FALLIBILISM OF KARL POPPER : A CRITIQUE

Saheli Basu

Associate Professor of Philosophy
Victoria Institution (College)
Mail : sahelidey@hotmail.com

Abstract

In modern times, it is Popper, who first developed the Fallibilism as a proper theory of knowledge. It was Xenophanes who developed this conjectural theory of knowledge. For him knowledge was just a web of conjectures. Popper's Theory of Knowledge is quite revolutionary in its nature. He points out to us that the real significance consists in its growth and progress and not in its absolute certainty. Thus he pulls down the concept of knowledge from its sacrosanct state to the ordinary human level. Knowledge is conjectural and fallible. According to him scientific knowledge is generally taken to be the best model of knowledge, it is the Popperian theory of knowledge, which serves its purpose best. It represents the correct picture of knowledge. Scientific knowledge is always conjectural. It is open to criticism. For them faith is completely insignificant in their scientific knowledge. In fact, testability is the essential mark of scientific knowledge. Newtonian science still remains a very significant scientific development even after it has been refuted by Einstein. Popper compares this stage with that of a climber on a mountain top who would not be sure that he has reached the peak of the mountain. Thus, for Popper, knowledge is progressive in nature. It is constantly approaching to a greater and greater truth. In other words, it is a process of greater and greater approximation to truth. The concept of verisimilitude is a concept of progressive approximation towards truth. Thus the Popperian epistemology tells us the story of the continuous growth of knowledge.

Keywords : Fallibilism, Conjecture, Verisimilitude, approximation to truth

Popperian view is that scientific knowledge is the best form of knowledge. It is always conjectural in nature. Refutability is the mark of a theory being scientific. We learn through trial and error. I have tried to develop Popper's positive epistemology, which consists of his fallibilism.

Through Popper's fallibilistic epistemology discards the much coveted certainly of the traditional epistemologists, it assumes the most significant dynamic aspect of knowledge. Knowledge is a continuously growing developing process. Popperism surely carries a revolutionary and consistent theory about scientific knowledge.

It is ordinarily believed that science is characterized by its empirical method, which is essentially inductive proceeding from observation and experiment. But Popper argues that the empirical

method of sheer observation and experiment need not necessarily be called scientific method. The study of astrology is based entirely on observation and experiment, yet in all fairness it cannot be called a proper science on the other hand, many of our metaphysical ideas, which are not variable in nature, contain the source of great scientific theories. Myths need not necessarily be non-scientific. In Popper's own words "…… science must begin with myths, and with the criticism of myths; neither with the collection of observations, nor with the inventions of experiments, but with the critical discussion of myths …."[1]

Popper's primary concern is to find out a criterion of demarcation by which science can be distinguished from pseudo science. The criterion of falsifiability is advocated by him which may serve as the desired criterion. With the help of this criterion he tries to show why he considers the theories of Newton or and Einstein to be scientific and those of Marx, Freud and Adler non-scientific. Marx, Freud and Adler are reluctant to express their theories to any criticism or any possible refutation. For them any observation is always a confirmation of their theory. They assumed the supposed universal confirmation of their theories. This particularly is the reason, according to Popper, what made their theories totally non-scientific.

The Newtonian and Einsteinian theories on the other hand, are of a different nature. They are exposed to all sorts of criticism. They are thus refutable or falsifiable. Newtonian theories have in fact been refuted by the Einsteinian theories. Both of these theories of Newton and Einstein could be put to a severe test and could be refuted is the significant mark of characteristic which made them scientific. Thus falsifiability or refutability stands for the Popperian criterion of demarcation between science and non-science. A scientific theory worth its name must be subject to refutation. According to Popper, confirmation is not the coverable truth about science. Every good scientific theory is compatible with certain things but incompatible with many more things. That is why a theory, which is not refutable by any conceivable event, is not scientific. So Popper writes, " ….the criterion of the scientific status of a theory is its falsifiability or refutability or testability."[2]

Popper's picture of science is thus different from what the justificationists think. For him it is not important that one should establish science as absolutely certain or probable. Human beings are fallible and consequently we must pass through a continuous process of testing and criticizing our stock of knowledge. As Popper says, we learn from our mistakes and gradually proceed towards a better theory. Thus for Popper the most significant thing about knowledge is not its claim for certainty but for its progressive nature. Though knowledge can never attain certainty, it is constantly approaching to a greater and greater truth. In other words it is a process of greater and greater approximation to truth.

The theory that knowledge is an approximation to truth through criticism has sometimes been criticized as a form of negativism in contrast with the justificationists who are positivists in their attitude. As a matter of fact the approach of the positivist is a subjective approach to truth. The subjectivists seek to attend truth through verification by observed instances. But can we really hope to get at a scientific theory, which would be irrefutable. Belief is a subjective state and truth thus analyzed becomes a property of our state of mind.

But in reply to this objection Popper would point out that concept of truth still plays a very significant role in his epistemology. We are prone to mistake and proper theories are always open to criticism. He also claims that he can significantly speak of mistake and falsity only

because he has an idea of truth. He encourages critical discussion because he wants to get nearer to truth. It is rather built up in the background of the idea of an objective truth.

Popper is of the opinion that "our main concern in philosophy and in science should be the search for truth. Justification is not our aim".[3] Popper observes that it is not possible that there should be a general criticism of truth. Absolute certainty is an impossible idea. "We are seekers for truth". [4] Popper says, "but, we are not its possessors."[5]

Popper was a common sense philosopher. He believes that science or rational thought must start from common sense. But it is equally true that common sense is frequently modified and replaced by a theory. According to Popper, every science and all philosophy are enlightened common sense. The criterion of common sense, which we make, prepares the way to progress.

It is understood that, Popper's intuition is not to reach absolute certainty, but only to consider the relative satisfactoriness of a theory. This satisfactoriness is indicated by the degree of empirical content. A Scientific theory, which is shown to have relatively higher degree of empirical content of information, would be accepted as more satisfactory than any other theory possessing a lesser degree of empirical content. The conception of content and its richness may be illustrated by a comparison between the contents of Newton's theory and those of Einstein's theory. Since Einstein's theory has greater explanatory power, it would be supposed to have greater content. Popper holds that a theory with greater content has lesser probability than a theory with smaller content. It offers greater challenge and enjoys greater probability. Yet this is the advancement in knowledge. Knowledge aims at high probability and so we should prefer theories with greater content.

So progress in knowledge would demand that we should endorse theories, which have greater explanatory and predictive power. The concept of "low probability" must not dishearten us because it simply means high probability of being falsified, and this is what all scientific knowledge should aim at. Science should proceed with the discovery of mistakes and continuous process of refutation and this is the process of the progress of scientific knowledge.

Popper consequently, presents his idea of 'truth likeness', which he characterizes, as 'verisimilitude'. The concept of verisimilitude indicates that truth is something to be approximated. The idea also shows Popper's lack of sympathy with the verificationists or the justificationists on the one hand, and ordinary fallibilists on the other. Popper's idea is that scientific knowledge is available when we keep up the habit of critical approach. The task of scientists are simply to criticize and test theories with the intention of finding out if we are mistaken anywhere. It is clear therefore, that the concept of verisimilitude is a concept of progressive approximation towards truth. According to him, the idea of truth may act as a regulative principle. Since truth is an object of approximation. There cannot be an absolute truth, but we may have a criterion of progress.

Popper's conjectural theory of knowledge provides him with enough ground for his evolutionary theory of knowledge. Knowledge grows through a continuous process of trial and error. Darwin's theory is that an animal which is well adapted to the changing environment, survives. The organs of an animal get transformed in response to the need in a changed environment and thus make it the fittest for its survival. Darwin's Theory of Evolution speaks of the method of trial and the elimination of errors. Scientific theories also survive when they allow errors to be exposed and corrected. Error is not always a vice. The amoeba makes errors but cannot criticize

and thus has not got the mechanism of error elimination. But Einstein differs from an amoeba because he can criticize and eliminate his errors and thus learn out of it. The learning and knowledge of Einstein gradually evolves through mistakes and their elimination. The Popperian epistemology tells us the story of the continuous growth of knowledge.

Popper gives a schema of how knowledge grows. A theory in science is evaluated with respect to some preexisting problems. There may be alternative competing theories. Between two such competing theories i.e. T_1 and T_2 the one with greater verisimilitude would be preferable.

If P_1 is the already existing problem, T_T is tentative theory, E_E is error elimination, than the schema of Popper stands like this $P_1 \rightarrow T_T \rightarrow E_E \rightarrow P_2$.

In upholding the view that scientific knowledge must be objective, Popper explains his notion of objectivity in the world of knowledge. The conception of an objective world of knowledge makes Popper a realist. He was a commonsense realist. More fully he was a pluralist. He developed scientific theory on behalf of his pluralistic view of the world. He believes like the native realists that there is an objective physical world and also a world of states of consciousness but in addition to these two worlds he speaks of a third world, which is no less objective than the other two worlds.

The third world is supposed to be constituted by theoretical system and critical arguments. The three worlds may be described as the world of critical arguments, the world of Physical world and the world of consciousness.

It may be thought that the problems and theories which constitute the third world, have no existence apart from the subjective mental states. Thus the independent existence of the theories and the problem composing an objective third world has been misconceived. Popper offers at least two arguments to show that a world of the kind mentioned above is really independent of the second world. Popper replies the knowledge in the objective sense is really knowledge without a knowing subject. This is knowledge in the true objective sense.

It appears that the term 'knowledge' gets a new dimension when we speak of the third world. There is no use of such expression as 'I know'. Knowledge simply remains a "branch of learning a science; and art".[6]

Popper sums up his contention in the form of three thesis. His first thesis is that traditional epistemology is interested in knowledge in the subjective sense. Popper holds that this is irrelevant to scientific knowledge.

His second thesis is that epistemology is concerned with the study of scientific problem, scientific discussion and critical argument. Three problems constitute a world, which is independent of the second world and consequently 'largely autonomous'.

The third thesis is that, knowledge is objective and finds place in the third world. Knowledge grows through the interaction between the scientists and the third world of objective knowledge.

This is how Popper stresses the need of his theory of knowledge without considering the sources of knowledge.

References

1. Popper, K.R. : Conjeetures and Refutations, Routledge & Kegan Paul,- London 1972 P.50
2. Ibid : P. 37
3. Popper, K.R. : Objective Knowledge, Clarendon Press - Oxford, 1972 P. 44
4. Ibid : P. 47
5. Ibid : P. 47
6. Ibid : P. 110
7. Popper, K.R. : The Logic of Scientific Discovery, Hutchison - London 1968
8. Popper, K.R. : The Open Society and its Enemies. Routledge & Kegan Paul,- London 1966