CHAPTER I

INTRODUCTION

At the outset of my thesis entitled: "Investigation of the problem of induction: A tentative solution proposed from the standpoint of philosophy of language", I like to say that the methodology which is adopted by me is qualitative in nature. The data, which I have collected, are mostly based on first-hand sources. I have also collected some data from essential reference books and Journals, where first-hand sources are not satisfactorily available.

Now, let me say about the statement of the problem. First of all I shall explain the meaning of the term 'induction' and I shall proceed to the problem.

In the most general way I can say that the term 'induction' is a kind of inference in which we draw a general or universal conclusion based on the observation of particular facts of experience. Induction, again, establishes conclusion from an observed particular to an unobserved particular. But there lies the problem of justifying the transition from particulars to universals or from particular to particular.

The first chapter of my thesis entitled "Introduction" comprises the introductory explanation of the problem.

In the second chapter 'History of the problem', I have explained the origination of the problem beginning with Aristotle. In this regard I have chosen a
selective process and discussed the views of some philosophers, namely, Bacon, Hume, Mill, Popper and Peirce. Though Aristotle used the word 'induction' for the first time, it is David Hume who raised the problem and as such he is known as the originator of the traditional problem of induction. He raises the problem when he discusses the cause-effect relation.

Various attempts have been made by the logicians and philosophers to solve the traditional problem, which is considered by them as the problem of justification of the truth of inductive conclusion. Justification here means the justification of a statement.

In the third chapter 'Deductive standard of justification' attempt is made to justify inductive argument by arranging it in a deductive way which was demanded by Hume himself as well as other deductionist philosophers.

Some logicians tried to justify induction by presenting inductive argument as a variety of deductions because they have agreed with the fact that the conclusions of deductive argument have superior certainty to provide. But at last it is found that it is not possible even in the part of the best induction to draw a certain conclusion from the premises. So the shortcomings of the deductive standard of justification is found to be unsatisfactory.

The fourth chapter is 'Rejection of induction'. In this chapter I have discussed mainly the view of Karl R. Popper. Popper's main issue is the rejection of
induction. To him, though it is believed that scientists depend for their starting-point on induction, it is true that the starting-point of science is the critical examination of myths which flow not from the collection of observation i.e. induction. His view is that the scientist is not called upon to explain how he makes the transition from observation to theories and thus there is no problem of induction.

If there were induction, it would not be logically valid and could not even be shown to be probable.

We shall find in the fifth chapter entitled: 'Induction as a self-supporting device' that we are justified in using induction and in relying upon inductive conclusions because induction works. Every natural science is based on inductive conclusions in some sort or other and everyone knows how successful science is. But this type of justification is also unable to solve the problem. If we follow this justification it will suffer from vicious circularity.

Next justification which I have proposed is that of Pragmatic justification which belongs to the sixth chapter. Here I incorporate the frequency theory of Hans Reichenbach. He maintains that when the universe contains the limits of frequencies it is orderly and this order can be discovered by using the rule of induction.

But, as will be seen, his theory bears no satisfactory solution.

The objective of my thesis is that in order to sort out the related problems of induction and to show that
when all the attempts to solve the problem from different standpoints fail, there is some hope to review the problem from the standpoint of philosophy of language and the last chapter (chap-vii), entitled: “The conclusion” is concerned with this.

My aim is to solve the problem from the standpoint of philosophy of language. So far I have found that no such attempt has been made to justify induction which seems to me a novel as well as necessary. The so-called dissolution of the problem is raised by P.F.Strawson. He shows that induction cannot be justified by showing that it is really a form of deductive reasoning. If it is a variety of deductive reasoning then what will be its premise? Strawson argues that in order to rely on inductive arguments it is better to say that it is reasonable rather than justifiable. Schlick has rightly pointed out that experience can never compel the abandonment of a convention. On the basis of this he makes a distinction between statement of fact and statement of convention. From this viewpoint Carnap and others have developed semantic and inductive logic as separate branches of philosophy. Thus we find that certainty belongs to Analytical Philosophy and I have tried my best to solve the problem from the viewpoint of language.