meaning of the term 'fully grounded' in Michael Clark's definition of knowledge.

.....

.....

Q 6: What is the viewpoint of Stephen Hetherington regarding Gettier's cases?

.....

Q 7: Write two points of criticism made by Jianbo Cao regarding Gettier's cases?

.....



5.5 LET US SUM UP

- Gettier Problem is basically a problem related to the problem of defining knowledge.

- Plato's dialogue Theaetetus basically concerned with replying the question "What is knowledge?. Hence, this problem is called the problem of Theaetetus.

- A definition of knowledge that considers the three conditions viz. belief, truth and justification to be necessary and sufficient conditions of knowledge is called JTB definition. This definition asserts that 'Knowledge is justified true belief'.

- Gettier by means of his article "Is Justified True Belief Knowledge?" challenged this JTB definition that was workable till the publication of the article in 1963.

- The JTB definition of knowledge is also known as the standard definition in contemporary epistemology. It is also called traditional definition or the trinitarian account of knowledge.

- Basically there are two responses to the Gettier Problem. First is the fourth condition approach where epistemologists attempt to add a fourth condition with the three conditions of the traditional definition, and the second is the way where different thinkers replace one or more conditions of the trinitarian account. However, some thinkers like Hetherington attempted to resolve the problem by providing a non-standard interpretation of the Gettier cases.

- Malcolm by means of 'weak sense of knowledge' tried to defend the JTB account. A weak sense of knowledge is that where a person claims to know a proposition, say p, but accepts the possibility of rejection of his claim to know that p.

- Responding to the Gettier Problem, Thomas Paxson and Keith Lehrer defines Knowledge as Undefeated Justified True Belief.

- Alvin Goldman in his first response to the Gettier Problem proposed the addition of the 'causal condition' to the JTB definition, and in his

latter attempt tried to resolve the problem, roughly speaking, by adding the 'reliability condition'.

- Responding to Gettier, Chisholm also in his later writings followed the fourth condition approach.

- Both the cases of Gettier were based upon the 'principle of justification'. This principle considers that 'justification for accepting a proposition is transmissible to propositions that it entails'. But Thalberg rejects this principle and says that "justification for accepting a proposition is not always transmissible to propositions that it entails". Such a view has also been adopted by the thinkers like G. Meyers and Kenneth Stern.

- Michael Clark tried to repair the 'JTB' definition with the addition of the fourth condition that "S's belief that p is fully grounded" with the three conditions of JTB account.

- Clark's definition has been rejected by two other thinkers - J. T. Saunders and N. Champawat.



5.6 FURTHER READING

1) Cao, J. (2006). A Critique to the Significance of Gettier Counter-Examples. Frontiers of Philosophy in China , Vol. 1 (No. 4), pp. 675-687.

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4) Clark, M. (1963). Knowledge and Grounds: A Comment on Mr. Gettier's Paper. Analysis , Vol. 24 (No. 2), pp. 46-48.

5) Dougherty, T. (2011). Fallibilism. In S. Bernecker, & D. Pritchard (Eds.), The Routledge Companion to Epistemology (pp. 131-143). London, UK: Routledge.

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10) Hetherington, S. (2011). The Gettier Problem. In S. Bernecker, & D. Pritchard, The Routledge Companion to Epistemology (pp. 119-130). London, UK: Routledge.

11) Lehrer, K., & Paxson (Jr), T. (1969). Knowledge: Undefeated Justified True Belief. The Journal of Philosophy, Vol. 66 (No. 8), pp. 225-237.

12) Saunders, J. T., & Champawat, N. (1964). Mr. Clark's Definition of 'Knowledge'. Analysis, Vol. 25 (No. 1), pp. 8-9.

13) Sturgeon, S. (1993). The Gettier Problem. Analysis , Vol. 53 (No. 3), pp. 156-164.

14) Thalberg, I. (1969). In Defense of Justified True Belief. The Journal of Philosophy, Vol. 66 (No. 22), pp. 794-803.

5.7 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q No 1: The epistemological account that considers the definition that knowledge is justified true belief is known as JTB account of knowledge.

Ans to Q No 2: The problem that Gettier raised concerning the JTB definition of knowledge in his paper "Is Justified true belief knowledge?" is known as the Gettier Problem.

Ans to Q No 3: Gettier's cases were based on the principle that "for any proposition P, if S is justified in believing P, and P entails Q, and S deduces Q from P and accepts Q as a result of this deduction, then S is justified in believing Q." (Gettier, 1963, p. 121)

Ans to Q No 4: The following two definitions of knowledge proposed by the post-Gettier thinkers may be presented: First, Thomas Paxson and Keith Lehrer says that 'Knowledge is undefeated justified true belief', and secondly, R.M. Chisholm defines knowledge by saying that "h is known by S = Df (1) h is true; (2) S accepts h; (3) h is evident for S; and (4) if h is defectively evident for S, then h is implied by a conjunction of propositions each of which is evident for S but not defectively evident for S." [One can present other such definitions to answer the question.]

Ans to Q No 5: The meaning of the term 'fully grounded' in Michael Clark's definition of knowledge is that if each ground in the chain of grounds for a belief is found true, then the belief may be said to be "fully grounded".

Ans to Q No 6: Stephen Hetherington argues that though the usual interpretation of Gettier cases is standard, yet not mandatory and true interpretation. He asserts that there is no controversy regarding the view that knowledge is absent in each Gettier cases if it is considered that knowledge needs to be infallible. But, if it is considered that knowledge need not be infallible, then such cases contain knowledge, although they are "failable" knowledge.

Ans to Q No 7: Two points of criticism made by Jianbo Cao regarding Gettier's cases may be said to be-

i) Jianbo Cao argues that the JTB definition is "neither an important nor a comprehensive one that covers all knowledge". It is "only a definition of propositional knowledge about experience"; hence the significance of Gettier's two cases also is "limited to empirical propositional knowledge" only.

ii) Cao moreover, points out that there is an important distinction between "contextual" and "non-contextual" knowledge. But Gettier fails to realise the distinction and makes a confusion of both these two kinds of knowledge in his counter-examples.



5.8 MODEL QUESTIONS

A. Very short questions

Q 1: Write the full form of 'JTB'?

Q 2: Who challenged the JTB definition of knowledge?

Q 3: In which year Gettier's paper "Is Justified True belief knowledge?" was published?

Q 4: In which journal Gettier's paper "Is Justified True belief knowledge?" was published?

Q 5: Did Plato accept the JTB definition of knowledge?

Q 6: In which dialogue of Plato the problem of definition of knowledge was discussed?

Q 7: Who proposed the addition of the 'causal condition' to the JTB definition of knowledge?

Q 8: In which paper the causal condition was proposed?

Q 9: Who made the distinction between strong and weak sense of knowledge?

Q 10: Name two thinkers who followed the fourth condition approach.

B. Short questions (Answer in about 100-150 words)

Q 1: State any one of the two Gettier's cases?

Q 2: Briefly explain any two responses to the Gettier Problem.

Q 3: Write a brief note on the Gettier Problem.

C. Long questions (Answer in about 300-500 words)

Q 1: Is Justified true belief knowledge? Answer with reference to the Gettier Problem.

Q 2: How do the post-Gettier thinkers respond to Gettier? Briefly explain.

Q 3: What do you mean by 'fourth condition approach' to the Gettier Problem? Briefly explain.

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UNIT 6: A PRIORI AND APOSTERIORI KNOWLEDGE

UNIT STRUCTURE

6. 1 Learning objectives

6. 2 Introduction

6. 3 A priori judgments

6. 4 A posteriori judgments

6. 5 Distinction between a priori and a posteriori

6. 6 Analytic a priori and Synthetic a posteriori

6.6.1 Kant's view

6.6.2 Anti-Kantian views

6. 7. Let us sum up

6. 8 Model questions

6.1 LEARNING OBJECTIVES

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

- define a priori and a posteriori knowledge;
- explain two important kinds of judgments;
- explain the criteria of a priori judgments;
- discuss the meaning of 'strict universality',
- define analytic and synthetic judgments,
- explain the distinction between a priori and a posteriori statements,
- discuss Kant's and anti-Kantian views

6.2 INTRODUCTION

This unit introduces to you the philosophical terms a priori and a posteriori and the distinction between the two. At the beginning it can be said that the Latin phrases a priori means "from what comes before" and a posteriori means "from what comes after". There is no question of doubt that the a priori and a posteriori are philosophical terms popularized by German philosopher Immanuel Kant (1724-1804). In his Critique of Pure

Reason (first published in 1781, second edition in 1787), one of the most influential works in the history of philosophy, Kant hinges a priori and a posteriori propositions or judgments or statements. These two terms are used with respect to reasoning (epistemology) to distinguish "necessary conclusions from first premises" (i.e., what must come before sense observation) from "conclusions based on sense observation" which must follow it. Thus, the two kinds of knowledge, justification or argument, may be glossed such as a priori knowledge or justification is independent of experience, as with mathematics (7 + 5 = 12), tautologies ("All bachelors are unmarried"), and deduction from pure reason (e.g., ontological proofs) and a posteriori knowledge or justification depends on experience or empirical evidence, as with most aspects of science and personal knowledge. Here it is important to note that the terms a priori and a posteriori are primarily used as adjectives to modify the noun "knowledge" (for example, "a priori knowledge"). However, "a priori" is sometimes used to modify other nouns, such as "truth". Philosophers also may use "apriority" and "aprioricity" as nouns to refer (approximately) to the quality of being "a priori". In short, the terms "a priori" and "a posteriori" are used primarily to denote the foundations upon which a proposition is known.

6.3 A PRIORI JUDGMENTS

The very concept a priori is one of the most important and controversial problems in contemporary philosophy. Various analysis and controversies can be and have been raised concerning a priori judgments/statements. Therefore, present chapter begins with following questions: What is an a priori judgment? Is the term a priori ambiguous? What are the criteria of an a priori judgment? At this juncture it can be stated that the term a priori is used in philosophy to indicate deductive reasoning. Even the word a priori is primarily applied to concepts, notions or ideas in general and to propositions or statements or judgments in particular. Precisely speaking, the term a priori is Latin, meaning "from what comes before", as already stated earlier, referring to that which comes before experience. However,

the term a priori is ambiguous because an a priori proposition may be any of the following:

i. A proposition we know from birth,

ii. A proposition we know, or can know, as soon as we acquire the relevant concepts or ideas. For example: once we acquire the concepts of red and blue we can know that nothing is simultaneously red and blue all over,

iii. A proposition we cannot understand without knowing it to be true, and

iv. A proposition we cannot learn via sense experience.

Thus, a proposition is said to be a priori when it is independent of any experience whatever. It reveals that a given proposition is knowable a priori if it can be known independent of any experience other than the experience of learning the language in which the proposition is expressed. In short, a priori knowledge comes from reason alone and not from experience. For example: the statement "all chickens are birds" is an a priori truth or statement as "all chickens are birds" is true without the need to look at any actual chickens. Equally, mathematical equations, 40 plus 5 (40 + 5) is equal to 45, for example, are an example of a priori knowledge, since they do not require any real-world evidence to be considered true. This information 40 + 5 = 45) is known without direct experience; you can calculate the problem as an abstract without needing to arrange forty-five objects and count them. For Kant, necessity and strict universality are two criteria of a priori judgments or propositions. These two criteria are inseparable or undividable. By 'strict universality' Kant is meant 'true in all possible worlds'. Nobody can deny, for example, '5 + 7 = 12' is a universal and necessary proposition. In philosophy of language and philosophy of mathematics, a priori judgments are ones whose truth can be known before any experience with the world.

6.4 A POSTERIORI JUDGMENTS

The term a posteriori is the opposite term of a priori. In the same vein of the term a priori, the term a posteriori is applied to ideas or notions or concepts in general and to judgments or statements or propositions in particular. Even the term a posteriori is used in philosophy to indicate inductive reasoning. We have already hinted above that the term a posteriori is Latin, meaning "from what comes after", referring to that which comes after experience. The term a posteriori means 'based on experience', the experience of sense organs, i.e., five senses and perhaps introspection. Thus, something that is known a posteriori is known based on logic that is derived from experience. Reason can be involved in an a posteriori statement, but that reason still stems from an assumption made empirically, rather than one derived from an abstract truth. Thus, a posteriori knowledge is called empirical as it is derived from the experience of the world. For example: date of birth, orbits of planets and so on. It is important to note here that a posteriori knowledge is often considered to be true, and is often very likely to be true, but it is not infallible. Though your date of birth is something known a posteriori, you cannot reasonably argue that your date of birth occurred on any particular day or time without knowledge that has been acquired empirically - either a record of your birth (such as a birth certificate), testimonial from a witness (such as your mother) or some freakish ability to remember your own birth. That means that a number of things could cause this knowledge to be false: birth records could have been misprinted or falsified, a testimony could be a lie or your freakish recollection could be inaccurate or even imaginary.



ACTIVITY: 6.1

I Write what you know about a priori and a posteriori judgments?

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.....

I Is an a posteriori judgment infallible? Give reasons in support of your answer.

.....

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CHECK YOUR PROGRESS

Q 1: State whether the following statements are True or False

i) The term a priori is used in philosophy to indicate deductive reasoning. (True/False)

ii) The term a posteriori is used in philosophy to indicate inductive reasoning. (True/False)

Q 2: Find out the correct answer

i) The term a posteriori means 'based on reason' / 'based on experience'.

Q 3: Fill up the blanks

i) _____ and _____ are two criteria of a priori judgments.

Q 4: Who is the author of the book Critique of Pure Reason?

6.5 DISTINCTION BETWEEN A PRIORI AND A POSTERIORI

So far we have outlined the concept of a priori and a posteriori. Now let us make a comparison between them. We think that a posteriori knowledge is often compared to a priori knowledge, which is knowledge that is known to be true based on reason alone. Compared to a priori knowledge, such as a mathematical equation, a posteriori knowledge is more likely to be false, since it relys on an interpretation of an experience.

The distinction between a priori or analytic and a posteriori or synthetic is based on the content of propositions. If a proposition does not add to

cognition or knowledge, it is called analytic proposition, whereas a proposition does add to cognition or knowledge, it is called synthetic.

Most of the philosophers granted that analytic = a priori and synthetic = a posteriori proposition. For them, the distinction between a priori and a posteriori propositions has reference to the source of cognition. A priori propositions stem from pure reason or pure understanding. As such they are valid independently of any experience whatsoever. A posteriori propositions, on the other hand, are derived from experience of the world. This is the reason why a posteriori propositions require experience for their validation. In short, it can be said that something known a priori is known purely through reason while something known a posteriori is determined through empirical evidence.

A priori propositions are analytic, not synthetic. A posteriori propositions are non-analytic. A posteriori propositions are all synthetic. Synthetic or a posteriori propositions are those which are possible through experience. A proposition that is knowable a posteriori is known on the basis of experience. For example, the proposition that all bachelors are unmarried is a priori, and the proposition that it is raining outside now is a posteriori. This is, in brief, all about the distinction between a priori and a posteriori.

6.6 ANALYTIC A PRIORI AND SYNTHETIC A POSTERIORI

A priori judgments are universal and necessary and further all a priori judgments are analytic. Analytic statements are a priori. Likewise, a posteriori propositions are synthetic. When we deal with the issue of a priori and a posteriori in theory of knowledge, we of course, consider here only those statements which are analytic ad synthetic. Let us explain in detail how a priori and analytic propositions and a posteriori and synthetic propositions are identical. Consider the following example from Arithmetic: '5 + 7' are together equal to '12' is said to be an a priori judgment. Accordingly, mathematics is analytic and a priori because 5 + 7 = 12 is universal and

necessary. Platonism did grant that mathematics is a priori. Plato thought that a mathematical proposition is necessary. For example: 2 + 2 = 4 is rational as well as necessary. Two and two make four is not only a fact, but it is a necessity. Because it is not merely the case that 2 and 2 do make 4, but they must make four. So it is unthinkable that they should not. In other words, its opposite is unimaginable, for example, 2 + 2 = 5 is unthinkable or beyond belief. According to Plato, "a mathematical proposition is necessarily true, its truth is known without verification by experience" for example, the angles at the base of an isosceles triangle are equal - is a necessary proposition. This proposition is necessary as we know it without any experience at all, if we were clever. Thus, we conclude with Plato by saying that arithmetical knowledge is innate and a mathematical/arithmetical statement is necessary.

According to Platonism, mathematical objects are very real and exist independently of us. For example, 'Karim loves juice' is true. Here 'Karim' refers to the person Karim, 'juice' to the substance, and 'loves' refers to a particular type of relation which holds between Karim and juice. It follows from the fact that Karim exists. If he didn't, then 'Karim loves juice' couldn't be true. In other words, unless Karim exists, 'Karim loves juice' is false. Equally, mathematically true propositions, such as, '7 + 5 = 12' and '7 > 3', require the number 7 to exist; otherwise the propositions would not be true. In standard semantics the objects denoted by singular terms in true sentences ('Karim', '7') exist. In the same vein of standard semantics, mathematical objects do exists. Even the mathematical objects are outside of space and time. Unlike physical objects in space and time, such as orange, dog, positrons and so on, the mathematical objects, namely, the number '25' which is to be found nowhere. They are outside space and time is obvious. They are outside time for they are universal and necessary. Their universality and necessity is not a matter of experience, but is known through thought. They are lies only in reason and hence their existence cannot be doubted. Even the truths of science (Masih, 1994, 201f.) can be doubted but the truths of mathematics like '2 + 2 = 4' cannot be doubted. Mathematical

objects are real and rational. Of negative character arithmetical objects are not physical. In fact we can intuit arithmetical objects and can be grasped or seen mathematical truths with the mind's eye. Thus, unlike empirical knowledge is based on sense experience, i.e., based on input from the usual physical senses, for example, hearing, seeing etc., arithmetical knowledge is intuit. There is no doubt that mathematics is a kind of experience that is independent of the physical senses. In this sense mathematics is a priori. But Kant thought that mathematics is synthetic a priori. And finally, Kant came to the conclusion that arithmetic is synthetic and a priori and synthetic a priori proposition is possible.

6.6.1 Kant's View

It was Kant who refused to acknowledge mathematics as analytic. In his Critique of Pure Reason Kant introduced a distinction between analytic and synthetic judgments. He says: "In all judgments in which the relation of a subject to the predicate is thought (I take into consideration affirmative judgments only, the subsequent application of negative judgments being easily made), this relation is possible in two different ways. Either the predicate B belongs to the subject A, as something which is (covertly) contained in this concept; or B lies outside the concept A, although it does indeed stand in connection with it. In one case I entitle the judgment analytic, in the other synthetic" [Kant, 1982, 48 (A6-7)]. Kant believed that in all analytic judgment the predicate is overtly or covertly contained in the subject term. For example, 'All bachelors are unmarried' is an analytic judgment. In this judgment the predicate term bachelor is contained in the subject term in the sense that the meaning of the term bachelor is the same as the meaning of the term unmarried. Analytic judgments are about logical relations and hence to deny an analytic judgment is to assert contradiction. On the contrary, a synthetic judgment is one in which the predicate does not contained in the subject term. The denial of a synthetic judgment is not a logical contradiction. A synthetic judgment is known through experience. For example, Material bodies are heavy.

Rather, Kant made distinction between a priori and a posteriori judgments. Kant claimed a priori judgments are independent of any experience with the world, whereas the truth of a posteriori judgments is uncovered via experience of the world. Thus, Kant made a fourfold distinction, analytic vs. synthetic, and a priori vs. a posteriori propositions. These two distinctions made for four possibilities, analytic a priori, analytic a posteriori, synthetic a priori and synthetic a posteriori judgments. Of these analytic a priori and synthetic a posteriori were accepted by everyone. Everyone agreed that there are no analytic a posteriori judgment as analytic implies a priori, i.e., analytic implies that the truth of the judgment is independent of the empirical situation. The synthetic a priori judgment was controversial. But Kant claimed that there are some synthetic a priori judgments. For example, 7 + 5 = 12 is a synthetic a priori proposition. It is a priori because it is necessary. He believed that it is a necessary truth as it cannot be falsified by any experience. However, Kant did not think that every necessary truth is analytic. He makes the bold claim that arithmetic is synthetic. Kant claimed the predicate "= 12" is not contained in the subject "7 + 5" of the statement "7 + 5 = 12". Here is what Kant wrote about it: "We might, indeed, at first suppose that the proposition 7 + 5 = 12 is a merely analytic proposition, and follows by the principle of contradiction from the concept of a sum of 7 and 5. But if we look more closely we find that the concept of the sum of 7 and 5 contains nothing save the union of the two numbers into one, and in this no thought is being taken as to what that a single number may be which combines both… Arithmetical propositions are therefore always synthetic. This is still more evident if we take large numbers. For it is then obvious that, however we might turn and twist our concepts, we could never, by the mere analysis of them, and without the aid of intuition, discover what (the number is that) is the sum" [ibid., 52-53 (B15-16)].

6.6.2 Anti-Kantian Views

Obviously the explanation offered by Kant is not good enough. His various attempts to draw the distinction between analytic and synthetic judgments were at times unclear. Even some have charged that they are ambiguous and equivocal. We think that Kant's arguments fail to show that there is no mathematical analytic proposition on the one hand and there is synthetic a priori and analytic a posteriori statement/statements on the other hand. The claim that there are synthetic a priori judgments was and is rejected not only by empiricists but also by logicists in mathematics and formalists too. It was Willard Van Orman Quine who rejected Kant's own example of analytic truth such as 'A body is extended'. This assumption, according to Quine, is an extra logical one. Empiricists especially David Hume and the logical empiricists (logical positivists) and their followers rejected the claim that there are any synthetic a priori judgments in any form. Equally, the formalists in mathematics, especially Hilbert, Frege and others rejected that claim. Thus, there are only two kinds of judgments, analytic and synthetic ones. Analytic judgments are a priori and synthetic judgments are a posteriori.



ACTIVITY: 6.2

- Explain, with examples, mathematics is a priori after Platonism.

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- Write an essay on synthetic a priori judgment.

  .....

  .....



CHECK YOUR PROGRESS

Q 5: Find out the correct answer

i) 5 + 7' are together equal to '12' is said to be an a priori / a posteriori judgment.

ii) "It is raining outside now" is an example of an a priori / a posteriori proposition.

Q 6: Fill in the blanks

i) Kant did not think that every necessary truth is _____.

ii) Kant thought that mathematics is _____.

iii) _____ rejected Kant's own example of analytic truth such as 'A body is extended'.



6.7 LET US SUM UP

- Throughout the discussion we have attempted to see how or in how many different ways arithmetic may be analytic and a priori. Of course, the search begins with a presupposition regarding what a priori and analytic statement/judgment is.

- A statement/judgment is apriori proposition the truth or falsity of which is knowable without appeal to any empirical observations.

- An analytic statement is a sentence that is empirically indefeasible. Analytic statements of mathematics are countable as meaningful in that they in varying ways constitute/formulate the domain of science.

- Synthetic statements of empirical sciences are concerned with the world as they describe and also explain it. But mathematics does not describe the world nor does it explain it. It represents the general structure of the world in its well-formed sentence/sentences. Mathematics presupposes the world consists of particulars as well as concepts. Like logic, the domain of arithmetic is laws of thought. The truths which logic and

mathematics discovers are the truths universally and necessarily valid. For example, 2 + 2 = 4 is universally true in our conceptual scheme. Necessary truths in our conceptual scheme can be called apriori and analytic.

- A judgment is knowable apriori if, and only if, it is necessary. The principle of which an analytic judgment is determined is universal and necessary. Mathematical judgments, for example, 7 + 5 = 12 is true. This statement is true, and obviously it is true in a way that seems to place it beyond falsification by sense experience.

- A mathematical judgment cannot possibly be falsified at all because it is a necessary truth. Certainly mathematical judgments are a priori and analytic due to their necessity and universality. Thus, in a nutshell, it can be said that mathematics is a priori and analytic and statements of empirical sciences are a posteriori and synthetic.



6.8 FURTHER READING

1) Ahmed, Hasen. A. (2015). "Is Arithmatic A Priori? An Observation", in S. Debnath, B. Bagchi and S. Mishra (eds.) Modern Trends in Social and Basic Sciences, Readers Service, Kolkata, pp. 1212 - 1220.

2) Frege, G. (1918). 'The Thought: A Logical Inquiry', trans. A. Quinton and M. Quinton, Reprinted in Klemke (1968).

3) Frege, G. (1952). "On Sense and Reference", in Translations from the Philosophical Writings of Gottlob Frege, trans. Peter Geach and Max Black, Basil Blackwell, Oxford, Reprinted, 1977.

4) Hardy, G. H. (1929). "Mathematical Proof", included in Mind 38.

5) Kant, I. (1982). Critique of Pure Reason, trans. N. K. Smith, Macmillan, London.

6) Masih, Y. (1994). A Critical History of Western Philosophy, Motilal Banarsidass, Delhi.

7) Stace, W. T. (1920). A Critical History of Greek Philosophy, Macmillan India LTD., Reprinted, 2005.

6.9 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q No 1: i) True ii) True

Ans to Q No 2: i) 'based on experience'

Ans to Q No 3: Necessity , universality

Ans to Q No 4: Immanuel Kant

Ans to Q No 5: i) a priori ii) a posteriori

Ans to Q No 6: i) analytic ii) synthetic a priori iii) W. V. O. Quine (Willard Van Orman Quine)

6. 10. MODEL QUESTIONS

A. Very short type questions

Q 1: Give an example of a priori proposition.

Q 2: Give an example of analytic proposition.

Q 3: Define a posteriori judgment.

Q 4: What is analytic proposition, according to Kant?

Q 5: Define synthetic proposition after Kant.

Q 6: What is meant by strict universality?

Q 7: What are the two criteria of an a priori judgment?

Q 8: What are the four possibilities of judgments?

Q 9: Who advocates synthetic a priori judgments?

Q 9: "In all analytic judgment the predicate is overtly or covertly contained in the subject term"- who said this?

B. Short type questions (Answer in about 100-150 words)

Q 1: What is an a priori proposition? Give an example of a priori proposition.

Q 2: Define a posteriori proposition? Given an example of a posteriori proposition.

Q 3: Distinguish between a priori and a posteriori judgments.

Q 4: "Arithmetical propositions are always synthetic." Explain briefly after Kant.

Q 5: "A mathematical statement is necessarily true". Explain briefly after Plato.

Q 6: Mathematical objects do exists - justify the statement.

Q 7: What is synthetic judgment? Give an example of synthetic judgment.

Q 8: Explain, with examples, synthetic a priori judgment.

Q 9: Compare and contrast between analytic and synthetic judgment.

Q 10: Explain briefly the a priori judgments are universal and necessary.

C. Long type Questions (Answer in about 300-500 words)

Q 1: Explain and discuss the concept of a priori.

Q 2: Discuss, with examples, a posteriori knowledge?

Q 3: What is a priori judgment? How many ways the term a priori is ambiguous? Explain.

Q 4: Explain analytic and synthetic propositions after Kant.

Q 5: Mathematics is a priori after Platonis, explain this statement.

Q 6: Discuss critically Kant's view on synthetic a priori judgments.

Q 7: Explain, with examples, the a priori and a posteriori knowledge.

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UNIT-7 RATIONALISM AS A THEORY OF KNOWLEDGE

UNIT STRUCTURE

7.1 Learning Objectives

7.2 Introduction

7.3 Origin and Sources of Knowledge

7.4 Theories of Knowledge

7.5 Rationalism

7.5.1 Standpoints of Different Philosophers

7.6 Let Us Sum Up

7.7 Further Readings

7.8 Answers to Check Your Progress

7.9 Model Questions

7.1 LEARNING OBJECTIVES

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

- state the names of philosophers associated with different theories regarding the origin of knowledge
- explain the theory of rationalism as the origin and source knowledge
- discuss the different views of philosophers associated with the theory of rationalism
- examine the merits and demerits of reason as sources of knowledge

7.2 INTRODUCTION

The branch of philosophy that studies the nature, source and limits of knowledge is known as epistemology. It is the theory of knowledge. The basic questions of epistemology can be put down in the following manner:

1. What is the nature of knowledge: this question asks what does it mean to say that someone knows. How do we distinguish between cases in which someone knows something and cases in which someone does not know something?

2. How do we acquire knowledge: here we try to find the sources and origin of our knowledge. How can we use our various faculties like reason, senses, or other resources to acquire knowledge? We try to find out how we gain the concepts we use in our thought.

3. What is the scope of knowledge or what can we know: this query tries to answer whether there are limits to what we can know. For example, whether there are things which are unknowable for us. Is it possible that we do not know as much as we think we do?

This Unit will introduce you to the second question of epistemology, that is, how we acquire knowledge.

7.3 ORIGIN AND SOURCES OF KNOWLEDGE

There are many ways that one might come to know something or acquire knowledge. We acquire our knowledge of empirical facts about physical world through perception, that is, by using our senses. Science is the best example of empirical knowledge with its collection of data. Our everyday knowledge also mostly comes from the senses, as we look, listen, smell, touch, and taste the various objects in our environments.

But knowledge is not simply made up of sensations. All knowledge requires some amount of reasoning. Data collected by scientists must be analyzed before knowledge is yielded, and we draw inferences based on what is given to us by our senses. In case of knowledge of abstract or non-empirical facts one has to rely exclusively upon reasoning.

Some philosophers regard memory also as a source of knowledge. In memory we come to know something which we knew in the past but which is no longer present to our senses now. Knowledge can also be acquired through testimony, that is, from the words of some trusted person or books that can be believed to be true.

7.4 THEORIES OF KNOWLEDGE

There are four main theories of origin of knowledge.

1. Rationalism: It is a theory that regards reason as the chief source of knowledge. Descartes, Spinoza and Leibniz are advocates of Rationalism.

2. Empiricism: It is a theory that regards experience as the source of knowledge. Locke and Hume are the chief exponents of this theory.

3. Criticism: It is also called the Critical theory of knowledge. It is advocated by Kant. He advocated the view that both experience and reason together yield knowledge.

4. Intuitionism: It regards intuition as the source of knowledge. Henry Bergson is an advocate of this theory.

7.5 RATIONALISM

Rationalism is the theory of knowledge according to which reason or intellect is the main source of knowledge. Rationalism rejects all knowledge derived from sense experience. Socrates and Plato are the earliest rationalist philosophers. According to them, true knowledge originates from reason. The Rationalism that was advocated by these two philosophers became articulate in the philosophy of Descartes, Spinoza and Leibniz. However, the rationalist philosophers differ among themselves regarding how much importance should be given to experience in yielding knowledge. Some rationalists regard experience as wholly misleading while others attach some values to it. They say that the knowledge given by experience is confused knowledge. But inspite of their differences they all agree that reason alone can give us certain and perfect knowledge. Rationalism is also called a priori theory of knowledge as according to this theory knowledge is prior or independent of experience.

7.5.1 Standpoints of Different Philosophers

RENE DESCARTES (1596-1650)

As it has been mentioned above, modern rationalism begins in the philosophy of Descartes. Descartes is considered as the father of modern western philosophy. Descartes was a mathematician and according to him the perfect form of knowledge can be gained only through mathematical demonstration. Such demonstration consists in starting with self-evident principles and deducing other truths from these self-evident principles.

Descartes divides ideas into three kinds: adventitious, factitious and innate. Adventitious ideas are imposed on the mind from without. They are not clear and distinct. Factitious ideas are created by the mind by the conjunction of ideas. These are created by imagination. They are also not clear and distinct. But innate ideas are clear and distinct. They are implanted in the mind by God at the time of birth.

According to Descartes, knowledge is given by clear vision of intellect or reason. Descartes calls it intuition. For him intuition is the undoubted, immediate apprehension of self-evident truth by reason. God imprints certain innate ideas in the mind at the time of birth. They are self-evident. The idea of causality, infinity, eternity, perfect Being or God and the like are innate ideas. They are clear and distinct. Clearness and distinctness is the test of their truth. The development of true knowledge consists in the logical deduction of other truths from these principles. Thus Descartes applies mathematical method to philosophy. Therefore, Paulsen, has characterized Descartes' philosophy as Mathematical Rationalism.

According to Descartes, certainty is the criterion of truth. Therefore, he rejects knowledge derived from sensation. He starts with universal doubt. He doubts all knowledge including mathematical demonstration. One can doubt everything, but in doubting one cannot doubt the doubting itself. To doubt is to think. To think is to exist. "Cogito ergo sum". "I think, therefore, I exist".

Once he establishes the existence of the self, Descartes moves to prove the existence of the external world. Each one of us has the innate ideas of which God is the most important. From this idea of God Descartes proves the existence of God. The idea of God is the idea of infinite Being. But I being finite cannot produce this idea of infinite Being in me. Another human being cannot produce it, as he too is finite. This idea also cannot be produced by addition of finite beings and things as the sum of finite is also finite. So, this idea of the infinite Being must be produced by that which itself is infinite, that is, by God himself. So God must exist. Now God is benevolent and truthful. As such he cannot deceive us. And we have conviction that external things exist. So they must exist. For otherwise God will turn deceitful. Descartes thus proves the existence of the external world.



CHECK YOUR PROGRESS

Q 1: State whether the following statements are True or False

a) Theory of origin of knowledge is studied in the branch of philosophy known as Metaphysics. (True/ False)

b) Plato's philosophy cannot be claimed to be rational in nature. (True/ False)

c) A priori means 'knowledge is after experience'. (True/ False)

d) Innate ideas are implanted in the mind at the time of birth by God. (True/ False)

Q 2: What are three kinds of ideas according to Descartes?

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.....

.....

Q 3: What is the criterion of truth according to Descartes?

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.....

BENEDICT SPINOZA (1632-1677)

Spinoza gave a developed form to the rationalism initiated by Descartes in modern western philosophy. Like Descartes, Spinoza had immense faith in reason. Like a true rationalist Spinoza holds that we can know truth through reason. Reason can give us knowledge of reality because reality itself is rational in nature. According to Spinoza, God himself creates the world rationally and intuition is the realization of true knowledge. It is intuition by which one knows the necessary relations between different phenomena.

According to Spinoza, the goal of philosophy is to get complete knowledge of things. He holds that this is possible only by clear and distinct thinking. Like Descartes he believed that if we start with self-evident principles and prove the steps involved in the argument then we will be able to reach certain and universal knowledge.

Spinoza uses geometrical method to philosophy to arrive at certain truths. His method is geometrical because he lays down certain definitions, axioms and postulates and from these principles he deduces propositions with proofs

Spinoza starts with the innate principle or idea of God or Substance. According to him, a substance is that which exists by itself and is conceived by itself. This substance is infinite and it has infinite attributes. Out of these attributes we can know only thought and extension which themselves are infinite. They are parallel and co-exist with each other. These attributes are modified into infinite intelligence and will and infinite extension and motion. They are the infinite modes of Substance. Infinite intellect and will are again modified into finite intellects and will or finite minds. Infinite extension and motion are modified into finite extension and motion or finite objects. Thus finite minds and finite objects are modification of the one and same Substance.



CHECK YOUR PROGRESS

Q 4: The method in philosophy used by Spinoza is: a. mathematical b. geometrical

.....

Q 5: According to Spinoza, God has a. two attributes b. three attributes c. infinite number of attributes

.....

GOTTFRIED WILHELM LEIBNIZ (1646-1716)

Leibniz was a famous mathematician. He held that the world has logical and mathematical order. Laws that govern this world order are rational. Therefore the world can only be comprehended by reason.

Leibniz's theory of knowledge is based on his metaphysical theory. Leibniz established that the world is composed of dynamic units or immaterial, unextended, simple units of force. These are called monads. According to him, monads are windowless and hence they cannot receive any knowledge from any external source. Leibniz holds that we cannot derive any invariable law concerning the functions of the universe on the basis sense experience. Knowledge is simply brought out and manifested by experience. He holds that nothing can exist in the intellect that did not first exist in sensation- except, he adds, the intellect itself. The rational laws governing the world are to be found only in reason because the world has been created by God on the basis of reason.



CHECK YOUR PROGRESS

Q 6: State whether the following statements are True or False

a) Monads are extended. (True/ False)

.....

b) According to Leibniz, the role of experience in knowledge is to manifest it. (True/ False)

.....



ACTIVITY: 7.1

a) State three characteristics of Rationalism

.....

.....

b) Name one important book written by each rationalist philosopher.

.....

.....



7.6 LET US SUM UP

- Rationalism is a theory which holds that reason is the only source of knowledge.
- Descartes, Spinoza and Leibniz are the supporters of Rationalism
- Modern rationalism begins in the philosophy of Descartes. Descartes is considered as the father of modern western philosophy.
- Spinoza holds that the goal of philosophy is to get complete knowledge of things.

- "Cogito ergo sum" means "I think, therefore, I exist".



7.7 FURTHER READING

1) Copleson, Frederick.(1964) A History of Philosophy (Vol. IV, V, VI) Image Books

2) A. Morton.(2001). A Guide Through the Theory of Knowledge. Oxford, Blackwell

3) Thrilly, Frank.(1994). A History of Philosophy. Central Publishing House, Allahabad

4) Trusted, J.(1997). An Introduction to the Theory of Knowledge, Macmillan

5) William, M. (2001). Problems of Knowledge: Oxford, OUP



7.8 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q No 1: a) False b) False c) False d)True

Ans to Q No 2: Adventitious, factitious and innate

Ans to Q No 3: Certainty

Ans to Q No 4: Geometrical

Ans to Q No 5: Infinite number of attributes

Ans to Q No 6: a) False b)True



7.9 MODEL QUESTIONS

A) Very short questions

Q 1: What is epistemology?

Q 2: Is testimony a source of knowledge?

Q 3: What is rationalism?

Q 4: Who are the advocates of rationalism?

Q 5: Mention the other name of rationalism.

Q 6: Give an example of innate ideas.

Q 7: According to Descartes, What is the criterion of truth?

Q 8: State the meaning of Cogito-ergo-sum.

B) Short Questions (Answer each question in about 150 words)

Q 1: Briefly explain the theory of rationalism.

Q 2: Who are the advocates of rationalism? Explain in brief the concept of rationalism.

Q 3: Briefly comment on the concept of rationalism.

Q 4: Explain briefly the kinds of ideas formulated by Descartes.

Q 5: Who is the profounder of Geometrical method? Briefly explain on it.

C) Write short notes on (Answer in about 150 words)

Q 1: Innate ideas

Q 2: Descartes' mathematical method in philosophy

C) Long Questions (Answer in about 300-500 words)

Q 1: Explain the theory of Rationalism.

Q 2: What are the demerits of Empiricism and Rationalism? Discuss

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UNIT: 8 EMPIRICISM AS THE THEORY OF KNOWLEDGE

UNIT STRUCTURE

8.1 Learning objectives

8.2 Introduction

8.3 Empiricism

8.3.1 Standpoints of different philosophers

8.4 Critiicism

8.4.1 Kant's viewpoint on knowledge

8.5 Let us sum up

8.6 Further readings

8.7 Answers to check your progress

8.8 Model questions

8.1 LEARNING OBJECTIVES

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

- state the names of philosophers associated with different theories regarding the origin of knowledge
- explain the theory of empiricism as the origin and source knowledge
- examine the merits and demerits of experience as sources of knowledge

8.2 INTRODUCTION

In the previous unit you have studied the theory of rationalism as the theories of origin and sources of knowledge. Now, in this unit, you will study the theory of empiricism.

This unit introduces to you the theory of empiricism. The issues to be discussed in this unit are:

- Empiricism as the theory of origin and sources of knowledge
- Standpoints of different philosophers' regarding the theory of empiricism

- Criticism as a theory of knowledge
- Kant's viewpoint on knowledge

8.3 EMPIRICISM

Empiricism is a theory according to which experience is the source of true knowledge. It is a reaction against rationalism. In direct opposition to rationalism, empiricism holds that knowledge is derived from sense experience. The empiricists hold that the so-called a priori rational principles are actually derived from experience. As contrasted with rationalism, empiricism is called a posteriori theory of knowledge because according to this theory knowledge is posterior or dependent on experience.

8.3.1 Standpoints of Different Philosophers

JOHN LOCKE (1632-1704)

Locke revolted against Descartes' rationalism and criticised his theory of innate ideas. He criticised the the theory of innate ideas on the following grounds:

1. If there were innate ideas they should be equally present in all minds. But there are no such innate ideas which are equally present in all minds. For example, we do not find that savages, children or idiots are concious of so called innate ideas like causality, infinity, eternity etc.

2. If there were innate ideas they should be the same in all minds. But the ideas of morality, God and the like are not the same in all minds. Different ideas are held in different socities. Sometimes the same society may hold different view at different times or ages.

3. Even if there were the same ideas in all minds, it would not make them innate on that account. Everybody has the same idea of fire. But all of

us get the idea of fire from experience. It is not an innate idea. Universality of an idea does not prove the innateness of it.

According to Locke, at the time of birth the mind is a tabula rasa or blank sheet. Mind is a clean slate in the beginning on which expereince writes. According to him, 'there is nothing in the intellect that was not previously in the senses'. Mind receives ideas from expereince. This expereince is two fold: sensation and reflection. Sensation is the source of our knowledge of the sensory qualities of objects. Reflection is the source of our internal states of mind, such as, perception, belief, thought and reasoning etc. We get our first ideas from sensation and then we reflect upon it. Sensations are the material on which the mind thinks.

According to Locke, the mind is passive in receiving ideas. But it is active in comparing and combining these ideas. The ideas that are passively received by the mind are the simple ideas. These simple ideas are combined by the active power of the mind into varieties to make complex ideas. Locke says that there are four simple ideas: Firstly, the ideas which enter our minds through one sense organ only. For example, colour, sound, taste, heat, cold solidity. Secondly, the ideas which enter the mind by more than one sense organ. For example, space, figure, rest, motion which enter through both sight and touch. Thirdly, the ideas that are received by reflection only. For example, perception, retention, discerning, comparing, compounding, naming and abstracting. Fourthly, the ideas that we receive both through sensation and reflection. For example, pleasure, pain, power, existence, unity, succession and duration.

According to Locke, the power that an object has to produce idea in our minds is a quality. But he makes an important distinction between primary and secondary qualities. Primary qualities belong to the objects themselves. They cannot be separated from the object. As such he calls them objective. Examples of primary qualities are solidity, extension, motion, shape, size, impenetrability etc. Secondary qualities on the other hand are mere sensations or ideas in the mind of the knower. They are sensations produced

in the mind by the primary qualities. They vary under different conditions. They are subjective.

Locke is an empiricist, but he believes in existence of matter, mind or soul and God though they are not given in experience. He says that we have to assume the existence of matter as the substratum of primary qualities of objects though we do not perceive it. Similarly, the existence of mind is inferred from various mental operations. Its existence must be assumed as the substratum of power of perceiving, thinking, feeling and willing. Similarly, we infer the existence of God as the maker of the external world. Locke being empiricist refuses to believe that knowledge can be derived from any other source than sense-experience, but he crosses the bounds of empiricism by accepting the existence of matter, mind and God.



CHECK YOUR PROGRESS

Q 1: Why empiricism is called a posteriori theory of knowledge? (Answer in about 50 words)

.....

Q 2: State whether the following statements are True or False

a) Locke maintains that at the time of birth we are born with innate ides. (True/ False)

b) Reflection is prior to sensation. (True/ False)

c) Locke is a thorough going empiricist. (True/ False)

d) Mind is given in experience and therefore according to Locke we should believe in its existence. (True/ False)

DAVID HUME (1711-1776)

Hume developed Locke's empiricism to its logical conclusion. Hume is a true empiricist and he does not accept the existence of anything that is not given in experience. As such he denies the existence of mind, matter and God, because these are not given in experience. According to him, all

knowledge comes from impressions and ideas. Impressions are lively perceptions and images are their faint copies. There are impressions of sensations or external perceptions and impressions of reflection or internal perception. They constitute the original materials of knowledge.

Impressions and ideas are discrete or disconnected from one another. Impressions and ideas are automatically combined with one another by the laws of association, such as law of contiguity, similarity and causality. A picture suggests the object it represents due to law of similarity. An inkpot suggests a pen due to law of contiguity in space. A lightening suggests a thunder due to law of contiguity in time. Fire suggests burning due to law of causation. Thus discrete impressions get connected with one another due to the laws of association. Thus our knowledge is composed of impressions and ideas combined by the laws of association. Our knowledge does not owe anything to reason or intellect. However, these laws are subjective in nature. As such the connection they provide to the impressions are also subjective.

Hume rejects the idea of material substance, mind and God, as we do not have any empirical evidence of them. He also rejects all metaphysical entities, as we cannot have any ideas of these entities. Hume admits only particular and contingent truths as they alone are given in experience. It is not possible to go beyond sensation to know reality outside them. Hume's theory thus lands up in sensationism and scepticism.



CHECK YOUR PROGRESS

Q 3: Why does Hume deny the existence of matter, mind and God?

.....

.....

Q 4: State whether the following statements are True or False

1) Experience can give us necessary truths. True/ False



ACTIVITY: 8.1

I What do you mean by scepticism? Discuss

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.....

8.4 CRITICISM

The doctrine of criticism is synthesis of rationalism and empiricism. As we see neither rationalism nor empiricism is a satisfactory theory of knowledge. By denying the role of experience rationalism has become one sided. Empiricism also is one sided as it denies the role of reason in knowledge. However, rationalism rightly emphasizes the universality or necessity of knowledge. But it is wrong in accepting innate ideas. If we accept innate ideas then we also will have to accept that there is no progress in knowledge as knowledge consists simply in analytical deduction of innate principles. Therefore, empiricists are right in emphasizing that knowledge is acquired through experience. But the problem with empiricism is that it denies universal and necessary knowledge as experience gives us only contingent truths. However, true knowledge should be universal and at the same time it should be novel.

Immanuel Kant tries to reconcile rationalism and empiricism in criticism and give a satisfactory view of knowledge that is both universal and contains novelty.

8.4.1 Kant's viewpoint on knowledge

IMMANUEL KANT (1724-1804)

According to Kant, no knowledge is possible without sensation. But he also holds that knowledge is not wholly derived from experience, as it cannot

give us universality. The part of knowledge that is not given by experience is a priori.

According to Kant, human mind receives sensation from without. The sensations are produced by noumena or things-in-themselves. These are the material of knowledge. These sensations are discrete or disconnected from one another. As such they cannot give us knowledge unless they are connected with one another by the mind with its synthetic activity. Thus the form of knowledge is supplied by the mind from within itself. According to Kant, both forms and matter of knowledge always go together. In the words of Kant: "Conception without perception is empty; perception without conception is blind".

Kant divides the faculty of knowing into three subordinate faculties: the faculty of sensibility, the faculty of understanding and the faculty of reasoning.

Faculty of sensibility: When we perceive a thing, we perceive it in space and time. Space and time are the forms of perception that sensibility applies to the disconnected sensations and converts them to intelligible objects. Space and time do not belong to the things-in-themselves. They are the forms of perception. They are the a priori ways of perceiving things.

Faculty of understanding: Categories of understanding are the universal necessary characteristics of experience which are found in all mental experience. Understanding applies its categories, namely, substance, causality, unity, plurality etc., to the sensations that are already arranged in space and time by sensibility. Like the forms of perception they also do not apply to things-in-themselves.

Faculty of reason: Reason is the faculty by which the mind tries to employ its innate forms and categories where there is no sensuous experience. Sensations arranged in space and time by sensibility and subsumed under the categories of understanding are co-ordinated by reason. Reason co-ordinates sensibility and understanding according to its ideas of the world, soul and God. These three ideas of reason are

regulative ideas. These are the ideas by which reason organizes the facts of experience into a system. The discrete sensations supplied by experience are reduced to a unity by the synthetic activity of the mind.

According to Kant, sensations are the materials of knowledge, while the faculties of knowing-forms of sensibility, categories of understanding and Ideas of reason are supplied by the mind itself. Thus our knowledge is confined to phenomena or appearances only. Noumena or the things-in-themselves remain unknown and unknowable. Human mind cannot know them.

All thinkers before Kant regarded that our perceptions correspond to the characteristics in the external world. Kant, on the other hand, maintains that objects in order to be known must conform to the constitution of our minds. Thus according to Kant, in knowledge, instead of mind conforming to an independent nature, it is nature that conforms to mind. This is known as the Copernican Revolution in philosophy.



CHECK YOUR PROGRESS

Q 5: State whether the following statements are True or False

a) Forms of knowledge are a priori. (True/ False)

b) Mind can know only phenomena. (True/ False)

Q 6: Why, according to Kant, we cannot know noumena? (Answer in about 50 words)

Ans:……..

……..

……..

……..

Q 7: What are the faculties of knowing, according to Kant?

Ans:……..



ACTIVITY: 8.1

- Why Kant's philosophy is called critical? Discuss

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8.5 LET US SUM UP

- Empiricism as a theory of knowledge views that experience is the source of knowledge.
- Locke, Berkeley and Hume are the chief exponents of this theory.
- Empiricism is called a posteriori theory of knowledge because according to this theory knowledge is posterior or dependent on experience.
- Hume is a consistent empiricist because he does not accept the existence of anything that is not given in experience



8.6 FURTHER READING

1) Copleson, Frederick.(1964) A History of Philosophy (Vol. IV, V, VI) Image Books

2) A. Morton.(2001). A Guide Through the Theory of Knowledge. Oxford, Blackwell

3) Thrilly, Frank.(1994). A History of Philosophy. Central Publishing House, Allahabad

4) Trusted, J.(1997). An Introduction to the Theory of Knowledge, Macmillan

5) William, M. (2001). Problems of Knowledge: Oxford, OUP

8.7 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q No 1: Empiricism is called a posteriori knowledge. It holds that knowledge is not independent, rather knowledge is dependent means that knowledge is derived from experience. As contrasted with empiricism, rationalism is called a priori theory of knowledge.

Ans to Q No 2: a) False b) False c) False d) False

Ans to Q No 3: Because we do not have any impressions of mind, matter and God.

Ans to Q No 4: False

Ans to Q No 5: a) True b) False

Ans to Q No 6: Kant holds the view that sensations are the materials of knowledge. Our knowledge is confined to phenomena or appearance only. Noumena or the-things-in-themselves remain unknown and unknowable. Human mind cannot know them, therefore, noumena or the things-in-themselves is unknown and unknowable.

Ans to Q No 7: Faculty of sensibility, faculty of understanding, and faculty of reason

8.8 MODEL QUESTIONS

A) Very short questions

Q 1: What is empiricism?

Q 2: State the name of the philosopher who advocates the theory of empiricism.

Q 3: What are the two folds of experience, to Locke?

Q 4: Locke mentions that there are four simple ideas, what are they?

Q 5: According to whom, "conception without perception is empty, perception without conception is blind".

Q 6: What are the three divisions of the faculties of knowing put forward by Kant?

B) Short Questions (Answer each question in about 150 words)

Q 1: Briefly explain the theory of empiricism.

Q 2: Who are the advocates of empiricism? Explain in brief the concept of empiricism.

Q 3: Who is the profounder of Geometrical method? Briefly explain on it.

Q 4: What are the grounds of Locke's refutation of Descartes' Rationalism? Explain in brief.

Q 5: Distinguish between primary and secondary qualities.

C) Write short notes on (Answer in about 150 words)

a) Innate ideas

b) Descartes' mathematical method in philosophy

c) Locke's refutation of innate ideas

d) Primary and secondary qualities

C) Long Questions (Answer in about 300-500 words)

Q 1: Discuss Empiricism as a theory of knowledge.

Q 2: Discuss the demerits of Empiricism and Rationalism.

Q 3: How does Locke criticize theory of innate ideas? Discuss

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