Human knowledge has been classified into different disciplines. Each discipline restricts itself to a particular field of study, having a specific subject matter. At least, at all the disciplines are both autonomous as well as related to one another. A discipline is autonomous in the sense that it has a particular well-defined domain as its subject matter and it deals with a set of restricted and specified problems. However, the autonomy of the discipline does not rule out the possibility of any kind of relation with other disciplines. The relationship between philosophy and science is an interesting philosophical theme. The relationship between philosophy and science has at least two different contexts in the history of philosophy. In the classical times, science was construed as a part of philosophy. For instance, in Aristotle, science was based on philosophy. Aristotle placed science in the area of theoretical sciences and tried to explain it on the basis of philosophical speculation. Thus, in the classical times science was either founded on philosophy or at least it was a part of philosophy. However, this relation is inverted in the modern period where some philosophers have sought to found philosophy on science. Science, in the modern period, has shed its dependency on philosophy and has claimed its autonomy. It has even influenced the philosophical thinking, and in some philosophical schools, science has become the foundation of philosophy. Political philosophy, as a branch
of philosophy, is no exception to this influence of modern science. This is evident in the philosophies of the modern philosophers from Descartes through Hobbes to Logical positivists, who have contributed to this inversion.

In discussing the philosophical implications of the inversion of philosophy depending on science, it is interesting to note that scientific theories often contest their previous theories in substantiating their position. It is natural that a scientific theory could be rejected by a new one. For example, Copernicus' revolution and Einstein's 'Special Theory of Relativity' came into existence by contesting Ptolemy's theory and Newtonian mechanics, respectively. Unlike science, philosophical theories are criticised and interpreted, but never completely rejected. Popper (1959) rightly acknowledges this difference between philosophy and science. In contrast, the rival social and political theories unlike their scientific counterparts exist simultaneously at different places, though they oppose each other radically. Co-existence of socialist political philosophy and liberal political philosophy in the present day world is the best available example for this. However, the case with scientific theories is not the same. This difference between political philosophy and science results in complexities when one is dependent on the other, as it is the case

1 It is a different matter that Popper sought to remove this distinction. He was committed to methodological monism and suggested falsification as a common criterion to science and philosophy.

2 I am not here concerned with the methodological discussions that are taking place in the recent times about continuity or discontinuity of the scientific theories.
with the modern period. The political philosophy of Hobbes serves as an interesting case in understanding the problems involved in basing political philosophy on science.

Though there is a continuous interest in the philosophy of Hobbes in the academic circles since 17th century there is a sudden increase in the amount of work that came up in the twentieth century. Preston King, in his introduction to Thomas Hobbes: Critical Assessments, observes that "What cannot be denied is that Hobbes’s work has been paid more sustained critical attention in the twentieth than in any preceding century..." (1993: vi). The sustained and critical attention that Hobbes commands from twentieth century scholars proves the relevance of his philosophy to our concerns, but it cannot explain the occasion for such an attention. My thesis gives an account of the reason for the sudden emergence of diverse interpretations of Hobbes that had cropped up in the twentieth century. This is the central argument of my thesis.

In this connection it is relevant to ask, how one would account for astonishingly diverse works on a particular thinker like Hobbes. Why did such a need, which amounted for the arrival of large number of works, arise? What caused such a curiosity in the twentieth century scholars? This curiosity is further strengthened by the fact that these are not works that particularly dealt with Hobbes’s scholarship or mere studies of Hobbes’s texts, rather, they are attempts to probe the monolith structure of Hobbes’s philosophy and to provide alternative foundations. They seek to provide to Hobbes some connection that is lost. This is what makes one
wonder about the emergence of these works. Further, these works are major
contribution in interpreting Hobbes. These works, while displaying diversity in
interpreting Hobbes, nevertheless, converge on the same purpose. This converging
point does give us a clue to proceed further. In order to proceed further we need to
look at the reason for the emergence of the works. The reason, according to King, for
the renewed interest in the twentieth century is because "He [Hobbes] was more
analytical than Machiavelli, more concise than Bodin, more historical than
Descartes, more 'modern' than any of them" (1993: i). King argued that along with
the specific skills of analyticity, consciousness, historicity, insightfulness and
coherence Hobbes's modem attitude towards the subject made him command
significant attention in the twentieth century by relating his philosophy to our times.

However, one must note here that though it is true that the skills of the author
certainly attract the attention of the scholars and cause the production of the number
of works on him, sometimes, besides these skills there can be other reasons also
which may cause such an upsurge. If the skills of the author alone draw the attention
of the scholars in producing works on him, then, if the author is skilled he must
attract the attention of the scholars all the time, without any exception. From the
words of King (above) we can understand that Hobbes did not attract the attention of
the scholars all the time. Only the present century attracted the attention of the
scholars more than the previous centuries. This implies that the greatness of the
author alone cannot cause the production of diverse works on him. Now a relevant
question that is to be asked is, what is the reason, if not the authors skills and
greatness alone, in the case of Hobbes, that caused the sudden increase in the works on Hobbes. King did not recognise the need to answer this question.

Going outside the framework of King the present thesis maintains that, to appreciate or evaluate the significance of these twentieth century attempts one may have to go outside Hobbes's scholarship or even look at the developments outside philosophy which might have necessitated these efforts. However, most of the interpreters have not discussed this aspect of the background to these interpretations earlier. This work argues that the arrival of the diverse interpretations cannot be answered only by looking at the developments within Hobbes's political philosophy. We have to go outside Hobbes's political philosophy to account for their arrival.

Modem period in science started with the discovery of Newtonian and Galilean theories, which were accepted unquestionably until twentieth century. However, the emergence of Special theory of Relativity in the twentieth century by Einstein has caused a set back to the Newtonian and Galilean theories. These developments, though internal to science, have their own implications even outside science. Hobbes's political philosophy is one of the instances where the implications of the developments within science can be observed. Given the fact that Hobbes's political philosophy is based on Galileo's Resolutive-Compositive method, the sudden

---

The traditional interpreters of Hobbes generally accept that his political philosophy is founded on Galileo's 'Resolutive-Compositive' method. Commenting on this Richard Tuck shows that both Richard Peters (Hobbes, 1956) and J.W.M. Watkins (Hobbes's system of Ideas, 1965) have demonstrated the impact of scientific
upsurge of the diverse interpretations in the twentieth century can be accounted by looking at the developments in the modern science.

Following the contestation of Galilean theories by Einstein's Special theory of Relativity, Hobbes's political philosophy hangs in the air without foundations. This work argues that it is in this context that the twentieth century interpretations can be accounted. Since it is difficult to discuss all the interpretations, I have taken a clue from C.B. Macpherson (1962: 9-12) who lists Leo Strauss (1936), A.E. Taylor (1938), J.H. Warrender (1957) and M. Oakeshott (1947) as the most influential intervention in Hobbes's political philosophy. These interpreters have put forward three important propositions to demonstrate the dependence of Hobbes's philosophy on scientific theories. They are, to quote Tuck, "First, that Hobbes's political theory was intimately connected with his general scientific philosophy. Second that his scientific method was the same as Galileo's, which was in turn a well established principle of scientific inquiry... namely the so called 'resolutive compositive method'. Third, that this was a method of empirical inquiry designed to elicit a moral or political science in the modern sense - something, which could be used to explain human social behavior. Few people [other than those in the second of the post-Kantian traditions] would now disagree with the first of these propositions (1985: 218). This dependence has given scientific status to the political philosophy of Hobbes, making it more rigorous in methodology and helping him to construct a coherent system of philosophy, which is both rational and indubitable.
interpreters of Hobbes in the twentieth century. The present thesis confutes only to Leo Strauss, A.E. Taylor, J.H. Warrender and C.B. Macpherson’s own interpretation (1962), while excluding M. Oakeshott, who is not very relevant to the present endeavour. In this work, we elaborately discuss these alternative interpretations of Hobbes, which are discussed briefly by Macpherson.

Given this fundamental relation or dependency, Hobbes’s political philosophy can become a good instance to understand the relationship between philosophy and science, especially the dependence of philosophy on science. Further, the complications in the inverted relationship between political philosophy and science provide a ground to bring these interpreters together. These twentieth century interpreters either implicitly or explicitly argue against the view that Hobbes’s political philosophy is based on the method of natural sciences. Strauss is explicit in the rejection of science as the foundation of Hobbes’s political philosophy. However, the interpretations of Taylor, Warrender and Macpherson implicitly reject the scientific foundations of Hobbes. The primary purpose of Taylor is to piece out a consistent theory of moral obligation from the philosophy of Hobbes. Warrender concentrates on constructing a coherent theory of obligation. For Macpherson, locating the possessive individualistic qualities in the seventeenth century philosophy of Hobbes is the primary intention.

Following this discussion on the relation between philosophy and science in the introduction, I will discuss in chapter I. the impact of scientific intervention in Hobbes’s political philosophy as an important instance. In this chapter, I will discuss
how Hobbes had used the scientific theories such as materialism, motion, geometric method and Galileo's Resolutive-Compositional method, as foundations in the course of the construction of his political philosophy by showing textual evidences.

The next four chapters discuss four various responses to the question about the predicament of Hobbes's political philosophy after its foundations i.e., Newtonian and Galilean theories were contested by Einstein's Special theory of Relativity. Chapter II discusses Strauss's rejection of scientific method as the basis of Hobbes's political philosophy. Strauss is explicit in his rejection, and considers 'self-observation' as the basis of Hobbes's philosophical construction. According to this view, the political philosophy of Hobbes is 'mistakenly attributed' in method and material to natural sciences. Strauss, further, points out that the origin of the material for Hobbes was provided by the tradition through the influences of Scholastic humanism and Aristocracy, and not by the modern science. He, thus, minimizes the significance of science in the philosophy of Hobbes.

Taylor-Warrender thesis, as it is usually called, argues against the importance of scientific method in Hobbes's philosophy by establishing a discontinuity between theory of psychology and political philosophy. However, they differ regarding the basis on which Hobbes founded his philosophy. While it is 'moral imperative' which is the basis of Hobbes's political philosophy for Taylor, for Warrender it is 'moral obligation'. Taylor views it from a deontological point of view, whereas Warrender gives it a naturalistic stand. The arguments of these two philosophers shall be the subject matter of III and IV chapters, respectively.
Chapter V discusses Macpherson’s argument, which minimises the importance of scientific method and views ‘Possessive Individualism’ as the basis of Hobbes’s political philosophy. Macpherson argues that Hobbes was able to construct his deductive system because he took it for granted that there existed a market model of society, which is of possessive nature. The basis of the theory of the political obligation of Hobbes, therefore, is possessive individualism, but not the scientific method.

In conclusion, the discussions in chapters II to V in establishing the independent status of Hobbes’s political philosophy by providing alternative foundations will be, further, related to the sudden upsurge in the twentieth century literature on Hobbes. Since endorsing any one of the interpreters deviates the discussion from the main concern, the thesis concentrates on establishing the context of the upsurge. Though all the four interpreters that are discussed have their own major concerns in interpreting Hobbes, the thesis viewed them as responses to the developments in realm of the relationship between political philosophy and science. In this way, this work explicates the context of the recent revival in Hobbes’s political philosophy.

My argument is not intended to undermine either Science or Political Philosophy, but to merely clarify the relation between the two. I shall not enquire into the truth or falsity of the relation. Rather, my questions are: what are the implications of scientific intervention to political philosophy? Does political philosophy lose its relevance simply because it tried to systematize itself with the
influence of science? Does it have to become a mere historical fact by losing its relevance? Does the political theory have to lose the relevance of its conclusions just because it is based on a scientific theory?