UNIT 2 RATIONAL METHOD

Contents

2.0 OBJECTIVES

In order to provide a solid foundation to philosophy one need to adopt a solid and sound method. This unit explores one such methods – the "rational method" in the discovery of truth. This study on the rational method will enable a student:

- To see the immensity of the power of reasoning in philosophizing
- How reason can lead us to clear and distinct truths
- Also to value the mathematical tool in the demonstration of truth

2.1 INTRODUCTION

The renaissance, which began in the 12th century in Italy and flourished all over Europe by the 16th century made sweeping changes in all aspects of life in the West. The awakening of the reflective spirit endowed with a critical mind inspired by the values of the classical world almost redefined the understandings of society, culture, religion, politics, art and literature. Revolt against authority and tradition, intellectual and religious absolutism and collectivism on the one hand and a demand for freedom in thought and action on the other, were the dominant trends of the period. Perhaps the most important contribution of this period may be the recognition of the dignity, freedom and importance of the human individual. In other words, renaissance witnessed the emergence of a new humanism freed from the stronghold of authority and tradition.

The field of intellectual life was also affected by this new trend. Reason took over the place of authority and tradition as the standard or criterion of truth. Truth is now considered as something to be acquired by impartial inquiry than what is decreed by religious authority and revelation. The method of arriving at truth is now changed from contemplation to empirical verification. Consequently an abiding faith in the power of human reason became the fashion of the time.

Knowledge then is esteemed for its utility for the practical value too. Philosophy became more rationalistic in the sense that reason became the highest criterion of knowledge leaving behind the supernaturalism of scholasticism. Philosophy became more scientific than a mere servant of Christian theology. Thus the modern thought was generally classified as rationalistic and empiristic as they accept reason or experience respectively as the source and norm of knowledge. In this unit we will deal with the understanding of rationalism as a philosophical system, its method of investigation and finally a detailed study of the method developed by the various rationalist philosophers.

2.2 UNDERSTANDING RATIONALISM

Rationalism derives from the Latin word "*Ratio*" meaning "Reason". In Epistemological sense, Rationalism is "any view appealing to reason as a source of knowledge or justification". In a more technical term, it is a method or a theory "in which the criterion of the truth is not sensory but intellectual and deductive. Rationalism holds that genuine knowledge cannot come from sense perception or experience but must have its foundation in thought or reason. It makes reason instead of revelation and authority as the standard of knowledge. To employ reason is to use our individual intellectual abilities to seek evidence for and against potential beliefs. To fail to employ reason is to form beliefs on the basis of such non-rational processes as blind faith, guessing or unthinking obedience to institutional authority. Rationalism gives emphasis on the a priori reason which means knowledge obtained prior to experience. It is universal, necessary and self evident. Hence this theory holds that certain ideas like ideas of causality, infinity and perfect being of God are inborn and highly indubitable. Rationalism is also commonly called as Continental Rationalism, the term 'continental rationalism' would traditionally refer to a 17th century philosophical movement begun by Descartes. After Descartes, several scientists and philosophers continued his teachings throughout continental Europe and accordingly were titled as Cartesians. A handful of philosophers influenced by Descartes were more original in developing their own views and they are Benedict Spinoza, Nicholas Malebranche and Gottfried Wilhelm Leibniz.

2.3 RATIONAL METHOD OF INVESTIGATION

Continental rationalists, in understanding the origin of knowledge, accepted the idea of innate and a priori truths which do not depend on experience, although psychologically perception of them may be on the occasion of an experience. They maintained that we could deduce truths with absolute certainty from our innate ideas, much the way theorems in geometry are deduced from axioms. Mathematical demonstration was seen as the perfect type of demonstrating truth and accordingly mathematical proof became the model for all other kinds of demonstration. For them Mathematics provides a model of clarity, certainty and orderly deduction. The personal elements, the subjective factors such as feelings and emotions, are eliminated and body of presuppositions the truth of which is assured are built up. Although the empiricist used the same deductive reasoning but they put a greater emphasis on the inductive method following the British country man Francis Bacon. Thus rational method is basically predicting and explaining behavior based on mathematical reasoning and logic.

Check Your Progress I

Note: Use the space provided for your answer

1) What was the effect of Renaissance on the intellectual sphere?

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2) What do you mean Continental Rationalism?

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3) Define the Rational Method of investigation?

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2.4 DESCARTES' RATIONAL METHOD

Fundamental aim of Descartes was to attain philosophical truths by the use of reason. But what he was seeking was not to discover a multiplicity of isolated truths but to develop a system of true prepositions in which nothing would be presupposed which was not self-evident and indubitable. And the whole edifice should rest on a sure foundation. In one sense Descartes consciously and deliberately broke with the past and did not rely on any previous philosophy. He resolved to rely on his own reason and not on authority. He was against what is conjectural of which he accused the scholastics. Knowledge for him was only certain knowledge. He was determined to attain and work with clear and distinct ideas in contrast to confused ideas and in contrast to terms (scholastics) without any clear meaning. He built his own interconnected system of knowledge, comprising an account of knowledge, metaphysics, physics and other sciences.

This ambition is summarized in one of his last writings as "all philosophy is like a tree, metaphysics is the roots it starts with the intuitively apprehended existence of the finite self and proceeds to establish the criterion of truth, existence of God and the existence of material world. Physics is the trunk of the tree and it depends on metaphysics in the sense physics cannot be considered organic part of science until the ultimate principles of physics have been shown to follow metaphysical principles. Particle sciences which are the branches of the tree

will be truly science when their organic dependence on physics or natural philosophy is shown.

For Descartes tree of knowledge was its hierarchical organization. He held firmly to the notion that the interconnected body of knowledge has a particular order. For him knowledge begins in metaphysics and metaphysics begins with the self. From the self we arrive at God and from God we arrive at the full knowledge of mind and body. Thus he overthrows the accumulation of life-long beliefs and us reason alone to establish solid and permanent truths. Truths should conform to a rational scheme. Ideal philosophy means organically connected system of scientifically established truths. This shows not only systematic arrangement and a proof was his aim but believed in the use of method that would enable the philosopher to discover hitherto unknown truths.

Cartesian Method of Investigation

In his method to attain absolute certainty and universally acceptable knowledge, Descartes wanted a certain and undubitable starting point that even a radical could not shake the edifice of his philosophical method. Expressing perfect confidence in the capacity of human reason to achieve knowledge, Descartes wanted to accept only what is genuinely certain as valid knowledge in his method. In order to do that one must first deliberately renounce all of the firmly held but questionable beliefs previously acquired by experience and education. Thus in his second part of the Discourse on the Method, he characterized four simple rules for his rational method: 1) Accept as true only what is indubitable, never to accept anything as true if one does not have evident knowledge of its truth: that is carefully to avoid precipitate conclusions and preconceptions 2) One must analyze difficulties into as many simpler parts as possible 3) One must advance from the simplest and most easily known objects to ascend little by little to knowledge of the most complex 4) One must ensure that nothing had been omitted it is to make enumerations so complete and reviews so comprehensive. Therefore this Cartesian method means a set of certain and easy rules, such that anyone who observes them exactly will never take anything false to be true without any waste of mental effort but by increasing his knowledge step by step, will arrive at a true understanding of all those things which do not surpass his capacity.

Mathematics as the foundation

In order to do this he employs mathematics as the foundational tool. Mathematics must be the guide to clear the confusions and uncertainties of philosophy. He looked at mathematics as a mode of clear and dubitable reasoning, because it consists of the use of two mental operations; they are: **Intuition**: an immediate knowledge of anything. It is supposed to be direct and impeccable. It is the understanding of self-evident principles about which no doubts are possible. Self-evident principle is anything that does not require any proof to establish itself. **Deduction**: Is a logical inference from self-evident propositions. A valid conclusion can be arrived by proceeding from generalizations to particular. Therefore, Descartes' quest for certainty and his looking for mathematics as a model of reasoning was due to the revival of scepticism, which was one of the aspects of Renaissance, Charron's fideism (he was skeptical of reason – theological truths can never be attained by reason, only by faith) and Montaigne's skepticism. It is this that led to set philosophy on a sure basis. This quasi

mathematical procedure for the achievement of knowledge is typical of a rational approach. This method is also called as the method of Doubt.

Doubt and Certainty

Descartes insisted that the task of his method is to rid oneself of all prejudices by calling in doubt all that can be doubted. The path even to certainty begins with doubt. The doubting process frees oneself from all preconceived opinions and provides one the easiest route by which the mind may be led away from senses. It is a methodic doubt because he doubts not for the sake of doubting but as a primary stage in the attainment of certainty and for shifting the true from the false. In this way the skeptical doubt prepares the mind for certainty. The first step towards certainty is the discovery of the existence of the self. There is one thing that cannot be doubted. That is the doubt itself which is certain. If doubt or thinking is real then the doubter or thinker is also real. If the thinker is real then the objects whatever comes into his contact are real therefore he comes to conclusion "*Cogito ergo sum*" 'I am thinking therefore I exist.' This cogito argument not only derives a proof for his existence but also seek to discover the essence to demonstrate the existence of God and to provide the criterion to guide the mind in its search for truth. Thus this argument is to build the entire world from the thinking self. It is important here that it is not just the mind that is the foundation, but my mind. In this way the starting point of philosophy for him was connected with the rejection of authority.

Check Your Progress II

Note: Use the space provided for your answer

1) What is the importance of Cartesian method in philosophizing?

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2) Why did Descartes chose Mathematics as the foundation for clear and distinct truth?

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3) Explain the twin principles of doubt and certainty in Descartes method?

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2.5 LEIBNIZ'S AIM OF PHILOSOPHY

Gottfried Wilhelm Leibniz a German philosopher, mathematician and logician shared Descartes' concern with what he called the improvement of the sciences' meaning the advancement of knowledge which would render it secure against the possibility of serious doubt and error. Like Descartes he felt that the various sciences and our so called knowledge generally are not properly grounded and lack the certainty and freedom from the possibility of error and so wanted to provide for a foundation for knowledge. As Descartes' Leibniz too was very much impressed with mathematics. His philosophical method was modeled on mathematics hoping to get a comparable exactness and certainty of our reasoning about reality.

He was critical of the method and procedure of Descartes on a number of counts. Leibniz believed that there are two great principles directing our reasoning. **The principle of contradiction:** it is by means which we decide to be false that which involves contradiction and that to be true which is opposed to the false. It states that a thing cannot simultaneously be itself and another and the immediate evidence of sense data. **The principle of sufficient reasoning:** According to it if a being exists, it does so because there is a sufficient reason for its existence. It asserts that there is an adequate reason to account for the existence and nature of everything that could conceivably not exist. We may not know all the reasons from its existence. But there should be sufficient reason to be so. It is different from the principle of causality and the principle of identity. Eg. What is the sufficient reasoning as to why I am a man not a table? It is because I am a human substance. This principle affirms that everything that exists is accounted for in a rationalistic and orderly world.

From these principles Leibniz contends that the rules of common logic may be derived. To avoid all errors it is enough that one sticks to common rules of logic with great constancy and rigour. It is not necessary first to prove that existence and goodness of God which is not possible without these rules anyhow. Thus for Leibniz there was not only the two principles and indeed something more to start with than Descartes *Cogito ergo sum*. There are other truths. That is the particular contents of our immediate experience. What is immediately given is not simply that I think but also that I have the particular thoughts or perceptions I do. They do not guarantee that there exists anything independent of them, corresponding to them but they themselves are not subject to doubt. There are as many primary truths of the act as there are immediate perceptions. Therefore what is truth are how will one establish that truth?

Types of truth

In his method he holds that the truth is to be established by combining the simplest and the most basic elements of knowledge. The key idea here is the distinction between truth of reasoning and the truths of facts. This is yet another contribution of Leibniz. The truths of reasoning (a priori) are necessary and eternal truths, their opposite is impossible. Their denial can only lead to contradiction. For example: "a triangle had three sides." They are also analytical that is the predicate of the Truth of Reasoning is already pre-contained in the subject itself. Eg. Two and two is four. Such truths are arrived through analysis and reasoning. The opposite of such truths is indeed false and not possible at all.

Truths of Facts: The truths of fact (a posteriori) are contingent and their opposite is possible. It is not arrived at by rational analysis but by experience of the fact. These truths are synthetic that is an external reason is needed to equate the subject and the predicate in their propositions. However the predicates of the TF are also virtually pre-contained in the subject. One who has a vast and extensive knowledge of the subject would be able to know all its contingent possibilities. Thus in his method, Leibniz has a rather low opinion of the importance of empirical knowledge. He is much more interested in what can be discovered about general nature of things through the use of reason alone. It is this main reliance upon reason as opposed to experiment and his conviction that reason can reveal to us the basic structure of reality, despite the limitation applying to empirical knowledge, accounts for the traditional designation of Leibniz as a rationalist.

2.6 SPINOZA'S AIM OF PHILOSOPHY

Spinoza, a Dutch-Jewish philosopher, expounded part of Descartes' philosophy. In Spinoza's view the proper order of philosophical argument demands that we should start with that which is ontologically and logically prior, namely with the divine essence or Nature and then proceed by logically deducible stages. In adopting this approach Spinoza separated himself from Descartes. In this endeavor to give a rational explanation of the world, speculative metaphysicians have always tended towards the reduction of multiplicity to unity. Explanation in this connection means explanation in terms of causality and so they have tended to reduction of multiplicity to unity. In this sense Spinoza was a metaphysician with the ambitious aim of explaining reality or making the universe intelligible. For him the fundamental philosophical vision was one of unification and synthesis. Man's happiness consists in attaining the truth. Hence he was concerned with the method of attaining truth and not about the capacity of the mind to know truth. In order to attain truth the mind must get rid of various prejudices that distract us. For example the prejudice that God and nature are not one. Thus in his book, *Treatise on the correction of the understanding* he speaks of three levels of the method of knowing.

Levels of Knowing

Imagination: We can first of all look at things '*sub specie temporis'* i.e under the aspect of 'here and now' time. This takes place when we use imagination. This corresponds approximately to sensation. Our bodies are affected by other bodies passively and through this affection we come to know them. The knowledge of universal ideas also belongs to this level. Through opinion or imagination we neither perceive things in themselves nor infer them from the clear ideas of their causes. We nevertheless rely on ideas of this kind in our common life and this is therefore a useful source of knowledge. Imaginations give us vague, generalized and inadequate information.

Reason: Sometimes we employ reasoning to view reality as separated, isolated and distinct. The object of reason is common notions which are self-evident principles of mathematics and physics. This knowledge is already scientific but it is not the highest cognition because common notions and the conclusions inferred from them are abstract. They do not represent the essence of things in the richness of totality.

Intuition: We also view things in "*sub specie aeternitatis"* or under the aspect of eternity. We are able to glimpse the essential inter-relatedness of things. This is the most perfect level of knowing. Here we have perception of the individual things in all their fullness. This is a natural process of knowing which begins with the perception of individual unrelated phenomena, continues through the common notions or abstract principles of thinking and ends in a full and gratifying version of all things in God. On the criterion of truth he supplemented the ideas of Descartes. For Descartes clarity and distinctness was the criterion of truth, instead for Spinoza coherence is another criterion.

The Geometrical Method

Spinoza applied Geometrical method in order to explain the nature of God and world. This method had been propounded by the most prominent mathematician Euclid (300 BC, Alexandria, Egypt). It deals with the laws concerning lines, angles, planes, etc; he handled the problem of the world as a problem of geometry. According to him everything is said to follow the first principle or ground of the universe as necessarily as the propositions. He assumed, without questions, that it is possible to construct a system of metaphysics that will render it completely intelligible. The method guarantees true conclusions if only the axioms are true and the definitions are correct. Spinoza's abstract entities also apply to reality as such. Thus we have a real definition, an adequate, true or clear and distinct idea, of things. Although Spinoza uses the geometrical method in the *Ethica ordine Geometrico Demonstrata* (Ethics Demonstrated in Geometrical Manner), he does not attempt to justify or even explain it. This has led many readers to view its argument as an intricate and fascinating chain of reasoning from arbitrary premises, which as such never touches reality.

Check Your Progress III

Note: Use the space provided for your answer

1) What are the two great principles that direct our reasoning according to Leibniz?

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2) Explain the distinction between truths of reasoning and truths of fact?

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3) Relevance of geometrical method in the discovery of truth?

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2.7 LET US SUM UP

In order to provide a solid foundation to philosophy one has to adopt a solid and sound method. The rationalists in and through their methods have given a strong foundation for philosophy. Their emphasis on reason as a tool to discover truth brought in a new dimensional change in the Western thought, especially the paradigm shift taken by Kant in the history of Western philosophy. Rational method by using mathematics and its operations of intuition and deduction has eliminated the personal and subjective factors such as feelings and emotions from the body of truth. As a result it has given truth a rational scheme, in other words, it has demonstrated truth is a rational and systematic order.

2.8 KEY WORDS

A priori **:** truths which do not depend on experience

A posteriori **:** truths which do depend on experience

2.9 FURTHER READING AND REFERENCES

Magee, Bryan. *The Great Philosophers.* Oxford: Oxford University Press, 1987.

Marias, Julian. *History of Philosophy.* New York: Dover Publication, 1967.