Chapter Nine

Descartes: Method of Philosophy and Theory of Knowledge

Key Words:

Descartes, mathematical deduction, self-evident, indubitable knowledge, skepticism, methodological skepticism.

This chapter discusses the conception of knowledge advocated by Rene Descartes and the unique methodology adopted by him in attaining this knowledge. The thinkers of the modern age were naturally inspired by the success of the emerging new sciences. But as a philosopher, Descartes was more vigilant and approached the natural sciences with caution. He felt that it would not be possible for the natural sciences to claim absolute certainty owing to the fact that they depend upon the inputs received from the senses, which themselves are shaky and indeterminate. He examines the existing sciences and finds that it is the methodologically oriented approaches that distinguish them from other forms of knowledge and information gathering. But among the scientific disciplines, mathematics can claim absolute certainty and this owes to its unique methodology; the method of deduction. Mathematics begins with a set of self-evident axioms: the truth of which are never doubted as they are clear and distinct, absolutely certain and indubitable. Beginning with such self-evident and obvious axioms, mathematics deduces the rest of its knowledge from them, which by logical necessity, are also equally obvious, clear and distinct.

Since the reason for its certainty is the unique methodology adopted by mathematics, Descartes attempts to adopt a similar method in philosophy as well. The correct methodology of philosophy is expected to make it more accurate and ensure certainty. Descartes begins with doubting the existing methods adopted to gain knowledge in various disciplines; sense perception. He proposes to doubt everything that can be doubted and finally reach an indubitable truth, which would be the starting point of all knowledge in philosophy.

The Importance of Epistemology in Modern Age

Philosophy's primary objective in the modern period is to redefine itself as a foundational discipline that clarifies the fundamental questions about knowledge. Unlike ancient philosophy, it no longer deals with the question of ultimate reality and instead enquires about the nature, kinds, limitations and sources of knowledge. This change in emphasis was
fostered by the rise of modern science as a cultural institution. The rapid developments in modern science resulted in the decline of the Church’s authority in European culture. Instead, scientific rationality now raises a strong claim of authority in culture and human life. Science exposed many dogmas that prevailed for centuries as unquestioned and the newly emerging scientific temperament reiterated the importance of not accepting anything as authority or as knowledge without questioning it. It asserts that nothing can be affirmed as true without critical examination.

The two important elements in scientific method are the empirical element and the rational element. The empirical or the inductive element relies on sense observation and considers observation as paramount in the process of knowledge acquisition. It considers the testimony of the senses—what is in front of us and is the most obvious—as valid source of knowledge. In this sense science is the extension of common sense. On the other hand, the rational element does not rely on empirical observation, but on the deductive counterpart of our reasoning process. Hence both the approaches adopted by empiricism and rationalism, which represent the inductive and deductive processes of reasoning respectively are combined in modern science for gaining genuine knowledge. These are two important schools of modern philosophy and their division is based on the answer they provide to the question of the ultimate source of knowledge. While the empiricists considers sense experience as the fundamental source of knowledge, rationalism affirms that all knowledge depends on the innate structures of the mind.

The rationalists in general affirm that genuine knowledge consists of universal and necessary judgements and argue that the goal of thought is a system of truths in which the different propositions are logically related to one another. In this sense they advocate a mathematical conception of knowledge. They argue that the knowledge has its origin, not in sense perception, but in thought or reason. According to them reason and intuition are the sources of genuine knowledge and not sensation and experience. Therefore, they assert that there are truths that are natural to reason and are therefore, a priori. Hence most of our ideas are native or innate rather than adventitious. René Descartes (1596–1650), Baruch Spinoza (1632–1677), Gottfried Leibniz (1646–1716) are the some important thinkers of the rationalist tradition.

The empiricists consider sense perception as the source of knowledge and reject the concept of inborn or innate truths. They affirm that there are no propositions that yield
necessary or absolute knowledge. John Locke (1632-1704), George Berkeley (1685-1753) and David Hume (1711-1776) were the prominent representatives of this tradition.

In spite of such differences in fundamental assumptions, both rationalism and empiricism consider reason as a faculty of the mind through which truths about reality are known. They only disagree with regard to the question of the source of knowledge. But neither affirmed that all knowledge comes from experience as even the empiricists acknowledge that there is some knowledge that does not derive from experience.

**Rene Descartes : The Important Questions**

Descartes primarily enquires how to attain philosophical truth by the use of reason. He asks the question; how do I get clear and distinct knowledge? His objective was to develop a system of true propositions in which nothing is presupposed which was not self-evident and indubitable. He thus envisaged developing a system of knowledge with solid foundations and therefore would be free from skepticism. In other words, Descartes aims at finding for philosophy the certainty of a mathematical proof. This system of philosophy would be based upon intuition and deduction which will remain as certain and as imperishable as geometry. He held a very comprehensive notion of philosophy that includes metaphysics, natural sciences, mechanics and morals.

Descartes, as mentioned above, was enquiring how to arrive at foundational beliefs which are clear and distinct. They are self-evident to reason and hence it is impossible to doubt their validity. Descartes held that the certainty of such a foundational belief must be ultimate and not dependent upon the certainty of any other beliefs. Again, it must be about something which exists so that it is possible to deduce from it beliefs about the existence of other things.

In order to arrive at such a foundational belief, Descartes proposes a method of doubt. He proposes to doubt everything that can be doubted in order to arrive at absolute certainty. In one sense, this approach is integral to modernity’s critical spirit. It challenges old beliefs, systems and methods of knowledge. Descartes initiates what is known as methodical or methodological skepticism, which uses doubt methodically in order to arrive at true knowledge, which is beyond all doubt.
Before we proceed further, we may have to understand Descartes’ conception of human knowledge and reason, which he believed can gain that knowledge. We have mentioned above that he subscribes to a very comprehensive notion of philosophy that includes metaphysics, natural sciences, mechanics and morals. Philosophy was treated by him as a study of wisdom and according to Descartes, all the sciences taken together are identical with human wisdom which always remains one and the same. He thus affirms that there is only one kind of knowledge. Ultimately there is only one science, though it possesses interconnected branches. Metaphorically we may conceive human wisdom as a tree, the tree of wisdom. These roots of the tree constitute metaphysics which form the foundations of human knowledge and from where it derives its nourishment. The trunk is constituted of physics and there are three branches, medicine, mechanics and morals, under which all other knowledge concerning of humankind can be subsumed.

We have to now see some of the basic assumptions about the concept of reason. The Discourse on Method affirms that reason or good sense is the most evenly distributed thing in the world. It is the ability to judge and distinguish the true from the false and this ability, according to Descartes, is equally distributed among all people. It is the only thing that makes us human and differentiates us from the animals and hence is entirely present in each of us. Descartes conceived reason as the means to acquire a clear and certain knowledge of all that is useful in life. He maintains that reason employs a definite method in its pursuit of knowledge. Descartes thus proposes to explore the nature of this method.

He says that philosophy consists of an organically connected system of scientifically established truths which are absolutely certain and clear. These truths are ordered where the mind passes from fundamental self-evident truths to other evident truths implied by the former. He then realizes that such truths are present only in mathematics and suggests a universal application of the method of mathematics, as there is only one science and the method must be common to all pursuits and intellectual enquiries that aims at attaining knowledge. Hence there can be only one scientific method, which is the method of mathematical deduction. In other words, since the method which is applicable in mathematics is the most rewarding method, it must be the method of all sciences.

Descartes’ Approach
Descartes proposes to break with the past and start again from the beginning without trusting the authority of any previous philosophy. He exhibited a general disbelief with regard to the theories and methods of past philosophers, particularly the Greeks, the Aristotelians and the Scholastic thinkers. The main obstacle in the pursuit of knowledge is the lack of certainty in what we construe as knowledge. Most of our knowledge is based on uncertain assumptions, customs and conventions. And hence lack strong foundations. He thus proposes to systematically doubt all that could possibly be doubted. Descartes believed that this would take us to certain knowledge.

Descartes suggest not believing too firmly in anything of which I had been persuaded only by example and custom. He then says that, with this attitude he freed himself little by little from many errors, which can dim our natural light and even make us less able to listen to reason. He then turns his attention from studying the book of the world to the study of his own self. He says that he has used all the powers of his mind to choose the path he should follow, which, according to him was much more successful, than if he had never left his country or his books. Descartes thus suggests that the true method of enquiry should be introspective, where one turns to oneself and critically evaluates one’s own contentions. He then discusses four important steps to be followed in order to arrive at the correct understanding of things.

1. Never accept anything as true which we could not accept as obviously true; to carefully avoid impulsiveness and prejudice, and to include nothing in our conclusions but whatever was so clearly presented to our mind that we could have no reason to doubt it.

2. Divide each of the problems we examine in as many parts as we could, as many as should be necessary to solve them.

3. Develop thoughts in order, beginning with the simplest and easiest to understand matters, in order to reach by degrees, little by little, to the most complex knowledge, assuming an orderliness among them which did not at all naturally seem to follow one from the other.

4. Make enumerations so complete and reviews so general that we could be assured that we had not omitted anything.

**The Cartesian Meditations and the Method of Doubt**

Descartes suggests six Meditations, each one dealing with a specific aspect of his methodology that ultimately resolve certain important problems a philosopher who considers
gaining absolutely certain genuine knowledge as his objective would encounter. The first Meditation outlines two stages in the method; the skepticism in regard to the senses and the refutation of radical skepticism. Here he proposes to doubt everything that can be doubted in order to reach the indubitable starting point of all knowledge. This starting point has been conceived as the foundation of knowledge. He thus decides to doubt everything that can possibly be doubted and had decided to get rid of all the opinions he had adopted so far about the world. On the constructive side, this endeavour aims at commencing anew the work of building from the foundation. Descartes thus wonders, whether he could doubt the fact that he is in the place where he finds himself, seated by the fire, clothed in a winter dressing gown, that he holds in his hands a piece of paper, with other intimations of the same nature. He speculates the possibility that he might be in a state of insanity with disordered brain and also the possibility that he might be dreaming, as one may get deceived in sleep by illusions. It is also possible that God may cause him to make mistakes or an evil demon may be misleading him. He doubts the existence of objects, which he perceives, and also the fact that he possesses any senses. He says that the body, figure, extension, motion, and place can all be merely fictions of the mind. Hence, the beliefs in the testimony of the senses and therefore, of the existence of material things or the physical world are suspended. This forces us to doubt the knowledge obtained by the natural sciences. Further the beliefs in mathematics, which is widely held as a domain of certainties, can also be doubted, as an evil demon may cause me to believe in them and consider them as certain.

After outlining the skeptical part of his method, Descartes now ventures to counter skepticism. He thus says that, though he can doubt many things and the existence of a world, which he experiences, the fact that he doubts is beyond all doubts. Hence he cannot doubt his existence, because in order to doubt, he should exist. Descartes thus says that, every time I doubt, I must exist to doubt and even if a being with the highest power and the deepest cunning, may be constantly employing all his ingenuity in deceiving him, I must exist, since I am deceived. The fact that I am in doubt cannot be doubted. I, therefore, exist, because I think: cogito ergo sum, I think, therefore I am.

The “I exist” therefore, is the absolutely certain, self-evident, and indubitable first principle. It is the only necessary truth. Descartes argues that, I think, I am, I exist, are necessarily true each time it is expressed by me, or conceived in my mind, as “I am” and “I
exist” are certain as often as I think. From this it follows that, if I cease to think, then I should at the same time cease to be.

To Descartes, the Cogito is self-evident to reason and indubitable and one cannot escape the Cogito by doubting it. Even to doubt it is to affirm it. According to Descartes, it is the most certain truth and the most ultimate truth and is not dependent on any other more ultimate truths, as it is not inferred from any other truths, but is from where every other truth is inferred.

In the next stage, Descartes focuses more on this cogito and attempts to understand its real nature. The only thing we can say about it is that it is a “thinking thing”. This is because, I know that I exist, only because I think. Hence Descartes concludes that, I am only a thinking thing, that is, a mind. The cogito is therefore, a thing that doubts, imagines understands, affirms, denies, conceives, perceives, wills, refuses etc.

Therefore, Descartes’ philosophy begins with an objective; to identify the foundations of genuine scientific knowledge. He thus advances a method of doubt, where he doubts everything that can be doubted, in order to arrive at the indubitable starting point of knowledge. The cogito is the starting point. But the cogito only proves the existence of the mind. Or more accurately, it proves my existence as a thinking thing. The existence of the mind is thus proved in the beginning. This in no way proves the existence of the world of objects. One can still doubt its existence. Descartes was aware of this difficulty and thought that if he could prove the existence of God, then he would be able to prove the existence of the empirical world of objects as well. In the next chapter we shall discuss these issues in detail.

Quiz

1. Which of the following is not true of Mathematics?
   (a) It employs the method of induction   (b) It begins with a set of self-evident axioms   (c) its axioms are clear and distinct   (d) It employs deductive method

2. Which of the following is not true of modern philosophy?
   (a) Primacy to epistemology   (b) Primacy to metaphysics   (c) Scientific temperament   (d) Critical spirit.
3. In Descartes’ tree of human wisdom, the roots constitute of:
   (a) Morals   (b) Physics   (c) Metaphysics   (d) Mechanics.

4. What was the aim of Descartes’ method of doubt?
   (a) To arrive at the knowledge of things in the world   (b) To arrive at clear and distinct knowledge about the mind   (c) To separate the body from the mind   (d) To arrive at the indubitable starting point of all knowledge.

5. Which of the following is not true of reason according to Descartes?
   (a) The ability to judge and distinguish the true from the false   (b) It differentiates us from the animals   (c) The means to acquire a clear and certain knowledge   (d) Some people are more rational than others.

Answer Key
1. (a)
2. (b)
3. (c)
4. (d)
5. (d)

Assignments
1. Discuss Descartes’ conception of knowledge.
2. Explain the method of doubt as adopted by Descartes.

Books

**Web Resources**