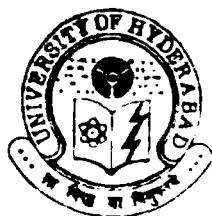


**ON CERTAINTY: A STUDY ON THE LIMITS OF
SCEPTICISM**

**A THESIS SUBMITTED TO THE UNIVERSITY OF
HYDERABAD FOR THE DEGREE OF DOCTOR OF
PHILOSOPHY IN THE SCHOOL OF HUMANITIES**



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Dedicated
To
My Parents
Sri. Koteswara rao
&
Smt. Shaidini

And
My (Late) Grand Parents

Sri. Sundaraiah
&
Smt. Sowbhagyamma

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CONTENTS

1. INTRODUCTION	1-7
2. CHAPTER-I	
THE NATURE OF SCEPTICISM: THE TRANSITION	
FROM PYRRHO TO HUME	8-51
3. CHAPTER-II	
POSSIBILITY OF KNOWLEDGE: THE RATIONALIST	
AND THE EMPIRICIST	52-105
4. CHAPTER-III	
LOGICAL NECESSITY AND SCEPTICISM	106-161
5. CHAPTER-IV	
QUEST FOR EMPIRICAL CERTAINTY	162-217
6. CHAPTER-V	
THE LIMITS OF SCEPTICISM: MOORE AND	
WITTGENSTEIN AGAINST THE SCEPTIC	218-264
7. CONCLUSION	265-266
8. BIBLIOGRAPHY	267-271

INTRODUCTION

Scepticism has a long history. It started in Greek philosophy especially in the philosophy of Pyrrho. Afterwards scepticism appeared in the medieval times and then in modern philosophy. Even in the contemporary times scepticism is a dominant trend in philosophy. Thus scepticism as a philosophical school is entrenched in the history of Western Philosophy.

The present study is a study of the limits of scepticism. It aims at showing that certainty is the foundation of all human thought and knowledge. Though the method of doubt has been universally acknowledged as a method of inquiry after Descartes, it has never been accepted that philosophy can only doubt and never presuppose any certainty and necessity in human knowledge. In the history of philosophy the debate between the sceptics and the non-sceptics is a very interesting one. While the sceptics challenge and question the very certainty of human knowledge, the non-sceptics try to prove that there are absolutely true beliefs underlying our knowledge of the world.

It has been my effort in this essay to develop the argument of the sceptics in the historical perspective from Pyrrho to Hume and after. My effort here is to take scepticism in its strongest form and to see if, as a philosophical position, it can hold good at all. Besides, I have taken the greatest epistemologists of all times like Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume, Kant, Russell and A.J. Ayer to show that scepticism has been defeated in many ways. The philosophers other than the sceptics have come to recognize that human knowledge is possible and that there are foundational principles underlying human knowledge.

Scepticism has many forms such as epistemological, moral, religious and so on. But it is the epistemological scepticism which is the most fundamental and the most serious. Therefore I have taken epistemological scepticism for a critical study. The

known sceptics in philosophy like Pyrrho, Hume and others have been concerned with epistemological scepticism. Epistemological scepticism questions all beliefs that mankind entertains about the world. That is why we have to take scepticism regarding these beliefs to be the most challenging one.

In chapter I entitled “The Nature of Scepticism The Transition from Pyrrho to Hume”, I have discussed the historical development of scepticism from the ancient Greek times till Hume. In section one I have developed the different sceptic positions within the Greek tradition. Obviously Pyrrho is the greatest Greek sceptic. He laid the foundations of scepticism for all time to come. He believed that there is nothing that man can be sure of. Everything is doubtful, uncertain and impermanent. Therefore, he believed that the ultimate aim of philosophy is to liberate man from confusion and ignorance. In section two I have discussed Descartes’ delineation of the sceptical position in terms of his ‘dream argument’ and the ‘demon argument’. Though not a sceptic, Descartes could introduce scepticism as an alternative standpoint which questions the very foundations of our knowledge of the world. In the dream argument he shows that we cannot be sure whether we are at the moment dreaming or not. The sceptic refuses to believe that we are not dreaming. The demon argument adds further that our so-called knowledge claims about the world could be a matter of the Demon’s projections and manipulations. Therefore, our claims to knowledge are nothing but false beliefs which we entertain under the influence of the malignant Demon. In the final section I have discussed Hume’s scepticism which is a continuation of the Cartesian dream argument. Hume believes that there is nothing certain in human knowledge. Everything is a matter of a chance and probability. Hume rejected the rationalists’ dogma that human knowledge is founded on universal and necessary principles. Thus he established the Pyrrhonian argument that in knowledge there is no rational validity and everything goes as a matter of practical convenience.

In chapter II entitled "Possibility of Knowledge: The Rationalist and Empiricist Models, I have discussed predominantly the two epistemological models, namely rationalism and empiricism. Under the rationalist model I have discussed the arguments of Descartes, Spinoza and Leibniz. They argue that human knowledge is possible and that there are self-evident and necessary principles underlying human knowledge. Descartes' *Cogito* argument is the first non-sceptical argument to establish that the self of the doubter exists self-evidently. Spinoza develops a more objective deductive argument to show that human knowledge is based on self evident principles derived from human reason. For Spinoza, everything in our knowledge is deductively valid and therefore the question of certainty of human knowledge goes without saying. Leibniz further adds that all knowledge, mathematical as well as empirical, is innate to human mind. Leibniz's famous distinction between necessary and contingent truths makes the rationalist model the most acceptable and dependable.

Under the empiricist model I have discussed the way Locke, Berkeley and Hume have discussed the possibility of human knowledge. Locke, Berkeley and Hume were defenders of empirical sciences. Therefore, they all accepted that the human mind has access to the empirical world through our sense experience. Hume, both Locke and Berkeley believe that human reason in collaboration with sense-experience is sufficient to establish human knowledge. Thus we find a refutation of scepticism even within empiricism, because empiricists themselves accept some sort of certainty in human knowledge.

It is Kant who brings out the underlying necessity and certainty of human knowledge within his transcendental and critical model of philosophy. Kant has shown that both rationalism and empiricism are viable arguments against scepticism and that they genuinely arrive at the certainty which we require in knowledge, though in quite different ways. Kant, however, shows the limitations of both rationalism and

empiricism by arguing that there is a superior way of arriving at certainty by a transcendental understanding of the structure of human reason.

In chapter III entitled “Logical Necessity and Scepticism” I have discussed the nature of necessary truths and their place in the system of human knowledge. Leibniz’s notion of necessary truths as different from the contingent truths was further developed by Kant. The notion of necessity thus has been the most interesting notion in rationalist and empiricist epistemology. The truths of mathematics and logic are held in high esteem by both rationalists and empiricists. We are indebted to Leibniz for making the necessary truths of mathematics the cornerstone of logic and epistemology. He has shown that the logically necessary truths are also metaphysically necessary because even God cannot violate them in creating the world. Thus the Leibnizian concept of necessity has given rise not only to Kant’s transcendental necessity but also to the latter-day concept of necessity in the possible world semantics of Kripke. However, the Leibnizian tradition was challenged by Hume, the positivists and by Quine. Hume has reduced the Leibnizian necessary truths into matters of relations of ideas and thus truisms of our logical thought. The positivists further added that these truths are nothing but linguistic conventions. Though Quine rejects the positivist distinction between analytic and synthetic truths, he, like the positivists, doesn’t accept that there is anything metaphysical about the necessary truths. He puts the necessary and the contingent truths wit in the same system of human knowledge and accords them a central place in that system. Quine thus rejects Leibniz and opens up a new way of understanding necessity without its theologico-metaphysical background. It is, however, Kripke who brings out a new metaphysical notion of necessity underlying our common beliefs like ‘Water is H₂O in terms of his notion of rigid designation.

In this way the philosophers defending necessary truths have clearly shown that there are truths in knowledge which are necessarily, self-evident and a priori. Especially

the truths of mathematics and logic belong to this category. Even the demon argument of the sceptics cannot reject these truths. There are truths of reason which no thinking human being can give up.

In chapter IV entitled "Quest for Empirical Certainty," I have discussed the notion of empirical certainty as demonstrated in the philosophy of Russell, Moore, Price, A.J. Ayer, Austin and Strawson. The notion of sense-datum has been introduced into philosophy by Russell and Moore in order to refute the sceptics' challenge to our knowledge of the external world. Russell has claimed that in knowing the objects of the world we know with certainty the sense data. The sentences expressing our sense-data are incorrigible and beyond doubt. Therefore, Russell pleads that even when we can doubt the external objects we cannot doubt the sense-data. Moore, following Russell, adds that it is the sense-data that give us the absolutely true knowledge about the world. In his "Proof of an External World" Moore argues that our access to the world in our sense-experience cannot but be guaranteed with certainty. The sense-data that we have are sufficient to prove that there are objects independently of our mind.

The argument from sense-data is carried further by Price, A.J. Ayer and others. The argument has been further strengthened to show that the language of sense-datum is the primary language on which is dependent the language of physical objects. The vast network of scientific language is derived from the basic language of sense-datum. A. J. Ayer has defended against Austin that there is a primary language of the phenomenal kind. We cannot do away with this primary language even if we admit that there are physical objects which are central to our conceptual system. The protocol language of the logical positivists is another version of this primary language Strawson goes further in claiming that our language of physical objects is superior in many ways to the language of sense-datum. Though he does not disown sense-data, he finds it more congenial to accept that physical objects are central to our conceptual system.

In this way one finds that the empiricist notion of certainty is as much rooted in the epistemological tradition as the notion of logical necessity. If something is empirically certain in our knowledge then scepticism cannot be true. The dream argument of the sceptic can never succeed in proving that we are all the while dreaming while experiencing the external world. We can always prove that we perceive the external world through our sense-organs.

In the fifth and final chapter entitled “The Limits of Scepticism: Moore and Wittgenstein against the Sceptic’, I have discussed specifically the arguments developed by Moore and Wittgenstein against the sceptic. In contemporary times Moore and Wittgenstein have argued against scepticism in a very serious and authentic way. Moore in his “A Defence of Common Sense” and “Proof of an External World” has argued that there are certain beliefs which all of us inherit from common sense. Such beliefs can never be sacrificed for the sake of other philosophical beliefs. These pre-theoretical beliefs constitute the frame of reference within which we can think at all; for example, we cannot think without accepting the truth of the belief that we are living on the planet, Earth, or that we are having physical bodies. Therefore, there is an underlying certainty in these beliefs. This certainty can be defended, justified and proved, according to Moore.

Wittgenstein while commenting on Moore finds that while Moore is right in his criticism of scepticism, yet his defence of common sense is philosophically unwarranted and logically vacuous. It is because, according to Wittgenstein, common sense needs no defence and the external world needs no proof. The fact that our commonsensical beliefs are true is evidenced in our language and actions. The fact that we use language presupposes that there is a world with which language is related. No proof is needed to show that there is a world we are talking about. We are already in the world. Similarly,

our other empirical beliefs are so much a part of language-games and our forms of life that we cannot doubt any of them. Thus Wittgenstein's criticism goes to prove that there is no epistemological refutation of scepticism because it will lead us into an infinite regress. The only solution is to come back to language and forms of life to show that scepticism is out of place. Scepticism is necessarily rooted out, once we see the basic structure of our thought and language. This argument may be called the grammatical argument in defence of the necessary truths in knowledge and language.

To conclude, scepticism as a philosophical position becomes irrelevant and absurd when it questions the very grounds on which we stand. A sceptic cuts the branch on which he himself stands. Therefore, it is necessary to realise that the sceptic must limit his doubting only within the commonly accepted conceptual structure.

CHAPTER – I

THE NATURE OF SCEPTICISM: THE TRANSITION FROM PYRRHO TO HUME.

Scepticism has a long history from the Greek times to Hume and after. It has remained a permanent philosophical standpoint with varying degrees of intensity and radicalness. While Pyrrho, the Greek sceptic, is the most radical of the sceptics, Hume is a moderate sceptic with tolerance for the non-sceptic point of view. In between we have sceptics of various kinds who have carried on the sceptics' debate across the centuries.

Since my aim is to prove that scepticism must be false if human knowledge is possible, I begin with a historical survey of the development of scepticism from the Greek times to Hume. The aim in this chapter is therefore to present the multifaceted argument of the sceptics in the historical perspective.

1. THE GREEK SCEPTICISM.

Translation of the works of Sextus Empiricus concerning Greek Scepticism in the beginning of the 16th century activated the Continental philosophers later the British philosophers. Scepticism did one great service to philosophy, it led to the introduction of modern age of philosophy on the Continent, later Britain too got liberated from the medieval thinking. Scepticism was a direct enemy of dogmatism. Many scholars consider Plato as the first sceptic and Aristotle as the first dogmatist. The view has got currency through the influence of Arcesilaus and Carneades who were the directors of Plato's Academy during the Hellenistic age. However, the credit is given to Pyrrho of Elis for giving birth to Scepticism. It became matured by the time it reached the age of Sextus Empiricus. Therefore this chapter is devoted to Greek Scepticism, Descartes and Hume. Since Scepticism as a school occurred only in Greece, a synoptic glance on the Greek sceptics has been made, beginning from Pyrrho and ending with Sextus Empiricus. Though not a sceptic, Descartes uses Scepticism to defeat Scepticism. After

its death in Greece, Scepticism revived after several centuries in the Continent. Descartes has been taken as the representative of the Continental reaction to Scepticism. Though John Locke and Berkeley reacted in their own fashion to Scepticism, they were not so vocal as Hume. Hume considered himself as a constructive sceptic. He represented the British thinking on Scepticism. This chapter is restricted to Hume, Descartes and the Greek Sceptics. A study on the limits of Scepticism presupposes a study of Scepticism in depth.

Pyrrho is considered as the founder of the Greek school of Scepticism. As a matter of fact Scepticism that took its birth in the Continent in modern times had its roots in Greek Scepticism. Rather the 16th and 17th century philosophers namely, Montaigne, Gassendi and Marsenne started interpreting the thoughts of the Greek Sceptic Sextus Empiricus. Neither Descartes nor David Hume were ignorant of Greek Scepticism. There are references to Pyrrho in the writings of Hume. Hume clearly mentions the name of Pyrrho and Pyrrhonism, and it is well known that Descartes started as a reaction to Pyrrhonian thinking. So Pyrrho can be described as the father of Western Scepticism and not only the father of Greek Scepticism. A reputed scholar of Greek Philosophy of the Hellenistic age remarks, "that the name that the school bears, Skeptic, goes back to Pyrrho himself. The philosopher must consider and examine (skeptesthai) all opinions and recognize that all affirmations have the same validity."¹ So Pyrrho becomes the father of Scepticism in its real sense. This scholar further remarks concerning the impact of Pyrrho on western philosophy, "it is this so-called Pyrrhonian Skepticism that we find systematized in the writings of Sextus Empiricus and that had a notable influence -- not in the Middle Ages when the works of Sextus were barely known, but from the sixteenth century onward. Many thinkers like Montaigne, Bayle, and Hume adopted a skeptical position and others like Gianfrancesco Pico, Descartes above all, and even Kant used skeptic arguments to demolish certain philosophical doctrines."²

This does not mean that Greek Philosophers prior to Pyrrho were devoid of sceptical attitude. Of course their Scepticism was partial. Heraclitus was sceptical about the nature of things surrounding us. He thought that contrary to our perception the universe is in constant motion and change. But Heraclitus did not mean that the real nature of the things couldn't be known. What he meant is simply that the reality is devoid of permanence. He succeeded in making the distinction between appearance and reality. It is only the appearance that presents permanence to our senses, because of appearance our senses are deceived into thinking that the real nature of the universe is also characterized by permanence. But Parmenides presents a wholly opposite view. For him the reality is characterized by permanence. Change and motion are deceptions introduced by our sense perception. What information the sense perception gives to Heraclitus is wholly different from the information given to Parmenides. So they had contradictory views about reality. If Heraclitus is right then Parmenides is wrong. Pyrrho was well aware of the controversies going on in Greek philosophy of his time.

If one accepts Pyrrho's thought then one cannot say either that reality is permanent (Parmenides) or that it is in flux (Heraclitus). Pyrrho was a legendary figure. Like Socrates and Buddha he never wrote anything. He only talked. So also like Socrates and Buddha Pyrrho's talk also survived. He too had faithful disciples, among whom Timon was well known. The position of Timon was like that of Plato. Plato was responsible for propagating the thoughts of Socrates. Similarly Timon propagated the thoughts of Pyrrho. Hellenistic philosophy owes more to Pyrrho than to any other philosopher of that time. He was a kind of Socrates of the Hellenistic world. According to A.A. Long, "for the Hellenistic Philosophers Pyrrho occupies a position that is comparable, in many respects to that of Socrates in relation to the philosophy of the fourth century BC."³

Pyrrho was born at Elis about 365 BC. He was a student of Anaxarchus. Anaxarchus was the court philosopher of Alexander the Great. That is how both Pyrrho and Anaxarchus got a chance to reach India with Alexander. It is said about Anaxarchus that he was influenced by the naked philosophers of India. Anaxarchus considered physical world as illusory. According to Sextus Empiricus, "A good many people ... have said that Metrodours, Anaxarchus and Monimus abolished the criterion (of truth) - Metrodours because he said 'we know nothing, nor do we even know just this, that we know nothing'; and Anaxarchus and Monimus, because they compared existing things to stage- painting and took them to be like experiences that occur in sleep or insanity."⁴ It is very common in India to call the physical world illusory. But this view was very uncommon in the Greek thought. It is doubtful that any philosopher prior to Anaxarchus held that the world is like a stage painting. This view itself is sufficient evidence that Anaxarchus was influenced by the naked philosophers of India, who were described as Gymnosophists by the Greeks. Anaxarchus certainly influenced Pyrrho's thought. So also Pyrrho was influenced by Gymnosophists of India. According to Diogenes Laertius, Pyrrho "would maintain that nothing is honorable or base, or just or unjust, and that likewise in all cases nothing exists in truth; and that convention and habit are the basis of everything that men do; for each thing is no more this than this."⁵ Pyrrho's reference to convention and habit as the guide of our actions sounds like David Hume. This is an attack on Jurisprudence, ethics, ontology and epistemology etc. Aristoclis also points out, "According to Timon, Pyrrho declared that things are indifferent, unmeasurable and inarbitrable. For this reason neither our sensations nor our opinions tell us truths or falsehoods."⁶ Pyrrho is blaming not so much the limitation of our psyche as the nature of objects supposed to occupy the reality. The objects happen to be so constituted that the human mind is unable to grasp them. Since opinions are formed on the basis of sensations, so if the sensations are rejected opinion will also be rejected. Pyrrho rejected the assertions of Dogmatists who claimed to possess knowledge. He taught that every object of human knowledge involves uncertainty. He argued that it is

impossible ever to arrive at the knowledge of truth. According to Arne Naess, "Pyrrho's Scepticism is.... superior to any other variant in its consistency, its radicalness, and also in its *practical* importance for intellectually gifted persons with high ideals of sincerity and honesty."⁷ If a sceptic is consistent he cannot avoid radical conclusion. So if one sacrifices radicalism one would have to sacrifice consistency. "*Philosophical* scepticism covers all fields of articulated cognition or discursive thinking. Pyrrhonism belongs to that kind."⁸ He spent a great part of his life in solitude, and was undisturbed by fear, or joy or grief. Pyrrho sees Scepticism as the road to perfect mental peace and the escape from the calamities of life.

Pyrrho said that the proper course of the sage is to ask himself three questions. Firstly, we must ask what things are and how they are constituted. Secondly, we ask how we are related to these things. Thirdly, we ask what ought to be our attitude towards them. As to what things are we can only answer that we know nothing.⁹ We only know how the things appear to us, but of their inner substance we are ignorant. If the real nature of things cannot be known either to senses or reason, then there is nothing by reference to which the truth or falsehood can be tested. Pyrrho is attacking all theories of knowledge, which seek to show that certain perceptual experience provides accurate information about the real nature of objects. We cannot get objects independent of sense-perception, and sense-perception provides no guarantee that we apprehend things as they really are. Objects in themselves are not available to test our sense-perception. Sense-perception reveals what appears to the percipient, but what appears cannot be used as sound evidence from which to infer 'what is'. Pyrrho is making a distinction like Kant between Phenomenon and Noumenon. Things as they are in themselves cannot be known. It is only the appearances of things with which we are acquainted. A.A. Long says, "Pyrrho is arguing that our perceptual experience can never be sufficient to warrant indubitable statements or beliefs about the external world. He does not deny that something, say, yellow sweet and sticky *appears* to me and he

will admit that I may be justified in saying, 'This looks like honey'. But he holds that my sense perception is quite compatible with the proposition 'this is not honey' as well as the proposition 'this does not look like honey to Pyrrho'.¹⁰ Here Pyrrho is showing the difference between the object as perceived or appears and the same object independent of its being perceived. Pyrrho says that it is possible to have contradictory statements on each and every thing. Arne Naess points out while interpreting Sextus Empiricus that the sceptic "finds that to any *pro*-argument for a doctrine or proposition there can be found an at least equally strong *contra* argument,.... he finds no better grounds for accepting the arguments in favour of the doctrine than for accepting those against."¹¹

For Pyrrho both pro arguments and contrary arguments are equally strong and balanced, which leads him to detach himself from all judgements. So he suggested to suspend judgements. He suspended judgements on moral concepts also. For Pyrrho suspension of judgements leads to freedom from confusion. According to Naess "... he (Pyrrho) eventually finds that *epoche* leads to, or is accompanied by, just that peace of mind (*ataraxia*) which he set out to achieve by finding truth."¹² Nothing is true or false. It only appears so. In the same way nothing is good or evil. Only it appears so. These appearances are sufficient guide for our actions, be they moral or non-moral.

It might have become clear that Pyrrho's Scepticism was not something that was restricted to the theoretical level, he uses his Scepticism for reaching a given form of life that can be characterized as the life without attachment of any kind. Most of us, if not all of us, prefer to live an active life. But Pyrrho's preference was quite unlike us. He lived a kind of life, which exhibited the detachment from the world. Detachment from the world presupposes the abolition of desires. According to Timon, "Desire is absolutely the first of all bad things."¹³ Pyrrho's Scepticism was not the result of arm-chair thinking. It was the result of a deep study of life. While moving with Alexander's

any Pyrrho had first hand experience with human suffering. In such a situation indifference to the world would be a natural outcome. As Emil Brehier points out, "Pyrrho must certainly have had direct contact with Hinduism since while accompanying Alexander on his Voyages, he met the Hindu ascetics whom the Greeks called Gymnosophists and must have been struck by their insensitivity and indifference even to torture."¹⁴

After Timon's death in 230 BC there remained no direct disciples of Pyrrho to continue his tradition. Though Pyrrho died, Scepticism survived. It became the property of Plato's Academy. For nearly 200 years Scepticism was the property of Plato's Academy, of which the first sceptic director was Arcesilaus, who was supposed to be the head of the Second or Middle Academy. He was born in 315 BC. Like Pyrrho he also taught the suspension of judgements by providing arguments for two contrary positions. He revived the dialectical tradition of Plato, for which Diodorus became well known. Arcesilaus was rightly described by a contemporary of his time. "He was "Plato in front, and Pyrrho in the back and Diodorus in the middle," thus asserting that Arcesilaus was only in appearance Platonic, but Pyrrhonian in reality."¹⁵ One can hardly deny Pyrrhonian influence on Arcesilaus. According to Kristeller, "Arcesilaus affirms that we must suspend our assertions about everything. Every perception and every assertion (*logos*) is uncertain. The arguments in favor of contrary assertions are of equal force, and all things are incomprehensible (*akatalepta*)."¹⁶ Arcesilaus introduced the term incomprehensibility. It was opposite of comprehensibility. Stoics maintain the distinction between comprehensive perception and incomprehensive perception. Comprehensive perceptions are free from uncertainty. This led Arcesilaus to reject comprehensive perception altogether. If all perceptions are incomprehensible then all of them are uncertain. Arcesilaus was deadly against the Stoics.

According to Sextus Empiricus, there was one aspect in which Arcesilaus was

different from Pyrrho. “ For Arcesilaus suspension of judgement was an “end in itself”. Whereas for Pyrrho this suspension carries with it the tranquility of the soul (*ataraxia*).”¹⁷ There was another aspect in which Arcesilaus differed from Pyrrho. Pyrrho considered dialectic as an unnecessary exercise. But Arcesilaus was a dialectician, and used dialectics in support of his Scepticism.

Arcesilaus, in order to justify his headship of Plato’s Academy, proposed a sceptic interpretation of Plato. The Sceptic direction, which Arcesilaus gave to Plato’s Academy, lasted for almost two centuries. Referring to Arcesilaus, Diogenes Laertius points out that, “he (Arcesilaus) was the originator of the Middle Academy, being the first to suspend his assertions owing to the contrarities of arguments. He was also the first to argue pro and contra, and the first to change traditional Platonic discourse and, by question and answer, to make it more of a debating contest.”¹⁸ The old Academy lost its original character, it was full of dogmatics who had no interest in dialectic. So there is a sense in which Arcesilaus gave a new life to Academy.

The second important academic sceptic was Carneades. His period is supposed to be 213-128 BC. He became the head of the Third Academy. The second Academy was headed by Arcesilaus. The contribution of Carneades to Greek philosophy was immense. He carried Greek philosophy to Rome. In 156 BC Carneades went to Rome as a part of an Athenian Embassy. It is said that Carneades in Rome made a profound impression on his listeners. In Rome Carneades presented himself as a real sceptic, devoting his first lecture in favour of Justice and second against Justice. As A. A. Long quotes “when Carneades had been sent by the Athenians as an ambassador to Rome, he discoursed at length on justice in the hearing of Galba and Cato the censor, the greatest orators of the time. On the next day he overturned his own discourse with a speech putting the opposite position, and undermined justice which he had praised on the previous day.”¹⁹ Carneades had to show to Galba and Cato his own rhetorical exercise,

therefore, the second lecture was essential. Secondly, Carneades wished to show that he is opponent of his own views. That all views for him have hardly any value, speaking against Justice is as good or, as bad, as speaking in favor of Justice. Carneades gave a practical demonstration the he was a sceptic.

Carneades attacked the stoic's criterion of truth. Kristeller points out, "There is no criterion of truth, neither the intellect (*logos*) nor perception, nor Phantasy, nor any other thing, because all these things deceive us."²⁰ It is not only the empirical reality and judgements concerning reality that are doubted by Carneades, he also doubted "certainty of Axioms in mathematics."²¹

The major contribution of Carneades is the concept of probability. His position is called probabilism, which is an intermediate position between radical Scepticism and dogmatism. The other dimension of his probabilism is that 'Carneades was perhaps the first to introduce into logical and philosophical discourse the concept of the probable (*pithanon*) which stands in the middle between the certain and the dubious. The New Academy was therefore characterized by probabilism."²² Those who are working on probability will understand the importance of Carneades for bringing the attention of intellectuals to this concept. Once certainty is rejected probability remains the only concept to be given a serious thought. One may find echo of Carneades' thought in Hume. He too rejected certainty, and had to fall back on probability.

Carneades finds that the concept incomprehensive introduced by Arcesilaus does not show that the incomprehensive perception must be uncertain. It is only by saying that perception is probable, it is ruled out that it is certain. According to Sextus Empericus, "Despite the fact that everything is uncertain, for Carneades the probable is sufficient for judging and action in daily life."²³ Concerning both Carneades and Arcesilaus a commentator writes "So great was Carneades' stature and authority that

after his death it was his philosophy more directly than that of Socrates and Plato that Academics felt required to interpret and defend (this is perhaps why some sources treat his headship as the inauguration of the 'New Academy' with the school under Arcesilaus forming the 'Middle Academy' i.e. transitional phase).²⁴

Academic Scepticism came to an end with Philo of Larissa. He was the head of the Academy from 109 BC. Sextus Empiricus described him as the founder of the Fourth Academy. The fact that he is described as the founder of the Fourth Academy shows that he might have made some significant contribution to philosophy in general, if not to Scepticism. It is through the writings of Cicero that Philo is known. For some years he was one of the principle teachers of Cicero. However, commitment to Scepticism which we find in Arcesilaus and Carneades is missing in Philo. If his impact has been as great as that of Arcesilaus and Carneades, the Academy would not have gone back to its old style. Though the director of the New Academy, he was knocking at the gates of the old Academy.

Sometimes in the middle of the first century BC Aenesidemus started the Pyrrhonist movement, revolting against the New Academy headed by Philo of Larissa. He was based in Alexandria, not in Athens. Sceptics for Aenesidemus meant searchers. The Academic sceptics from the time of Arcesilaus to the time of Philo were not Pyrrhonists. Pyrrho rejected dialectics, but the Academic sceptics made use of it. Only Pyrrho's actual personality was recognised by the Academic sceptics. For 200 years Pyrrhonist philosophy was extinct, Aenesidemus revived it. His work *Pyrrhonist Discourses* survived. The aim of the book is to establish "that there is no firm basis for cognition, either through sense-perception, or indeed in thought."²⁵ Both the phases, the earlier phase of Pyrrho and Timon and the later phase beginning with Aenesidemus, have been well presented by Sextus Empiricus. Of course Sextus Empiricus also exemplified the views of Academic sceptics. Aenesidemus has attacked not only the

non-sceptical systems but also the Academic sceptics, particularly Philo, who drifted towards the old Academy.

It is said that Aenesidemus made a pioneering contribution to the sceptical methodology. This was done with the detailed discussion of 'ten modes' (tropes). They are nothing but ten ways of achieving the Pyrrhonist suspension of judgements. One may be surprised to know from Sextus that Scepticism for Aenesidemus was a road which leads to Heraclitianism. The surprise is because Aenesidemus was extremely devoted to Pyrrho, and for Pyrrho the aim was *ataraxia*. Whether Pyrrho accepted the doctrine of flux is questionable because he accepted no doctrine, be it the doctrine of flux or the doctrine of permanence. Then why did Aenesidemus refer to Heraclitus? According to A.A.Long and Sedely "...this *may* be adequately explained as a specifically anti-Stoic campaign on Aenesidemus' part. Heraclitus was regarded by the stoics as an important fore runner, and it has been plausibly suggested that Aenesidemus was trying to embarrass them by developing the un-Stoic aspects of Heraclitus' thought."³⁶ With Aenesidemus the center of Scepticism shifted from Athens to Alexandria, with Cicero it further shifted to Rome. Cicero used Latin in his writings so he was making Greek Philosophy popular among the Romans. Prior to Cicero, Epicureans had their entry into Rome. Pleasure-loving people of Rome welcomed Epicureanism. Cicero, being the student of Philo of Larissa, accepted the moderate Scepticism of the Academy. He rejected both Epicureans and stoics. However, as a jurist he move to stoicism. It is certainly not his Scepticism, it is his stoicism that led him to natural law and natural justice. Credit goes to Cicero for bringing Hellenism to Rome.

Though last but the most important member of the Pyrrhonist group was Sextus Empiricus. It is because of him that the Greek Scepticism, not only Pyrrhonian, survived. His works, the *Outlines of Pyrrhonism* and *Against the Mathematicians*, had

been translated in several languages. The history of Scepticism has come to be preserved through Sextus. It is through his work only that we know about the different sceptical movements till the middle of the second century AD, which was supposed to be his period. His works became popular after fifteenth century AD, when they were translated in Latin and French etc. Sextus was originally a medical doctor and not a philosopher. He was not an original thinker or a genius but was a very good scholar. His both the works exhibit his scholarship. His first book *Outlines of Pyrrhonism* is devoted to ten modes (tropes) of Aenesidemus. It is through empirical investigation that Sextus discovered that different animals have different sense impression of the same objects. This is because different animals have difference in their origins, physiological structures and their audio-visual apparatus. The pattern of the argument is illustrated through the first mode as follows.

1. "X appears F to animals of kind K
2. X appears F* to animals of kind K*
3. It is impossible to decide whether the appearance of K or K* have authority
4. So we suspend judgement as to whether X is really F or F*,"²⁷

Likewise different modes have been discussed in different ways, but the aim of all the modes is the same i.e. suspension of judgements. These modes are as follows: "1, the mode depending on the disparity between animals; 2, that depending on the differences between men; 3, that depending on the different structures of the sense-organs; 4, that depending on situations; 5, that depending on positions, distances and locations; 6, that depending on admixtures; 7, that depending on the qualities and configurations of the objects; 8, that derived from relativity; 9, that depending on regularity or rarity of meeting; 10, that depending on ways of life, customs, laws, legendary beliefs and doctrinaire opinions."²⁸

Before we close the discussion, some serious objections against Pyrrhonian Scepticism have to be considered. The major objection is in connection with belief and

action. An action is supposed to be the result of accepting a judgement. When one uses an umbrella to save himself from rain, 'it may seem puzzling why a Pyrrhonist should open his umbrella if he does not even take impression that it is raining to be true.' It was only because he thought that it is raining that he was led to open his umbrella. His action was the result of accepting the truth of a judgement. Sextus would reply "...that his actions are either instinctive, e.g. drinking when thirsty, or conditioned by customs and educational processes of his own society, and can therefore be performed automatically without the intervention of assent." Pyrrho accepted custom and habit as the guide for living among appearances. Every action should be prefaced by a belief is the philosophers' myth which Pyrrho rejected. He lived till the age of 90, years in spite of the facts that he suspended judgements on all matters whatsoever. Similarly, "we can ascribe to Aenesidemus the position that ordinary acts of self-maintenance and self-preservation may be performed automatically, without assent."³⁰ All this means that the actions of the Pyrrhonian sceptic cannot be the result of a rational choice, they are like instinctive actions of animals. The superiority of man over animal is dissolved. This is not a desirable consequence to which Greek Scepticism has led us.

2. DESCARTES ON SCEPTICISM

Descartes is undoubtedly the father of modern philosophy. Modern philosophy is characterized by its revolt against Aristotle and the Aristotelian spirit that was hovering throughout the period of medieval philosophy. Opposition to Aristotle was Descartes' major occupation. His *Meditations* attempted to introduce foundations of his own physics against that of Aristotle's. As he remarked, "these six Meditations contain all the foundations of my physics. But please don't say so; because those who favour Aristotle would perhaps make more difficulty about approving them; and I hope those who read them will accustom themselves insensibly to my principles, and recognize their truth, before noticing that they destroy those of Aristotle."³¹ So Descartes is

supposed to have introduced a new physics that provides a new outlook about the world, in opposition to the Aristotelian physics that provided the outdated outlook of the world. Descartes' opposition to Aristotle is like Galileo's opposition to Ptolemy.

Scepticism contributed a lot for the Hellenistic transformation of Greek thought. So also Scepticism seems to have played a major role in the construction of the modern thought. *Outlines of Pyrrhonism* by Sextus was translated into Latin by Eestinne in 1562. Just after 18 years Montaigne published his *Apology for Raimond Sebond* which exhibited the influence of Sextus. In his *Apology* Montaigne has reproduced a lot of material from Sextus. He attempted to show that neither sense or reason can give us any knowledge. The reality with which we are acquainted is always distorted. Consider some remarks of Montaigne from the last part of *Apology*: "since our condition is always adjusting things to self and transforming them according to its own nature, we no longer know what things are in reality; for nothing comes to us but what is falsified and altered by our sense.... seeing the senses cannot settle our dispute, being themselves full of uncertainty, it must be reason that is to do it; but no reason can be established without the support of another reason; so here we are running backwards to infinity.

Both we and our judgement, and all mortal things, are perpetually following and rolling onward. Consequently nothing certain can be established concerning the one by means of the other, both the judging and the judge being in continual motion and mutation."¹²

Montaigne's reference to "continual motion and mutation" implies that no proper judgement is possible because what is judged is always slipping away. Though not directly, this is Montaigne's way of recommending suspension of judgements. Montaigne used Scepticism to reject reason and sense so that one is able to accept Christianity and faith alone.

Montaigne excluded extreme conclusions of Sextus. He attempted to show that

there is no conflict between the Pyrrhonian thought and the Christian doctrine of salvation. Montaigne rejected dogmatism, but he also rejected extreme conclusion to which a Pyrrhonian is committed. Pyrrho has not rejected appearances, he rejected only reality. One should not ask any questions about reality. But one could adjust one's life to appearances. Montaigne was responsible for the spread of Pyrrhonism on the Continent. Pyrrhonism brought into existence on the Continent a new spirit in the early 17th century. Montaigne's Pyrrhonism, according to Popkin, was 'popularized by his disciple Pierre Charron in his *De la Sagesse* and *Les Trois V'erite's*, and Jean Pierre Camus in his *Essai Sceptique*. This view formed a basic part of the intellectual climate of the *liberty* of the early 17th century in its scepticism of and freedom from traditional doctrines. Montaigne and Charron were among the best read and most admired thinkers.³³ Renaissance Humanism coupled with Pyrrhonism brought out a completely new age - age of spirit - to the Continent. The Continent refused to be suffocated by the fetters of tradition. This study of appearance was further developed by Gassendi. According to him, the Pyrrhonists had no hesitation in accepting appearances. Life would have become impossible if appearances were also rejected. Pyrrho was certainly interested in promotion of life, and not in its annihilation. It is only when one lives that one can attain a state of *ataraxia*. Gassendi was interested in science. He accepted the atomistic theory about appearances, which involved the existence of unobservable particles. According to Gassendi, science is a body of truths about appearances, not about reality. After Gassendi came in contact with Mersenne, he gave up Pyrrhonism. He became an Epicurean. Perhaps it is under the influence of Epicureanism that he developed the atomic hypothesis.

Mersenne popularized Pyrrhonism in his own fashion. It is in condemning Pyrrhonism that he brought out the details of Pyrrhonism. According to Mersenne, the sceptics are enemies of both God and science. In order to condemn Pyrrhonism, Mersenne gave detailed exposition of the book one and book two of the *Outlines of*

Pyrrhonism. His hostility popularized Pyrrhonism more than harming it. The challenge of Pyrrhonians was fully understood only by Descartes, perhaps Mersenne was responsible for Descartes' awareness of the danger of Pyrrhonian thinking.

When Descartes entered into the academic world he discovered that science was given an empiricistic and probabilistic interpretation. This kind of interpretation led to Scepticism. He wished to give new foundations to science by opposing Scepticism. As Christopher Hookway points out, "Descartes' principal adversaries were various sceptics and Pyrrhonists: his aim was to provide foundations for science and religion by refuting Scepticism."³⁴

Though Descartes was the father of Modern Philosophy, he was certainly not the father of modern Scepticism. The range of modern Scepticism is limited. It has nothing to do with the practical life. Modern sceptics are quite unlike the Greek sceptics. Scepticism was used by Pyrrho for ethical ends. As we have already seen, scepticism led Pyrrho to the state of suspension of judgements. Suspension of judgements was required to have the mental state of solitude or peace. In Greek terminology it has been described as the state of *ataraxia*. Cartesian scepticism, as will be shown in this section, was wholly different from Pyrrhonian scepticism. The fundamental difference is that scepticism is not a doctrine to which Descartes was committed. Scepticism is not a doctrine in the sense in which monism or dualism etc. are doctrines. Descartes established dualism of mind and body, and used scepticism for carrying out his project. Hume used his scepticism for denial of the external world. This was done in order to bring out his own form of subjective idealism. So far as their schools are concerned, we can say that Descartes belongs to the school of Rationalism and Hume belongs to the school of Empiricism. Pyrrho is known for Scepticism and practical life, which he led, so is also the case of Timon. We cannot even say that there is any such thing as a school of Scepticism in modern times, as there was a school of Scepticism among the Greeks.

Consider the case of Descartes. In the Cartesian sense, a sceptic is one who doubts. To doubt the truth of a proposition means that one is not certain about its truth. To doubt is to invite the mental state of uncertainty. How to remove this mental state and to arrive at the opposite state, the state of certainty? This was Descartes attempt. As Bernard Williams points out, referring to the Cartesian doubt, “the Meditations use the doubt to lead out of the doubt into knowledge and a correct conception of things...Descartes claimed that he had taken the doubts of scepticism farther than the sceptics had taken them, and had been able to come out the other side.”³⁵

So scepticism is used as a tool or a method to arrive at certainty. Therefore, Descartes, scepticism is described as methodical Scepticism. Scepticism is not a doctrine but a method. Any method is like an instrument that we use for certain purpose. Once the purpose is served, the tool or instrument is kept aside. Once certainty is obtained, the method of doubt becomes defunct. We need not worry about it. Descartes' position does not coincide even with the position of the Academic sceptic to whom Sextus Empericus refers. An Academic sceptic remains in the realm of probabilities. He never reaches the state of certainty.

Descartes' position would become clear even from the first sentence of *Meditations*. He picked up 'doubt' as an instrument for obtaining a piece of information that is free from doubt. Consider the opening remarks of the first *Meditation*. “Some years ago I was struck by the large number of falsehoods that I had accepted as true in my childhood, and by the highly doubtful nature of the whole edifice that I had subsequently based on them. I realized that it was necessary, once in the course of my life, to demolish everything completely and start again right from the foundations.”³⁶ Descartes clearly scrutinizes the beliefs, which he had in the past; some of these beliefs later become false. So it naturally comes to his mind that there is no guarantee that the

beliefs which he had at present may not become false in future. This leads Descartes to a thought-experiment. He contemplates the possibility of doubting all the beliefs, which he holds, including those, which he has not so far rejected. This leads to the possibility of entertaining universal doubt, doubt that is not restricted only to this or that item. Being a mathematician and a physicist his idea is the discovery of the foundations on which the structure of knowledge may be erected. Descartes expects that his universal doubt would lead to those foundational truths, which he expects to be free from doubt.

So far as the empirical world is concerned, its knowledge depends on our senses, such senses as hearing, seeing, tasting etc. Are senses reliable? Descartes' trouble is that senses cannot give knowledge that is free from uncertainty. Do not senses deceive us? Yes, they certainly do. As Descartes points out in the first page of the *First Meditation* itself, "...from time to time I have found that the senses deceive, and it is prudent never to trust completely those who have deceived us even once."³⁷ The deception to which Descartes is referring in this context is limited. If we look at a tower from a distance, though it is actually square in shape, it appears as round. Descartes points out that there are situations in which we can get false beliefs. Our perceptual beliefs are conditioned by many factors like proper lighting, the normal power of vision, etc. It is a universal fact that the distant objects appear somewhat smaller in size and shape than their actual size and shape. But this cannot lead us to doubt empirical judgements. Senses seem to deceive us in some circumstances, but seem to give us knowledge in other circumstances. Therefore, Descartes was in need of an argument which is more general. Dream argument was such a general argument. The better example of deception is dreaming. As Descartes writes, "How often asleep at night, am I convinced of just such familiar events- that I am here in my dressing-gown, sitting by the fire- when in fact I am lying undressed in bed."³⁸ There is no guarantee that what I am seeing, smelling, touching, hearing etc. is not part of a dream. The senses, which operate when I am awake, are the same, which operate when I am sleeping. I see an

apple on the table. The apple that I see could be a real, physical apple or an apple appearing in my dream. I hear the church bell ringing. This ringing could be a part of my dream. I have tasted mangoes and apples in my dream no less than in my waking state. How can it be shown that I am not dreaming now? There is no marked difference between the waking state and the dreaming state. This situation allows the possibility of doubt concerning empirical reality. This argument casts doubt, not only on physical objects like tables and chairs, but also on my body. In my dream I am eating an apple. If the apple is not physical, how could my mouth be physical, or the process of eating, a physical process? Since the physical objects are doubted, Descartes is led to doubt such science disciplines as physics, astronomy, medicine and other similar disciplines.

Judgements concerning empirical reality are very different in nature from judgements that are arithmetical and geometrical. Certainty associated with geometrical and arithmetical judgements cannot be removed by dream argument. It makes quite good sense to say that I see a chair in the corner of this room, but I may be dreaming. But it makes no sense to say that $2+2=4$, but I may be dreaming. To reject mathematical judgements, the dream argument appears to be non-functional. As Descartes points out, "For whether I am awake or asleep, two and three added together are five and a square has no more than four sides. It seems impossible that such transparent truths should incur any suspicion of being false."¹⁹ So Descartes recognizes the impotency of the dream argument for conferring uncertainty on mathematical judgements. In order to cast doubt on arithmetical and geometrical judgements, Descartes first contemplates about the hypothesis of God. God, being omnipotent, could perhaps mislead me about any judgement, be it an empirical or an a priori judgement. But this would imply that God is a deceiver. According to Descartes, "God would not have allowed me to be deceived... since he is said to be supremely good."²⁰ So God could not be a reason for my doubt about a priori judgements. His goodness does not allow deception. Descartes comes to the conclusion "that not God, who is supremely good and the source of truth,

but rather some malicious demon of the utmost power and cunning has employed all his energies in order to deceive me."⁴¹ So the demon becomes the grand deceiver. If the demon can mislead me into thinking that 2 and 2 make 4, he may also mislead me into thinking about the physical objects. After the introduction of the demon argument, the dream argument becomes redundant. The demon is sufficient to mislead me into the truth of mathematical judgements as about the truth of empirical judgements. The dream argument is superior, in the sense that most of us, if not all of us, had had dreams, but very few persons, mostly psychotics, have seen Demons. Demon hypothesis is wider, but less authentic. Dream argument is restricted, but quite authentic.

It is interesting to note that some judgements remain true whether I am asleep or awake. 'Two and three added together are five' and 'A square has no more than four sides', according to Descartes, remain true in both, the waking state and also in the sleeping state. This opens the possibility of having such transparent truths, which remain true in spite of the deception by an all-powerful deceiver. Even Descartes' demon would fail to deceive me about their truth. The statement 'I doubt' is one such truth. For if I doubt that I doubt even then I doubt. Doubting is a form of thinking, like such other forms as believing, asserting, etc. Believing, asserting, etc. are species of the same genus. The genus in question is 'thinking'. The relation between 'doubting' and 'thinking' is like the relation between 'red' and 'colour'. Red is a colour. So accepting something is 'red' is accepting that it is 'coloured'. Similarly, if there occurs doubt then there occurs thinking. So Descartes has reached the most indubitable truth, the truth of 'I think'. This truth has also led him to another truth, the truth of 'I exist'. If 'I think then I exist', because it is contradictory to say 'I think but I do not exist'. Descartes considers these two truths as clear and distinct.

Referring to the Cartesian 'cogito ergo sum' (I think therefore I exist), Hintikka comments, "After hundreds of discussions of Descartes' famed principle we still do not

seem to have any way expressing his alleged insight in the terms which would be general and precise enough to enable us to judge its validity or its relevance to the consequences he claimed to draw from it.”⁴² Obviously Descartes’ ‘famed principle’ refers to ‘cogito’. In this situation what is possible on our part is simply to point out the difficulties to which Descartes has led us. The first question which comes to one’s mind is whether Descartes considers ‘cogito’ as inference, that is, whether ‘sum’ has been inferentially derived from ‘Cogito’? The use of ‘ergo’ or the English word ‘therefore’ suggests that ‘I exist’ has been syllogistically derived from ‘I think’. If ‘I exist’ is the conclusion of the syllogistic inference then there must be a major premise, which is general. The major premise, which has not been expressed, would be something like ‘everything that thinks exists’. If it is true that ‘everything that thinks exists’ coupled with the truth that ‘I think’, then it clearly follows that “I exist”. But the difficulty arises with this kind of reasoning; how has Descartes arrived at the truth of the major premise, which is general? Descartes does not accept that ‘cogito’ is a syllogism, that ‘I exist’ has been syllogistically derived from ‘I think’. In his writings sometimes Descartes rejects that ‘I exist’ is derived syllogistically. As Bernard Williams quotes Descartes against syllogistic derivation of ‘I exist’ from ‘I think’, “when some one says “I think, therefore I am or I exist”, he does not deduce his existence from his thinking by means of a syllogism... if he deduced it by means of a syllogism, he would first have had to know the major premise, “Everything that thinks is or exists.””⁴³ But how could one form general propositions without having the knowledge of particular propositions? The position to which Descartes leads us is to accept that ‘I exist’ is derived from ‘I think’, but not in a syllogistic fashion. ‘I think’ therefore I exist’ is a single proposition and not a combination of two propositions. As Bernard Williams writes ““I think therefore I am”, in the misleading form of an inference, expresses in fact a single proposition, which is the exact point at which doubt is halted.”⁴⁴ Hintikka also maintains the same. Hintikka writes, “by saying cogito, ergo sum he does not logically (syllogistically) deduce sum from cogito but rather perceives intuitively (“by a single act of mental

vision") the self-evidence of sum."⁴⁵ Descartes' intuition perhaps functions like this. Consider the proposition 'I think but I do not exist'. This proposition is certainly self refuting. If I do not exist how could I think? My existence is a presupposition of my thinking. My thinking in a way becomes possible through my existence. Therefore, Descartes succeeds in deriving 'I exist' from 'I think'. This derivation cannot be called syllogistic, because the major premise is missing. According to Hintikka, "Descartes realised, however dimly, the existential inconsistency of the sentence "I don't exist" and therefore the existential self-verifiability of "I exist", Cogito, ergo sum is only one possible way of expressing this insight."⁴⁶ The same thing holds about Cogito. There is inconsistency involved in saying 'I do not think'. Therefore, 'I think' becomes true by the very fact of its expression.

Gassendi's argument against 'Cogito' deserves attention. Gassendi finds nothing very remarkable about Descartes' 'Cogito' argument. Why appeal to my thinking for inferring my existence? Why the mental state of thinking? Why not a physical state, a state like the state of walking. Copying the style of 'Cogito', Gassendi points out that my 'existence' can be derived from my 'walking'. One can argue like Descartes 'I walk therefore I exist'. Descartes has argued against Gassendi that a physical state cannot be a substitute for a mental state. My existence is indubitably inferred from my thinking. No such inference is possible with a physical state. The reason is very simple: I can doubt that I am walking because sometimes 'I do not walk', yet I think I walk, as happens in a dream. There is no incoherence involved in saying I doubt that I am walking, for I may be dreaming.

Therefore, there is no indubitability attached to 'I walk'. Then from 'I walk' how can one draw one's existence which may be indubitably true? But if 'I doubt I think' even then 'I think'. Therefore 'I think' is indubitably true, and from this indubitable truth follows another indubitable truth, 'I exist'. Certainly my existence is guaranteed if

it is derived from 'I think' rather than derived from 'I walk'. While replying to Gassendi - type arguments Descartes writes, "I may not, for example, make the inference "I am walking, therefore I exist", except in so far as the awareness of walking is a thought. The inference is certain only if applied to this awareness, and not to the movement of the body which sometimes – in the case of dreams – is not occurring at all, despite the fact that I seem to myself to be walking. Hence from the fact that I think I am walking I can very well infer the existence of a mind which has this thought, but not the existence of a body that walks and the same applies in other cases."⁴⁷ To some extent at least Descartes has met the Gassendi – type argument.

What sort of certainty is attached to 'I think' or 'I exist'? Their certainty is not logical, that is they are not tautologies. Neither 'I do not think' is self contradictory, nor 'I do not exist' is self-contradictory. Therefore, neither of the two propositions 'I think' and 'I exist' are analytically true. If it is maintained that these propositions are certain, then their certainty is empirical, not logical. However, they are different from other kinds of empirical propositions. These propositions, according to Bernard Williams, "belong to a class of propositions that are true if they are asserted, conceived, etc. and not to the class of propositions that are true no matter what the facts may be."⁴⁸ Descartes considers that these propositions are indubitable. Indubitability does not seem to be a logical concept. Descartes is certainly not ignorant of the fact that all knowledge is not a priori, that much of our knowledge is empirical. And these two propositions 'I think' and 'I exist' can function as foundations for our empirical knowledge. Of course, this does not mean that Descartes would accept our interpretation of his views. Consider his remarks. He says, "thus each individual can mentally have intuition of the fact that he exists, and that he thinks; that the triangle is bounded by three lines only, the sphere by single superficies, and so on."⁴⁹ Descartes has put "I think" in the same pigeonhole as the proposition that 'the triangle is bounded by three lines only'. If it is maintained that these propositions are diverse and belong to different pigeonholes then 'intuition'

becomes a subjective category. But intuitive truths are not subjective and psychological.

Descartes' 'Cogito' exhibits the failure of the demon argument, that is, the failure of the demon to deceive me. He failed to stop me from thinking. To take a further step, the futility of the dream argument has also to be established. Just as Descartes introduced the demon and later diffused him, similarly in the Sixth Meditation he also rejected the dream argument. Once the demon served the purpose, he was not required. Similarly, once the dream argument served the purpose, it was not required. In the First Meditation Descartes raised the question whether he is awake or asleep. This question was raised because he could not find any marked difference between the dreaming and the waking states. Dream appeared to him as an exact replica of waking experience. We cannot even say that a dream is a replica. If both of them completely resemble each other, then anyone of them could be a replica of the other. By the time Descartes reaches the Sixth Meditation, the dream argument lost its charm. He introduces memory in connection with the waking experience. The presence of memory makes waking experiences coherent and gives them identity, which is different from the identity of dreams. His journey through different Meditations is terminated with the remark, in the Sixth Meditation, "the exaggerated doubts of last few days should be dismissed as laughable."⁵⁰ His argument certainly led to the exaggerated doubts, which required to be dismissed as laughable. In the First Meditation he was unable to distinguish between 'being asleep' and 'being awake', but now in the Sixth Meditation he accepts that there is a vast difference between the two to distinguish dream from waking state. He finally remarks, "when I distinctly see where things come from and where and when they come to and... when I can connect my perceptions of them with the whole of the rest of my life without a break, then I am quite certain that when I encounter these things I am not asleep but awake."⁵¹ What appears to Descartes now as a laughable matter at the completion of his journey, was an extremely serious matter at the start of his journey. He provoked G.E. Moore to struggle throughout his life against the dream argument.

The dream argument successfully excluded the external world from our realm of experiences, and Moore had to do hard labour to bring the external world back. Many other philosophers of this century like Wittgenstein, Malcolm, Bouwsma had given their valuable time for the dream argument.

Though Moore does not refer to Descartes by name, his lecture on "Certainty" was completely devoted to the First Meditation of Descartes. The opening lines of Moore's lecture remind one about Descartes' reference to dreaming. Moore initiates by writing, "I am at present, as you can all see, in a room and not in the open air; I am standing up, and not either sitting or lying down: I have clothes on, and am not absolutely naked."⁵² In his lecture Moore tries to show that the assertions he made were free from doubt. He argues, the fact that he cannot prove that he is not dreaming, does not mean he does not know that he is not dreaming. At the conclusive stage of the lecture he comments, "...I cannot see my way to deny that it is logically possible that the sensory experiences I am having now should be mere dream-images... But the conjunction of my memories of the immediate past with these sensory experiences *may be sufficient* to enable me to know that I am not dreaming."⁵³ This shows that sensory experiences, alone are not sufficient to show that one is awake. But sensory experiences, coupled with memories, may enable one to know that he is not dreaming. This is similar to the Cartesian position in the Sixth Meditation. Descartes too has summoned memory to help him in showing that he is awake. Both Bouwsma and Malcolm have attacked the Cartesian question 'Am I wake or asleep?' Both try to show that this question makes sense only in certain circumstances. Clarifying Descartes' position Bouwsma writes, "...if it is a good argument, it remains a good argument even though no man at any time has been deceived by the senses. The argument does not depend in any way upon any instance of deception."⁵⁴ Not an actual dream, but the possibility of a dream, is sufficient for Descartes' argument. The possibility of a dream can be explained to someone by pointing out that the object, which he sees in dreams, has no physical existence. If

someone knows what it is to have a dream experience without ever having a dream, he can consider the possibility of his present experience to be a dream experience.

Bouwsma tries to show that there is incoherence in Descartes' argument. Descartes begins with the clear-cut distinction between dream experience and waking experience. Without this distinction the argument cannot proceed. At the conclusion of the argument Descartes converts even waking experience into the dream experience. This makes the argument incoherent. To expose Descartes' argument Bouwsma brings the analogy of a garden and its reflection. In his analogy "garden" stands for waking experience and the "reflection" for the dream. The steps, which a Cartesian has taken, are the following:

- "(a). One is a garden and one is a reflection, but there is no way of knowing which is which.
- (b). There are two gardens.
- (c). There are two reflections."⁵⁵

Bouwsma means to say that there is something wrong in converting a waking experience into a dreaming experience, if one has started with the distinction between the two.

Norman Malcolm considers the situation in which the question 'am I awake?' makes sense. He makes the distinction between ordinary sleep and sound sleep. Sound sleep is that state in which one is not disturbed by dreams. In such a state the question 'am I sleeping' cannot be raised. As a matter of fact this question can be raised only when I am getting up from the sleep, not fully awake, not fully sleeping. There are certain situations in which one can doubt whether one is sleeping or awake. But Descartes is committed to the philosophical position, which leads him to say what he says. It defines mind in terms of thinking. So a man has continuous thinking whether he has a sound sleep or a disturbed sleep. So Descartes' question 'Am I sleeping?' is not the result of empirical investigation of situations. It is the result of commitment to a

philosophical view. Yet this commitment continues only till the Sixth Meditation. As we have pointed out that Descartes himself does not allow senses to continue deceiving him for all times. Descartes was certainly an aspirant for having absolutely certain knowledge. In order to have such knowledge he was led to doubt. For the operation of doubt, he used the dream argument, and later the demon argument. All this was done in order to arrive at absolutely certain knowledge. Once a piece of knowledge is obtained, the dream argument became futile, so also so became the fate of the demon argument.

3. HUME'S SCEPTICISM:

Hume appears to be quite different from both Descartes and Sextus Empiricus. He carries a distinct philosophical identity. Descartes used his Scepticism, not for its own sake but for transcending it. Cartesian Scepticism gave birth to certainty. For Descartes Scepticism is not a doctrine but only a method. So he was clearly against Sextus. Hume was quite different. At places it appears that Hume was not a universal doubter like Sextus, not even like Descartes. One would feel that Hume was not sceptical about knowledge as such, like Sextus. He was sceptical only about some areas of knowledge. He rejected some knowledge claims without rejecting all of them. If he took up a sceptical stand on some aspects, then he did not waver from that stand. This attitude was like that of Sextus and quite unlike that of Descartes.

Hume exhibits his sceptical doubts concerning understanding in his *Enquiries* with the distinction between 'the relation of ideas' and 'the matters of fact'. Geometry and arithmetic come under the relations of ideas. Judgements in these areas do not become true or false because of reality. We have already seen in Descartes that his dream argument fails to introduce doubts about their truth. Their truth, according to Hume, depends on the relations of ideas. So Hume is quite unlike Sextus and Descartes. For Sextus, all judgements have equal value, because all of them can be opposed. But

Descartes succeeded even in doubting geometry and arithmetic with the help of his demon argument. But for Hume these judgements are beyond all doubts. The Cartesian demon did not disturb him. These judgements are through and through conceptual. As Hume remarks, "propositions of this kind are discoverable by the mere operation of thought, without dependence on what is anywhere existent in the universe. Though there never were a circle or triangle in nature, the truths demonstrated by Euclid would for ever retain their certainty and evidence."⁵⁶

In order to understand Hume's position, let us consider the Part 4, Book 1 of *The Treatise of Human Nature*. In this part, the Section Two is devoted to Scepticism with regard to the senses. Hume is led to reflect: "we may well ask, *what causes induce us to believe in the existence of body?* But 'tis in vain to ask, *Whether there be body or not?* That is a point, which we must take for granted in all our reasonings."⁵⁷ Hume makes a fine distinction between the question, whether there exists an external world, and the question, how have we come to believe in the existence of such a world? Hume has no doubt that we do happen to have a belief in the external world. What interests him so much is not the question, whether there is any external world, but the question what induces him to believe in the external world. The concept of the external world that is accepted by an ordinary man is quite naive. It is believed that the objects continue to exist when they are not perceived, and the percipients themselves are part of this world and exist along with the objects, which they perceive. Percipients and their perceptions may be destroyed without the objects being destroyed. In short, the objects do not depend on us for their existence. Hume makes an attempt to demolish this picture of the external world. In Hume's own words the issue that interests him is: "why we attribute a *CONTINU'D* existence to objects, even when they are not present to the senses; and why we suppose them to have an existence *DISTINCT* from the mind and perception."⁵⁸ There are three possibilities. It is possible that our senses have provided us the opinion of a continued and distinct existence of objects. If not the sense, then the reason might

have been the source. If neither *reason* nor *senses* are the sources, then the source may be *imagination*.

According to Hume, the mind's limit is perception: It is acquainted only with its perception. So existence of an object for Hume meant the same as the existence of perception. But perceptions are not continuous. Their existence is always short lived. There are interruptions in our perception. I am looking at a given direction and the perception of the church tower occurs, I turned my head towards another direction, and as result, I see the chimney of a mill. So the perception with the church is interrupted, another perception that of a factory's chimney occurs. Like this, one after the other, newer and newer perceptions continue. So our perception occurs in a discontinuous fashion. There is no such thing as the continuity of one and the same perception. As Hume remarks, "everything, which appears to the mind, is nothing but a perception, and is interrupted, and dependent on the mind."⁵⁹ To accept the existence of an external world is to accept a double existence, the existence of something as perception and its existence beyond perception. Hume rejects such a double existence. According to Hume, "there is only a single existence... which I shall call indifferently *object* or *perception*, according as it shall seem best suit my purpose."⁶⁰ So Hume's strategy is clear. He wishes to show that the continuous and independent existence of an object simply means the existence of unperceived perceptions. But this is certainly absurd.

To understand Hume's strategy we must be careful about the distinction between the qualitative identity and numerical identity. Sometimes numerically the same object may present two qualitatively different appearances. A person acting as a hero on the stage is the same person as the husband of a woman. The appearance as a hero is qualitatively different from the appearance as a husband. This is different from the case of a tomato and an apple, presenting qualitatively the same appearance. In the former case we say that the hero is numerically identical with the husband, though his

appearances are qualitatively different. In the later case the appearances are qualitatively the same, but having numerically different objects. Hume is trying to show, in his rejection of the external world, that the qualitative identity of an object with another object is confused with its numerical identity.

Perceptions occur in a sequence, one after the other. As soon as the interruption in a perception occurs there is also an interruption in its existence. In a given series of perceptions, some perceptions may be qualitatively different and others qualitatively alike, but no perception is numerically same as the other perception. This implies that no two different perceptions are numerically the same perception. Consider Hume's remark, "The very image, which is present to the senses, is with us the real body; and 'tis to these interrupted images we ascribe a perfect identity... The smooth passage of the imagination along the ideas of the resembling perceptions makes us ascribe to them a perfect identity. The interrupted manner of their appearance makes us consider them as so many resembling, but still distinct beings, which appear after certain intervals. The perplexity arising from this contradiction produces a propension to unite these broken appearances by the fiction of a continu'd existence."⁶¹ What Hume means is that different images or perceptions occurring at different times have their distinct existences. But some images or perceptions are qualitatively the same. Our faculty of imagination provides numerical identity to the resembling perceptions. For numerical identity Hume uses the expression 'perfect identity'. This means, if the perceptions had been deprived of resemblance or qualitative identity, they would also be deprived of the perfect identity (Hume's expression) or numerical identity. So it is the faculty of imagination in us which is responsible for introducing continuous and independent existence. But perceptions can never be either continuous or independent of our mind. The conclusion is clear, that the continued and independent existence of objects is the fiction of our mind, and this fiction has been generated by the imagination. If all perceptions had been qualitatively different from each other then the fiction of the

continued and independent existence of objects would have never arisen. So Hume ultimately blames not senses or reason but imagination for letting us believe in the existence of external reality. But this belief is obviously false.

Hume's analysis of primary and secondary qualities also leads to the denial of the external world. Berkeley already established before Hume that the secondary qualities such as colours, sounds etc. are mere perceptions, and so over the primary qualities, which allow the occurrence of the secondary qualities. Locke was wrong in making the distinction between the two. Hume accepts Berkeley's conclusions. If colours, sounds, motion, extension etc. are only our perceptions then there remains nothing in the world, which is continuous and independent of existence. As he writes, "If colours, sounds, tastes, and smells be merely perceptions, nothing we can conceive is possest of a real continu'd and independent existence; not even motion, extension and solidity which are the primary qualities chiefly insisted on."⁶² Primary qualities are nothing but those that make the operation of secondary qualities possible. It is obvious that there is no charm in accepting the hypothesis of an external world if that world is devoid of colour, sound, taste, motion, extension etc. It is said that the world of scientists is devoid of secondary qualities, but even such a world is not devoid of motion. Whatever status is given to *occupiers* of such a world, these *occupiers* are in constant motion.

Concerning Hume's notion of causality, it would be wrong to say, that he denied the relation of causality. He was concerned only with the analysis of this relation. Of course, he denied that causal relation is a logical relation. So also he denied the explanation of cause in terms of force, energy, etc. Consider the following remark of Hume's, "The idea of cause and effect is deriv'd from experience, which presenting us with certain objects constantly conjoin'd with each other, produces such a habit of surveying them in that relation, that we cannot without a sensible violence survey them in any other."⁶³ Hume means to say that when two objects occur, one after the other,

and continue reoccurring in the same fashion again and again, then we are led to say that one of them is the cause and another one is the effect. That which occurs earlier is the cause and that which occurs later is the effect. We develop a habit to see them like that. The habit to consider two objects causally connected depends on the frequency of instances. As Hume remarks, "As the habit, which produces the association, arises from the frequent conjunction of objects, it must arrive at its perfection by degrees, and must acquire new force from each instance, that falls under our observation."⁶⁴ If the conjunction of objects does not occur frequently, then this conjunction would be a matter of chance. One would say, it was only a chance that the objects are found together. The objects that have causal relation are contiguous in space and time, and one that precedes, is the cause and the other that proceeds is the effect. As Hume says referring to them, "that they are *contiguous* in time and place and that the object we call cause *precedes* the other we call effect."⁶⁵ So the relation of contiguity and that of precedence are necessary to the relation of causation. Contiguity is essential for the relation of causation otherwise conjoining will be impossible. It is again a definitional matter that a cause does not occur after the effect, that the cause occurs before the effect.

With one stroke Hume rejects the explanation of causation in terms of *efficacy*, *agency*, *power*, *force*, *energy*, *necessity*, *connection*, and *productive quality* etc. His argument is that all these terms "are nearly synonymous and therefore 'tis an absurdity to employ any of them in defining the rest. By this observation we reject at once all the vulgar definitions, which philosophers have given of power and efficacy."⁶⁶ If there had been any such thing as causal power, it would have been possible for us to have its impressions on our mind. But, according to Hume, "we never have any impression, that contains any power or efficacy. We never therefore have any idea of power."⁶⁷

Consider now the necessary connection. It is said that cause and effect are necessarily connected. This differentiates causal relation from other kinds of relations.

If there is no necessary connection then it is impossible to infer a given effect from a given cause. Hume has given a sceptical solution to this problem. According to Hume, the idea of necessity can arise only from some impression, but there is no impression of necessity. So Hume concludes, "necessity is something, that exists in mind, not in objects... Either we have no idea of necessity, or necessity is nothing but that determination of the thought to pass from causes to effects and from effects to causes, according to their experience'd union."⁶⁸ Hume was led to give two definitions of the relation between cause and effect, one of them *philosophical* and the other *natural*. The first definition reads, "An object precedent and contiguous to another, and where all the objects resembling the former are plac'd in like relations of presidency and contiguity to those objects, that resemble the latter."⁶⁹ And the second definition reads, "A cause is an object precedent and contiguous to another, and so united with it, that the idea of the one determines the mind to form the idea of the other, and the impression of the one to form a more lively idea of the other."⁷⁰ The first definition simply places the objects in the causal situation. In the second definition the emphasis is on how the mind moves from one to the other. So the second definition stresses on the mental operation.

Hume's views on induction have attracted the attention of the eminent philosophers of our age. According to him, induction cannot be justified. But this does not mean that we do not operate with inductive reasoning. Though not justified, it would have been impossible to live in this world without inductive reasoning. When we are thirsty we take water and thirst is quenched. In the past I have observed that water quenches thirst. The inductive generalization that water quenches thirst was obtained by observing several instances. But what is the guarantee that this generalization will hold good in the future? What is the guarantee that future would resemble the past? May be tomorrow when I take water I die, so instead of quenching thirst water kills me. Same difficulties hold with all the inductive generalizations like 'food satisfies hunger', 'arsenic is poisonous', 'fire burns' and so on. Hume says, "that the supposition *that the*

future resembles the past, is not founded on arguments of any kind, but is deriv'd entirely from habit, by which we are determin'd to expect for the future the same train of objects, to which we have been accustom'd."⁷¹ So ground for accepting inductive generalization is not any kind of reasoning, but the habit of our mind. One may argue that the future resembles the past simply because the nature is uniform. It is not the case that one part of nature behaves one way and another part another way. Hume argues that, "*instances, of which we have had no experience, must resemble those, of which we have had experience, and that the course of nature continues always uniformly the same.*"⁷² But how does one know that nature is uniform? For uniformity of nature we take help of induction: from time immemorial water quenched thirst, food satisfied hunger, fire burned etc. In the past I made predictions about the future, and when the futures became present, then those predictions were satisfied. An expectation is formed, what happened about these past-futures will also happen about the future-futures. Nature is obviously uniform. But all this shows that the uniformity of nature is grounded in induction. So induction is used to justify uniformity of nature and the uniformity of nature is used to justify induction. This is a vicious circle. If induction itself's required to justify the uniformity of nature, then uniformity of nature cannot be used to justify induction. Inductive beliefs are the result of our habit. They are not the result of any kind of arguments. It is on the ground of our past experience that we expect the things to happen in the future. But all future predictions are probable only and can never reach certainty, because the negation of a future prediction does not involve a contradiction in terms. Negation of such a prediction is possible. This simply means that there is no guarantee that future-futures will resemble the past-futures. Though there is no guarantee, yet I expect them to so resemble.

Prior to Hume, the views about the self and its identity that were in circulation were none but those of Descartes and Hubbes. Though an empiricist Locke retained the Cartesian dualism of mind and body. Hobbes believed only in physical bodies,

abolishing the mental substance. Berkeley, in opposition to Hobbes, abolished the material substance, retained only the mental substance. So it is not only Descartes who talked about mental substance, Locke and Berkeley also did the same. Hume attacks the concept of mental substance, refusing to accept the soul or self as any kind of substance. It is said about substance that it exists by itself. This definition hardly distinguishes substance from things that are not substances. Even perceptions become substances. As Hume remarks, "all our perceptions are different from each other, and from everything else in the universe, they are also distinct and separable, and may be consider'd as separately existent, and may exist separately, and have no need of anything else to support their existence. There are, therefore, substances."⁷³ It is clear that in Hume's philosophy perceptions play a major role. They are the foundational truths of Hume's philosophy. The existence of perceptions has been given so much importance by Hume that their existence is sufficient to oust substances. As Hume remarks, "we have no perfect idea of anything but of a perception. A substance is entirely different from a perception. We have, therefore, no need of a substance."⁷⁴ Hume has ruled out the possibility of considering the soul or self as a substance, mental or material, in which perceptions are supposed to inhere.

Though one may not agree with Hume on his views concerning personal identity, his analysis of this notion is insightful. (For his analysis see section six of part four, book one, of Hume's *Treatise of Human Nature*.) Hume disagrees with both of his predecessors, Berkeley and Locke, for converting perceptions into dependent type of entities. Thoughts are supposed to be thoughts of someone. Hume is unable to accept this view. He says, "All these (perceptions) are different, and distinguishable, and separable from each other, and may be separately consider'd and may exist separately and have no need of anything to support their existence."⁷⁵ This shows the possibility of there being perceptions without being perceptions of anyone.

It is said about the self that it resides inside. So Hume searches for this self looking into himself, to his great shock he fails to catch the self. As he observes, "when I enter most intimately into what I call *myself*, I always stumble on some particular perception or other, of heat or cold, light or shade, love or hatred, pain or pleasure. I never can catch *myself* at any time without a perception and never can observe anything but the perceptions."⁷⁶ This thought-experiment shows that Hume took for granted that self is also a kind of object that can be detected through the sense. He took for granted that it is not very unlike a sound, a taste, a smell, etc. Hume hoped to have an encounter with the self. But self is not the kind of object, which could be seen, touched, smelled or tasted etc. The self is supposed to be that which makes seeing, tasting, hearing etc. possible. The self is a presupposition of their existence. This would be leading towards Kant.

What is the nature of *myself*, and my fellow beings? Hume's response is very simple. He maintains that a man is "nothing but a bundle or collection of different perceptions, which succeed each other with an inconceivable rapidity, and are in a perpetual flux and movement."⁷⁷ So different persons are the different bundles of perceptions. Even the numerical difference between persons depends on the numerical difference between the perceptions. There is no such thing as numerically the same perception, belonging to two different bundles of perceptions. Each perception belongs only to one bundle. Crudely speaking, this view means simply, I think my thoughts and you think yours. The perceptions that occur in a bundle, occur by accident. There is no principle that unites them. Hume refuses to accept any principle that unites different perceptions. According to Hume, "The mind is a kind of theatre, where several perceptions successively make their appearance; pass, re-pass, glide away, and mingle in an infinite variety of postures and situations."⁷⁸ The theatre example is simply to show that certain perceptions may resemble each other, but they are different. Mind has been presented as a passive receptor of perceptions.

Hume makes a distinction between identity and diversity. He thinks that sometimes diversity is confused with identity. By diversity Hume means succession of related objects. He also thinks that sometimes numerical identity is also confused with identity arising out of resemblance. Hume's attempt is to reject any hidden principle of unity. Such a principle is not required. Soul is not something over and above its perceptions. As he says, "I cannot compare the soul more properly to anything than to a republic or commonwealth, in which the several members are united by the reciprocal ties of government and subordination."⁷⁹ 'Members' in this remark refer to human perceptions. A soul is a commonwealth of perceptions. These perceptions are reciprocal type. The commonwealth services through its members. There is no such thing as a hidden commonwealth over and above its members. So also there is no such thing as hidden soul over and above its perceptions. To talk about the soul is to talk about perceptions only.

Sometimes people introduce identity even in the cases in which there is diversity. Hume cites two examples, that of a church and of a ship. Imagine that a given church is destroyed and the parish rebuilt the same church. In this case neither the form nor the material are the same. Yet the inhabitants of the parish call it the same church. Similar is the case of a ship, which in due course became quite a new ship because of frequent reparation. Yet we call these two ships the same. Hume finds that both vegetables and animals are not very unlike the church and the ship. There occurs total change in them. Yet we call them the same. Hume concludes, "The identity, which we ascribe to the mind of man, is only a fictitious one, and of a like kind with that which we ascribe to vegetables and animal bodies."⁸⁰ The identity is fictitious because they are the cases of diversity. Our decision that it is the same ship or the same church is only verbal. There could have been nothing wrong if we would have said that neither the church nor the ship was the same. Hume concludes discussion on this issue with the penetrating

remark, "that all the nice and subtle questions concerning personal identity can never possibly be decided, and are to be regarded rather as grammatical than as philosophical difficulties."⁸¹ So Hume is quite unlike all contemporary philosophers who reduced philosophical difficulties to grammatical difficulties. But for Hume philosophical difficulties are serious and quite unlike grammatical difficulties. For him the issues of personal identity are riddled with grammatical difficulties. The solution of these difficulties does not make any changes in the objects. Hume has certainly not made only a grammatical move when he introduced memory in connection with the discussion of the mind. Perceptions not only occur; some of them also recur. This recurrence is possible because of memory. When a perception is remembered, then remembered perceptions resemble the original perception. So memory binds the two perceptions. Memory occurs as a relation between perceptions. Hume thinks that, "the memory not only discovers the identity, but also contributes to its production, by producing the relation of resemblance among the perceptions. The case is the same whether we consider ourselves or others."⁸² My memory unites the perceptions that occurs to me, and your memory unites the perceptions, which occur to you. So memory becomes the source of personal identity. Hume's reference to memory in the case of human beings totally distinguishes human identity from the identity of the ships and the churches. Neither the ships of any kind nor the churches of any kind happen to possess memories. So also vegetable and animal bodies are not supposed to possess memories. But memory simply cannot be a criterion of personal identity, because personal identity is presupposed by memory. Unless I know myself it is impossible to know my memories. Instead of clarifying the issue of personal identity, Hume has introduced difficulties for its explanation.

Lastly, consider Hume's Scepticism. Though Hume denied on many occasions in his work that he was a complete Pyrrhonian, many philosophers of repute consider him as a committed Pyrrhonian. In *Hume's Philosophy of Human Nature*, John

Laird remarked that "Hume remained a complete Pyrrhonian regarding all ultimate principles."⁸³ Popkin too considers Hume a complete Pyrrhonian. A poem equating Hume with Pyrrho has been quoted by Hume in one of his letters. The Poem reads:

"The wise in every age conclude,
What Pyrrho taught and Hume renewed,
That dogmatists are fools"⁸⁴

The fact that Hume valued this poem so much so that he quoted it in one of his letters shows that Hume had high regard for Pyrrhonian thought and did not mind himself to be considered as a follower of Pyrrho's thought. Then what led Hume to write against Pyrrho? The sorts of things he wrote against Pyrrho exhibit his misunderstanding of Pyrrho. Once these misunderstandings are removed, Hume is closer to the Pyrrhonian thought than to any other philosophical thought.

Consider some of the arguments of Hume made against Pyrrhonism. According to Hume, "The great subverter of *Pyrrhonism* or the excessive principles of Scepticism is action and employment, and the occupations of common life."⁸⁵ This remark against Pyrrhonism clearly shows that Pyrrhonism involves not only the suspension of belief and judgements but also the suspension of action. Therefore, once we involve ourselves in action, needless to say no life is possible without this involvement, we have to give up suspension of action. Perhaps Pyrrho's life style has given this impression. However, we should not forget that he lived for 90 years and those years were full of action. Suspension of judgements and beliefs certainly does not mean suspension of action. Hume even praised Copernicus, Ptolemy, Stoics and Epicureans for giving us something. But, Pyrrhonians had hardly any influence on his mind. As he writes, "a Pyrrhonian cannot expect, that his philosophy will have any constant influence on the mind: or if it had, that its influence would be beneficial to society. On the contrary, he must acknowledge, if he will acknowledge anything, that all human life must perish, were his principles universally and steadily to prevail. All discourse, all action would

immediately cease; and men remain in a total lethargy, till the necessities of the nature, unsatisfied, put an end to their miserable existence.”⁸⁶ Unfortunately nature could not put an end to the existence of Pyrrho, the father of Scepticism. He stops real discourses but not action. The doctrine of *ataraxia* was introduced by him for promoting human life, rather than killing life. Hume certainly has a wrong picture of Pyrrho’s thought. Consider a further remark against Pyrrhonism. He says, “Though a Pyrrhonian may throw himself or others in a momentary amazement and confusion by profound reasonings; the first and most trivial event in life will put to flight all his doubts and scruples.... When he awakes from his dream, he will be the first to join in the laugh against himself, and to confess, that all his objections are mere amusement.”⁸⁷ Hume accepts that the Pyrrhonian reason was profound. However, in this context it seems that he has a picture of Cartesian doubter, confusing him to be a Pyrrhonian doubter. Descartes, as we have already seen in the First Meditation, was an extremely serious doubter, but soon after reaching sixth Meditation he was the first to join in the laugh against himself. Rejection of Pyrrhonian scepticism, which for Hume meant excessive scepticism, led him to adopt the position of moderate scepticism, he calls it mitigated scepticism or academic philosophy. This is like adopting Aristotle’s golden mean. Rejecting excessive scepticism on the one hand and dogmatism on the other. Referring to his own variety of scepticism he writes, “There is, indeed, a more *mitigated* scepticism or *academical* philosophy, which may be both durable and useful, and which may, in part, be the result of this Pyrrhonism, or *excessive* scepticism, When its undistinguished doubts are, in some measure, corrected by common sense and reflection.”⁸⁸ But the attitude of Scepticism that Hume adopted both in his *Treatise* and *Enquiries* is not the result of commonsense or following the nature; it is the result of following Pyrrho. According Christopher Hookway, “Hume’s arguments often resemble the modes of Agrippa, and his insistence that judgement results from custom and imagination rather than from reason or understanding amounts to an admission that there is no defensible criterion of truth.”⁸⁹ In his work Sextus has discussed all the five

modes of Agrippa. According Christopher Hookway, even Hume's refusal to have any rational justification for induction employs "arguments of a familiar Agrippan form."⁹⁰ Hume certainly fails to discover any criterion for determining which of conflicting judgements one should accept. His position is completely like Pyrrho. When he questions himself, "Can I be sure, that in leaving all establish'd opinions I am following truth; and by what criterion shall I distinguish her, even if fortune shou'd at last guide me on her foot-steps?"⁹¹ This is the Pyrrhonian bewilderment. Any criterion that I choose is doubted, be it mine or someone else's.

According to Popkin, "There are two important points which Hume never recognised as part of the Pyrrhonian thesis, and therefore attacked the Pyrrhonians for omitting, first that we cannot remain wholly inactive, and second, that sensation and thought are natural occurrences and are to be accepted as such."⁹² Sextus would agree with Hume that we couldn't remain wholly inactive. So also he would not disagree with Hume that sensation and thought are natural occurrences, we are forced to have them. So Sextus too becomes a mitigated sceptic. Sextus was a Hume in ancient times, as Hume was a Sextus of modern age.

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CHAPTER II

POSSIBILITY OF KNOWLEDGE: THE RATIONALIST AND THE EMPIRICIST MODELS

The sceptics from the Greek to the present times have denied the possibility of knowledge. The question of knowledge has therefore been the main problem for those who have opposed scepticism through all ages. Especially the philosophers of sixteenth and seventeenth centuries have taken the challenge of sceptics regarding the possibility of knowledge more seriously. This is the age when the foundations of human knowledge have been firmly laid down by philosophers like Descartes, Spinoza and Leibniz in the rationalist tradition and Locke, Berkeley, Hume in the empiricist tradition.

In this chapter my aim is to present the foundations of human knowledge as laid down by the rationalists and empiricists. I have in a historical perspective shown how the dominant models of knowledge, namely rationalism and empiricism, have tackled the sceptics' problem. My aim is to show that human knowledge is possible and that the sceptics' denial of knowledge can be questioned.

1. DESCARTES' DEDUCTIVE MODEL OF KNOWLEDGE:

We have already discussed in the first chapter the Cartesian method of doubt. It was for the sake of certainty that Descartes was led to doubt each and every item that come to his mind. Descartes' ideal was certainty, not probability. In order to achieve this ideal he converted all sorts of sciences to only one sort. He expected that all of them behave like mathematics. If all of them behave like mathematics then mathematical method would work, not only on mathematics but also on those sciences. Descartes ruled out the possibility of plurality of methods. If sciences are diverse in nature, then they could have diverse methods. But Descartes did not accept their diversity. For him empirical sciences were also expected to behave like mathematics, otherwise mathematical method would not apply to them. True knowledge, which can be achieved through the mathematical method, consists in the use of intuition and

deduction. He writes, "the method... contains everything that gives certainty to the rules of arithmetic."¹ Descartes wants to make all knowledge a 'universal mathematics'. He is convinced that mathematical certainty is the result of a special way of thinking. Mathematical reasoning showed him that we are able to discover what we do not know by progressing in an orderly way from what we do know.

Descartes finds the whole edifice of knowledge upon the foundations of intuition and deduction. For him "These two methods are the most certain routes to knowledge, and the mind should admit no others. All the rest should be rejected as suspect of error and dangerous."² According to Descartes, intuition is an intellectual activity or vision of clarity that leaves no doubt in the mind. The testimony of our senses and the imperfect creations of imagination lead us to confusion. By 'intuition' he means our understanding of the self-evident principles such as the axioms of geometry and non-geometrical truths such as 'I think therefore I exist'. No rational mind can doubt the self-evident principles. By 'deduction' he means orderly, logical reasoning or inference from self-evident propositions. Descartes describes deduction as the necessary inference from the propositions that are known by intuition. By intuition we grasp a simple truth completely and immediately, whereas by deduction we arrive at a truth by a process. It is a continuous and uninterrupted action of the mind. As he says, "we distinguish this mental intuition from deduction by the fact that into the conception of the latter there enters a certain movement or succession, into that of the former there does not."³ So the first principles themselves are given by intuition alone, while, on the contrary, the remote conclusions are furnished only by deduction.⁴ For Descartes deduction indicates the relation of truths to each other. Descartes wanted to rest knowledge upon a starting point that had absolute certainty in the individual's own mind. But this leads to a difficulty. Certainty in one's own mind implies psychologism. Universal mathematics should not suffer much from psychologism or subjectivity. How can the *objective* character of science be retained if all importance is given to a person's psychology?

How can I arrive at objective scientific truths by looking into my mind? Descartes solves this difficulty by maintaining the view “that the Power of forming a good judgement and of distinguishing the true from the false, which is properly speaking what is called good sense or Reason, is by nature equal in all men.”⁵ So if I arrive at some truth intuitively, others would not fail in arriving at the same truth by looking into their mind. Because reason present in their mind is the same as that which is present in my mind. Though numerically different, our minds are qualitatively identical.

Some truths by their very nature cannot be known except through induction. But induction involves probability, not certainty. The sciences, which are wholly dependent on induction, cannot be converted into parts of universal mathematics. Induction cannot be converted into deduction, so also empirical sciences cannot become a part of universal mathematics. However, the Cartesian method has very limited scope of operation. It is not the kind of method which can be applied in all fields of knowledge. The fact that it functions well in geometry does not mean it would also work well in chemistry or geography. Descartes’ search for method thus suffers from the malady of reductionism. Diversity of human knowledge is overlooked. So also the diversity of methods is overlooked. Descartes goes wrong in advocating methodological monism. But it cannot be denied that this deductive method has been successful in securing foundations for human knowledge.

In the first chapter we have already discussed Descartes’ ‘Cogito’ argument. Descartes tried to derive one’s existence from one’s thinking. The next important step for Descartes was to show the epistemological priority of mind over matter, even if both of them are placed on the same ontological level. In his *Principles* he remarked, “the knowledge, which we possess of our mind not only precedes that which we have of our body, but is also more evident.”⁶ The epistemological priority of mind over body becomes evident from the fact that it is the mind that searches for the body and not vice

versa. In his *Discourse on Method* he remarked, "I could conceive that I had no body, and that there was no world nor place where I might be; but yet that I could not for all that conceive that I was not."⁷ Descartes succeeds in conceiving the non-existence of the world, including his own body, but fails to conceive his own non-existence. My existence is assured even in my attempt to doubt it. Descartes' further step on this issue is quite interesting. He says, "I knew that I was a substance the whole essence or nature of which is to think, and that for its existence there is no need of any place, nor does it depend on any material thing; so that this "me" that is to say, the soul by which I am what I am, is entirely distinct from body, and is even more easy to know than is the latter; and even if body were not, the soul would not cease to be what it is."⁸ Descartes is talking, not only about substances, but also about their essences. My essence consists in thinking. I am a substance that thinks. Since thoughts do not occupy any space therefore 'I' in its capacity as a thinker has not to occupy any place in space. So also I do not depend on any material thing, because such dependence would deprive me of my status as a substance. Descartes makes the distinction between the soul and the body. He even hints at the disembodied existence of the soul.

In the last remark, quoted in the above paragraph, Descartes distinguishes the soul from the body. I am necessarily a soul and contingently a body. My having of the body is the contingent truth because I would not cease to be when my body ceases to be. Descartes clearly means that 'I' is ambiguous. When I say 'I am six feet tall', 'I' has one meaning which is very different from the meaning when I say 'I am suffering from pain'. In the former case 'I' means the body. In the later case 'I' mean the mind. Since my relationship with my body is contingent the two substances, mind and body, are not necessarily connected. Just as essence of mind is thinking, the essence of body is extension. Shape, size, figure etc. are different modifications of extension. For the soul or mind in this context Descartes does not find a place in space. So also it is independent of the body, having no place in the body.

According to Descartes, the human mind is capable of having true knowledge by virtue of having clear and distinct ideas. These ideas constitute the bedrock of human knowledge in the sense that these ideas alone give us self-evident truths in mathematics, and other sciences based on mathematics. The ideas such as $2 + 2 = 4$ are clear and distinct and so are self-evidently true. So also are the ideas of self, God, etc., which are given to our mind clearly and distinctly. 'Cogito ergo sum' is the paradigmatic truth having absolute clarity and distinctness.

The concepts of clarity and distinctness of ideas have their own difficulties. The difficulty is not that these concepts have been given a psychological dimension, as a matter of fact they have been given a theological dimension. Because of the theological dimension the Cartesian argument has become circular. Consider his remark: "all the things that we very clearly and very distinctly conceive of are true, is certain only because God is or exists, and that He is a perfect being, and that all that is in us issues from Him."⁹ To express briefly the circle, clear and distinct perception depends on the existence of God. But the existence of God itself depends on the clear and distinct perception. Descartes has clear and distinct perception not only of his own existence but also of the existence of God. So God is required for clear and distinct perception, and the clear and distinct perception is required for the existence of God. This issue was raised by several critics in the Fourth Set of Objections to the *Meditations*. This 'circle' is also described as Arnauld's circle, because Arnauld was the most vocal critic of Descartes on this issue. If the theological dimension is dropped even then the Cartesian argument is not free from difficulties. The criterion of clear and distinct perception is not logical, it is certainly psychological. But Descartes' universal mathematics should not involve any judgements that are psychologically certain. They should be logically certain. However, it can be argued that Descartes intends to have a logical criterion of clarity and distinctness. His method of analysis demands the logical concept of clear

and distinct ideas. Otherwise, Descartes would be guilty of psychologism in his theory of knowledge.

We have already seen how Descartes doubted all kinds of beliefs, and how later he attempted to get rid of all doubts. By the time he reaches the Fifth Meditation he starts feeling the necessity of bringing the physical world back to its original place. He succeeds in bringing the physical world back to its original place only in the Sixth Meditation. At the end of the Fifth Meditation he claims that he has succeeded in knowing God and therefore he has acquired the ability to know the corporeal nature. Earlier he identified himself only with his mind, now in the Sixth Meditation he has directed his attention to the body. Now he maintains, “that I have a body which is adversely affected when I feel pain, which has need of food or drink when I experience the feelings of hunger and thirst, and so on; nor can I doubt there being some truth in all this.”¹⁰ Descartes does not dissolve the distinction between mind and body. The relationship between mind and body has been explained by him in terms of “as a pilot in a vessel.”¹¹ He continues to think that his association with the body is temporary, as he is permanently associated only with his mind. As he says, “it is certain that this I (that is to say, my soul by which I am what I am), is entirely and absolutely distinct from my body and can exist without it.”¹²

There are places when Descartes is unable to retain the rigid distinction between the thinking and unthinking substances. Bodily sensations of pain, hunger, thirst etc. have led Descartes to remark, “I am very closely united to it (body), and so to speak so intermingled with it that I seem to compose with it one whole... all these sensations of hunger, thirst, pain etc. are in truth none other than certain confused modes of thought which are produced by the union and apparent intermingling of mind and body.”¹³ So Descartes accepts the intermingling of body and mind, which is the intermingling of thought with extension. How is intermingling possible? Unless there is something

common to the two substances, mind and body, no intermingling is possible. But if there is something common between the two, then they are not genuine substances. They may simply be the modes of a higher substance. So Descartes has paved a way for Spinoza.

Descartes' rationalist epistemology lays down the foundations of human knowledge firmly in the self-evident and a priori principles. He shows that we can arrive at absolute certainty in knowledge, not only in mathematics but also in empirical sciences such as physics. Mathematics shows the way. Metaphysics follows mathematics in laying down absolute principles such as 'Cogito ergo sum', etc.

So far as knowledge is concerned Descartes affirms that doubt has no place in it. Sceptical doubts are to be ultimately eliminated. His Sixth Meditation decisively argues that the initial doubt of the philosopher is only methodical doubt and so there cannot be a genuine sceptical doubt regarding our knowledge derived from sense-experience as well as from reason. Knowledge is fully secure against any possible design of an Evil Genius.

2. SPINOZA'S CONTINUATION OF THE DEDUCTIVE MODEL:

Like Descartes, Spinoza too is inspired by the ideal of universal mathematics, converting human knowledge into knowledge of mathematics. As a matter of fact what was only an ideal for Descartes was actualized by Spinoza. His *Ethics*, the major philosophical work, has been *demonstrated in a geometrical order*. Spinoza demonstrated his order, modeled on Euclid's *Elements*. He was following Descartes, but with reservations. In his *Spinoza*, Stuart Hampshire writes about the seventeenth century rationalists that their programme was "to generalise the mathematical method of reasoning, and to apply it without restriction to all the problems of philosophy and

science.”¹⁴ The major difference between Descartes and Spinoza is that Descartes follows the ‘method of analysis’ whereas Spinoza follows the ‘method of synthesis’. The latter method follows the demonstrations from axioms. Geometry makes a start from definitions, postulates and axioms. Descartes did not start his demonstration in this fashion, because he thought that the axioms that occur in geometry are accepted by everyone, but the same does not happen in Metaphysics. Therefore, Descartes preferred the ‘method of analysis’ and was not bold enough to apply the ‘geometrical method’ which was the ‘method of synthesis’. As against Descartes, Spinoza has exhibited that metaphysics can be given the garb of geometry. His *Ethics* has been written in the Euclidean fashion.

The most important concept in his *Ethics* is the concept of substance. He rejects the plurality of substances. Such a plurality involves a contradiction. Descartes considered mind and matter as two different substances depending for their existence on the third substance, the God. Spinoza rejects this picture. In his proposition VI he maintains “one substance cannot be produced by another.”¹⁵ Therefore mind and body cannot be substances, because they have been produced by the third substance, God. Only God is the substance, not the mind and the body. Spinoza identifies God with Nature and this Nature or God is self-caused. In his proof of the proposition VII he says, “A substance cannot be produced from anything else (prev. prop. Coroll.): it will therefore be its own cause that is (Def. I) its essence necessarily involves existence or existence appertains to the nature of it.”¹⁶ Propositions XIV and XV are quite important. According to proposition XIV, “Except God no substance can be granted or conceived.”¹⁷ This means everything is in God, nothing is excluded from the God. This becomes clear in proposition XV, “Whatever is, is in God and nothing can exist or be conceived without God.”¹⁸ And this God is the substance consisting of infinite attributes. This is what he stated in Definition VI, “God (*Deus*) I understand to be a being absolutely infinite, that is, a substance consisting of infinite attributes, each of

which expresses eternal and infinite essence”¹⁹

The identification of God with Nature has led Spinoza to be described as a pantheist. He rejected the concept of God that had its origin in human form. Theistic concept of God implies that God is numerically different from man, so also different from the Nature. This notion of God allows human feelings to God. This concept of God has been created in the image of man. Man’s own image and his own psyche have been transferred to the God that is created. Spinoza clearly rejects such a concept of God. The fact that Spinoza denies the ascription of human form and human feelings to God does not mean that he denies the ascription of extension and thought to the God. Thought and extension are the attributes of substance i.e. God. God has infinite attributes; thought and extension are two of them. “God is a thinking thing.”²⁰ So also “God is an extended thing.”²¹ Descartes considered thought and extension as two different substances. Spinoza converted them into two different attributes of the same substance, the God.

The third important concept in Spinoza is the concept of a mode. By mode he means “the modification *affections* of a substance.”²² So a man is a mode of God’s attributes of thought and extension. He is not a combination of two substances as Descartes thought. He is the modification of only one substance. A man thinks, so also a man walks. If Descartes is right then the man who thinks is different from the man who walks. Thinking is done by one substance and walking is done by another substance. This is Descartes’ view. But, according to Spinoza, the man who thinks is the same as the man who walks. There is no place for mind body-dualism in Spinoza.

The objections that Strawson has raised against Descartes in *Individuals* are not applicable to Spinoza. Strawson argued against Descartes that Descartes has converted the subject expression ‘I’ into an ambiguous symbol. While discussing Descartes earlier

it was pointed out that 'I' refers to mental substance when it is said 'I am in pain'. But it refers to a material substance when it is said; 'I am walking'. According to Strawson, when we speak of a person in the Cartesian sense, we are really referring to "two substances of different types, each of which has its own appropriate types of states and properties; and none of the properties or states of either can be a property or state of the other."²³ The two substances in question are mind and matter, which have their own properties. Spinoza gives no scope for considering that 'I' is ambiguous. Since the substance that thinks is the same as that which is extended, there is no question of having two substances. The unity of man is not broken, by ascribing thinking and extension to him. Rather Strawson's own view concerning the identity of a person can easily be drawn from Spinoza's concept of the substance. In his *Individuals* Strawson maintains that the concept of a person is prior to the concept of his ego or his body. This clearly sounds like Spinoza, for whom the concept of substance is prior to the concept of its attributes. A substance is that "which is in itself and is conceived through itself: I mean that, the conception of which does not depend on the conception of another thing from which it must be formed."²⁴ So understanding of substance does not depend on the understanding of anything else. This means our knowledge of substance does not depend on our knowledge of other things. Strawson's concept of a person is also logically prior to mental and physical characteristics that we ascribe to him. Strawson's concept of a person is not very unlike Spinoza's concept of substance. According to Strawson, we ascribe states of consciousness to the very same entity to which we ascribe physical states. The subject of mental states is not different from the subject of physical states. He calls the subject a person. A person for Spinoza would be a mode of the substance, God. In ordinary language this mode is designated as 'man'. Under the attribute of thought we say that the 'man thinks'. Similarly under the attribute of extension we say about the same man 'He is six feet tall'. Spinoza, like Strawson, refuses to break the unity of man. We ascribe thought to the same entity to which we apply extension. To say that thought and extension are essences of a substance in our

context would mean the entity in question is of different kind altogether from a material body. Material bodies are incapable of thinking, but a man has the ability to think.

So far as Spinoza's rationalist theory of knowledge is concerned; he follows Plato rather than Descartes. In Plato there is triple division of reality. Corresponding to this, there is triple division of mind. Images and shadows are at the lowest stage of reality. An image appearing in mirror or water has no reality at all, except that which it has obtained from the physical objects of which it is an image. If there had been no physical object, there would have been no images and shadows. So physical objects exist at a higher stage of reality. But physical objects on their own part are nothing but images of concepts or essences. Physical objects depend for their existence on essences. Mental state of imagination or fantasy corresponds to having of images. The second higher mental stage is the stage of belief or opinion. It is directed towards the physical objects. It is only the third and final stage, the stage of reason, which has essences or ideas or concepts as its objects. The progress of thought in Spinoza is in terms of progress from inadequate ideas to the adequate ideas. Corresponding to adequate ideas Spinoza refers to intuition which is the highest knowledge. Below intuition is reason, which is concerned with scientific knowledge. At this stage the ideas are adequate but not so adequate as at the stage of intuition. The lowest stage of the mind is the stage of imagination. Imagination has only inadequate ideas as its objects. Spinoza's rejection of sense perception according to Stuart Hampshire exhibits his Platonism. As Stuart Hampshire says, 'This is Spinoza's peculiar version of the ancient doctrine of rationalist philosophers that knowledge wholly derived from sense perception is not genuine knowledge, but is in some sense subjective and uncertain.'²⁵ Spinoza's example of the Sun seen with naked eye gives us only confused inadequate idea of the Sun. But when the Sun is studied in Astronomy our idea of the Sun has acquired some adequacy. At the highest level of knowledge, higher than the level of Astronomy, we would have wholly adequate idea of the Sun. So the object remains the same, but the mental state to which

it is revealed passes through three stages: the stages of perception, reason and intuition.

Since Spinoza identifies Nature with God, its attribute of thought should not come in conflict with its attribute of extension. Therefore, it would be a conflict if physical world is determined and the mental world is free. If the physical world is determined by causes and effects, then the mental world should also be determined by causes and effects. Therefore, Spinoza was led to accept determinism and did not allow freedom either for human thinking or for human action. Human thinking and human action are as much part of the Nature as are rivers, plants and clouds etc. Causal determination of events is as rigid as that which occurs between the terms of logical relations. Spinoza does not allow chance and probability.

If human actions are determined then there is no scope of ethics. Ethics presupposes freedom of will and freedom of action. Unless I am *free* to do what I *ought* to do I will not succeed in performing moral action. Ethics appears to be impossible in a world, which is deterministic. Spinoza prescribes a kind of detachment. Events of world cannot be changed by, us but we can develop the attitude of a detached observer. If we move from the mental state of having inadequate ideas to the state of having adequate ideas or having intuitive knowledge, we will be liberated from desires and passions. Freedom from desires and passions is possible only when we move towards God. We should have intellectual love of God: This kind of love is different from the love which arises from desires and passions etc. And this love is eternal. According to Spinoza, “no love save intellectual love is eternal.”²⁶ According Stuart Hampshire, “Spinoza is often represented as a mystical pantheist because of his description of the good life as “The intellectual love of God”.²⁷ Again, eternity for Spinoza does not mean ever lasting; it means something like timelessness.

Lastly, though Spinoza gives the same importance to human mind that he gives

to human body, in the end the human mind obtains superiority over the human body. According to Spinoza, "The human mind cannot be absolutely destroyed with the human body, but something of it remains, which is eternal."²⁸ This means nothing in the human body remains after death, which is eternal. Has not the attribute of thought gained superiority over the attribute of extension? Spinoza too like Descartes exhibits a drift towards mentalism, toward the superiority of mind over body.

Spinoza's metaphysics of the substance is based on his rationalist theory of knowledge, which refuses to accept subjective doubts and sceptical attitude. For Spinoza scepticism, even methodical scepticism like Descartes', is impossible. We cannot doubt our knowledge of reality because the reality is there and our thinking is itself a part of reality. Thought and the external world are both real and are attributes of the same substance. In this sense we cannot doubt whether there is a world corresponding to our ideas.

Spinoza considers the sceptic as one who has no clear and adequate idea of reality. Had he got adequate ideas he would have seen that it is absurd to pretend that we do not know reality because we ourselves are a mode of reality. Reality needs no *vouchsafe* from our thinking because the latter is an aspect of the world.

3. LEIBNIZ'S METHOD OF LOGICAL ANALYSIS:

Leibniz was no less known to the mathematicians than to the philosophers. He made original contribution to mathematics, not very unlike his original contribution to philosophy. The concept of substance has played a major role in the rationalistic thought. Following Descartes and Spinoza, Leibniz too took the notion of substance quite seriously. Though Leibniz retained substances, he rejected the views of Descartes

and Spinoza. Their views fail to do justice to the concepts of God, man, and nature, and the distinctions that go with them. The picture of the world that Leibniz painted with the help of substances was an attempt to meet the sceptic.

One of the occupations of the 17th century philosophers was the sceptical challenge to knowledge. We have already seen sceptical background of Descartes' *Meditations*. According to Stuart Brown, "Leibniz was sympathetic to Academic scepticism though not to the Pyrrhonists, whose goal a of suspense of judgement seemed to him neither desirable nor attainable."²⁹ It seems Leibniz was introduced to a version of Academic scepticism, which rejected the suspension of judgement. Pyrrhonist accepted the suspension of judgement. Leibniz according, Stuart Brown, "had an amicable correspondence with Pierre Bayle (1647-1706), whose *Historical and Critical Dictionary* contained some forceful statements of Pyrrhonic scepticism that were to influence later figures such as Berkeley, and Hume."³⁰ Brown means to say that Berkeley and Hume were influenced by Pyrrhonism but not Leibniz. And this was only for the reason that Leibniz was not in favour of the suspension of judgement. The answer of Leibniz to scepticism was the construction of fascinating world picture, which was extremely original. No philosopher of the past succeeded in drawing such a picture.

Monads are the ultimate substance of the world according to Leibniz. A monad is a simple substance without parts. It has neither extension nor shape. Therefore it was not divisible. According to Leibniz, these are true atoms of Nature. The fact that they have no extension or shape implies that they are not material atoms. The ultimate picture of the reality that Greek atomists drew was in terms of physical atoms in motion. Motion was external to an atom. According to Descartes, Motion had "to be added to extension by God."³¹ Though atoms have extension they do not have motion as their property. They are inert and inactive. So Leibniz was in need of those kinds of atoms which made activity possible. Monads were such atoms: they were centers of force and

exhibit that they are not purely material atoms. Leibniz described them as souls. A soul is supposed to be active and it is distinguished from the matter, which is dead and inert. The concept of a Monad is the concept of a spiritual atom. The dimension of spirituality has been added to introduce motion as the property of an atom, this is, in order to save God from taking the trouble of introducing motion to the physical world. According to Leibniz, "Monads have no windows, by which anything could come in or go out."³² This is treating the monads not unlike the material objects. Two material objects may lie side by side without having any communication between them. By converting monads into windowless substances Leibniz has attempted to show that though monads are spiritual there is no communication between them.

Leibniz believed in the principle of the identity of indiscernibles. This principle presupposes that numerical diversity involves qualitative diversity. The objects that are numerically diverse must also be qualitatively diverse. Leibniz says, "every monad must be different from every other. For there are never in nature two beings which are precisely alike, and in which it is not possible to find some difference which is internal, or based on some intrinsic denomination."³³ Since monads do not have such things as shape, size or figure, which may be regarded as its external property, they can be distinguished only in terms of internal property. What Leibniz means to say is that the monads are substances, and no two substances differ only in number. To think of two indiscernible things is to think of only one thing having two names. This problem becomes more difficult to handle when we consider the view of Leibniz concerning the possible worlds.

Leibniz believed that the world that we inhabit is the best of all possible worlds. How does one reach the concept of a possible world? Consider the situation of myself involved in discourse on Leibniz at this time, but it is possible that I could have been doing something else at this time. Some other situation was possible to have occurred

rather than the present situation. According to Leibniz, before the world came into existence God contemplated different alternatives, different possible worlds. This world is one of the possible worlds and God has actualized this world because he found it the best one. According Nicholas Rescher, “Each possible world consists of a family of possible substances, every one of which is compossible with all the rest.”³⁴ Rescher means to say that there is perfect harmony between different monads that exist in the world. The concept of a monad is the concept of a substance that has been actualized. The possible substances of the other possible worlds are not monads, because they have not been actualized. Of course the possible substances of the possible worlds which have not been actualized are also in harmony with each other. As Rescher points out, “Every *possible* world has its own population of possible substances. And not just *possible* one, but substances that are also *compossible*, i.e. capable of being realised together and conjointly.”³⁵

Consider now the connection between possible worlds and the identity of indiscernibles. It is impossible for one and the same substance to occur in two possible worlds. Each substance is restricted to one possible world only. The principle of identity of indiscernibles penetrates into possible worlds. Not only that a given substance of a given world is qualitatively different from all the other substances of that world, but it is also qualitatively different from all the other substances of all the other possible worlds. Suppose there are three possible worlds having possible substances.

P1				
	Sa	Sb	Sc	Sd
P2				
	So	Sp	Sq	Sr
P3				
	Se	Sf	Sg	Sh

What Leibniz means to say is not only that Sa, which is occurring in P1 is qualitatively different from Sb, Sc, Sd, but it is also qualitatively different from the substances occurring in other possible worlds. That is Sa is qualitatively different from So, Sp, Sq, Sr, Se, Sf, Sg, Sh. Not only the substances of these possible worlds are numerically different from each other, but they are also qualitatively different from each other.

Closely connected with the concept of the possible worlds is the concept of truth. Leibniz distinguished the 'truth of reasoning' from the 'truth of fact'. As he says, "Truths of reasoning are necessary and their opposite is impossible; those of fact are contingent and their opposite is possible."³⁶ Necessary truths being analytic in character are true in all possible worlds. A contingent truth is restricted to a given possible world. The distinction between necessary and contingent is only because of the limitation of human understanding. For a higher understanding, or the understanding of God, there is no such distinction as the distinction between necessary and contingent. As Leibniz points out, "all things are understood by God *a priori*, as eternal truths; for he does not need experience, and yet all things are known by him adequately. We, on the other hand, know scarcely anything adequately, and only a few things *a priori*; most things we know by experience, in the case of which other principles and other criteria must be applied."³⁷ What other principles and other criteria are had to be elucidated. In order to understand the position of Leibniz one has to understand the notion of analysis. Applying the subject - predicate distinction to substances and their attributes, one can say that subject includes its predicate. If we analyse the subject we will find all the predicates contained in it.

In the case of *a priori* proposition the law of contradiction helps the analysis. In the case of contingent propositions which are true, Leibniz uses the principle of sufficient reason. Nothing occurs without reasons. According to Leibniz, every true proposition is analytic, be it contingent or necessary. In the case of contingent truths we

have to take infinite steps in order to analyse the predicate from the subject. God alone can carry this analysis. But the fact that we fail in performing infinite tasks does not mean that the true propositions are not analytic. There arises the distinction between finitely analytic propositions and infinitely analytic propositions. Finitely analytic propositions are those which are necessarily true, on which we can apply the principle of contradiction. As distinguished from them are the infinitely analytic propositions, which are true contingently. In their case we are required to take infinite steps, which is impossible in our case.³⁸ Only God can do it.

Leibniz also mentions the *principles of perfection*. This is the principle, which God uses in creating the universe. The possible world, which has the greatest amount of perfection, is actualised by God. The substances of the actualised world also exhibit the maximum perfection. According to Leibniz, "God has chosen (to create) that world which is the most perfect, that is to say, which is at the same time the simplest in its hypothesis [i.e. its laws] and the richest in Phenomena."³⁹ Simplicity of hypothesis or law does not mean that they are numerically diverse. Numerical diversity some times leads to chaotic condition. Richness means variety. The principle of perfection is Leibniz's God's goodness. The principle is not logical but ethical. So also the necessity of contingent truths is distinguished from the necessity of a priori truths. The former is described as moral necessity whereas the latter is the logical or metaphysical necessity. The position of Leibniz is certainly different from the position of Descartes and Spinoza, who took a position that implied that God's will in creation was arbitrary.

The next important principle or law is that of continuity. The universe of monads has no gaps and holes. It is a universe in which continuity pervades. At any instance every monad represents the entire universe. Of course this representation differs from one monad to the other. There are as many representations as there are monads. Because each monad represents the universe from its own point of view. As

has already been pointed out, the monads are windowless. But then how is the harmony between them possible? Leibniz introduces the notion of pre-established harmony. It is a harmony that obtains among the monads. This is a kind of reciprocal accord. According to Rescher, "This accord is pre-established in a dual sense: first, because it is determined upon anterior to the creation of the world, second because the accord at any instance of time is but the consequence of the accord at any previous instant."⁴⁰ It implies that a substance has its own place in the possible world. It is so situated in that world that it is harmonised with other possible substances. It's earlier and later states harmonize with earlier and later states of other possible substances. As Leibniz writes, God has "so formed each of these substances from the beginning, that in merely following its own laws, which it received with its being, it is yet in accord with the other, just as if they mutually influenced one another, or as if over and above his general concourse, God were for even putting in his hand to set them right."⁴¹

Now consider the nature of *perception*, which these monads have of one another. Leibniz in his monodology distinguishes perception from apperception. Apperception is a kind of consciousness of one's perception, i.e. it is a higher order perception. Leibniz introduces a hierarchy of monads. Bare monads are at the lowest level; above them are monads that are living creatures. Man is at the top among the living creatures. Of course man too is not wholly perfect. Only God is the perfect monad. Perception characterizes all monads. Apperception is like self-consciousness. This is restricted to men. In a superficial way one can think of Leibniz as dissolving all kinds of distinctions, reducing everything to soul-substances. However, Leibniz has done no such thing. He gives high importance to men. As he writes, "it is the knowledge of necessary and eternal truths which distinguishes us from mere animals, and gives us *reason* and the sciences, raising us to knowledge of ourselves and God. It is this in us whom we call the rational soul or *mind*."⁴²

The views of Leibniz on space and time are quite different from the views of Newton. According to Leibniz, space and time are relative concepts. They depend on the existence of things. Things are ontologically prior to space and time. Space and time arise as soon as things come into existence. These are relations between things. As against this relativist view was the view of Newton. Newton considered space and time existing prior to the things, as if they are containers. Containers can be empty whether things exist or do not exist in them. No harm is done to space and time in the absence of things. They would continue to exist even when the things discontinue to exist. Space and time are primary; things existing in them are secondary.

If the Newtonian views of space and time were accepted then one and the same space and one and the same time would penetrate into all possible worlds. This would lead to a complete breakdown of several principles of Leibniz. In order to save his position Leibniz was free to accept the plurality of space-time systems. Each possible world would have its own spatio temporal framework. Space, according to Leibniz, arises out of co - existence of substances. The possible substances of a given possible world co-exist with each other. None of these substances co-exist with the substances of any other possible world. Therefore the space of one possible world cannot be the same as the space of another possible world. Every possible world has its own spatial frame. So is true about time. Each substance has its own future history. No substance is common to two different possible worlds. No two substances would have a common future history. Therefore time in one possible world cannot be same as time in another possible world. One possible world is not at any distance from the other possible worlds. So also is true about time. There is no such thing as taking any time for reaching from one possible world to another possible world. So Leibniz treats space and time as particulars, and as particulars they are restricted to their own worlds.

To sum up the position of rationalists, all of them attempted to meet the sceptic.

All of them thought that absolutely certain knowledge is possible in mathematics. So all of them used mathematical method even in the non-mathematical disciplines. Greek sceptics were dependent on experience because they did not reject appearances. Therefore in attacking scepticism these rationalists also attacked knowledge derived from experience. They however recognised the role of experience. As Leibniz remarks, "we are merely empiricists as regards three-fourths of our actions. For examples, when we expect it to be day tomorrow, we are behaving as empiricists, because until now it has always happened thus."⁴³ So according to Leibniz we are most of the times empiricists, only occasionally, rationalists. Even the academic empiricists would not deny the occasional use of reason to run their lives.

Leibniz meets the sceptics' challenge by providing that we know the world and other monads by our innate capacity of apperception. We apperceive the world in our inner consciousness. There is no gap between what we know (apperceive) and what is real. Reality consists of monads, which are represented in my consciousness. So there is necessity in our knowledge of the world. Even the so-called empirical propositions are morally necessary.

Leibniz takes human knowledge, both mathematical and empirical, as founded on necessary truths, which have origin in us. There is no possibility of doubt that threatens the fabric of our knowledge.

4. LOCKE AND THE PROJECT OF EMPIRICISM:

Locke is the founder of British empiricism, which led to the evolution of Berkeley and Hume. He reacted against rationalism, especially that of Descartes. Since the British rejected rationalism they had favorable attitude towards a milder form of scepticism. As we have already pointed out, the Greek scepticism was revived on the Continent during 16th century. But the revised scepticism lost its original extremism.

Though dogmatism was rejected, the extreme form of scepticism was also rejected. The middle course was accepted which was described as constructive scepticism. For constructive scepticism the names of Montaigne, Gassendi and Mersenne are well known. It was this constructive scepticism that came over to the British Isles. As Woolhouse points out, a tradition of constructive scepticism “has been traced in Seventeenth-Century England, both in religious and non-religious areas... Locke belongs to this tradition of constructive scepticism.”⁴⁴ Woolhouse further points out about the nature of Locke’s scepticism that it is “both *limited* and *constructive*. These two features explain how, beginning from a basically sceptical position, he can still hope to avoid the worrying, doubting outlook which often characterises such a position.”⁴⁵ Locke’s scepticism is limited in the sense that he rejected that kind of scepticism, which is general. We have already seen how Pyrrhonists rejected the knowledge-claims made in all the areas of knowledge. But Locke believes that there are areas where our knowledge claims are free from doubts and uncertainty. However, Locke recognises that there are some areas where our understanding cannot reach. About these areas, according to Locke, we should not accept anything to know. We should be content to remain ignorant of these areas. According to Locke, an attempt to go beyond one’s mental capacities only leads to frustration and despair. As he remarks, “...men, extending their inquiries beyond their capacities, and letting their thoughts wander into those depths where they can find no sure footing, it is no wonder that they raise questions and multiply disputes, which, never coming to any clear resolution, are proper only to continue and increase their doubts and to confirm them at last in perfect scepticism.”⁴⁶ This is Locke’s constructive scepticism. This suggests a way to avoid scepticism. The way is not to indulge in asking questions and making inquiries about the area where human understanding cannot reach.

Book I of the *Essay* is devoted to an attack on innate ideas and principles. It seems that Locke’s analysis of human understanding presupposes the driving away of all those things, which were put by earlier philosophers in human mind. The rationalist

philosophers from Plato to Descartes and Leibniz have been putting into the human mind all kinds of ideas. Of course they did not take any credit for doing this. Sometimes God has been made responsible for putting ideas into human mind, at other times nature itself had been made responsible, and yet on some other occasions it was said that the human soul has got certain ideas from its very birth. Locke had no wish to increase the stock of things that already existed in the human mind. He wished to start with a clean human mind. Plato was certainly not starting with a clean human mind when he thought that all knowledge was recollection. Ideas were already existing in the mind, a man had only to recollect them. Descartes improved the situation by rejecting the mythology connected with recollection and rebirth. Finally, Leibniz considered human mind having innate abilities to know certain things. From the time of Plato to the time of Leibniz several versions of innateness hypothesis were presented by philosophers. Whose version was attacked by Locke? Locke seems to have attacked only a crude version of the innateness hypothesis. Referring to the innateness doctrine Yolton points out, "The doctrine underwent, in general, a transformation from its naive form to a modified version. The naive form claimed that God wrote into or impressed upon the soul or mind at birth certain ideas and precepts (or a developed conscience capable of deciding what is right and wrong, independent of custom or learning) for the guidance of life and the foundation of morality, even though we do not become aware of these innate principles (or of the conscience) until maturity."⁴⁷ The naive form of innatism was introduced to sustain morality and religion. This sort of innatism is easy to be criticized. But it is doubtful, whether Locke has rejected this kind of innatism. He was certainly not against morality and religion. But the improved version of the doctrine of innate knowledge was difficult to criticize. During the days of Locke himself innate knowledge was given a *dispositional* analysis. It was "claimed not that men are born with completed ideas and principles of morality, but only that such knowledge was implicit in the soul and merely required experience to elicit awareness of it."⁴⁸ This means there is no contradiction between having innate knowledge and using

experience to make it explicit. To call some piece of knowledge innate simple means to have potentiality to have such knowledge. Potentialities are not occurrences, but can lead to occurrences.

Lee, Sergeant and Leibniz attacked Locke's empiricism in order to defend innate ideas. According to Lee, "If all knowledge comes by our *senses* or *Reflexion*, which is his Maxim, then there can be no *certain* knowledge of the truth of any *general* proposition whatever; because our senses can reach but to *particulars* and *Reflexion* no farther."⁴⁹ This would mean the success of scepticism. Scepticism denies the possibility of knowledge i.e. certainty. Without general propositions we cannot make any progress in any science. According to Lee, the man would lose all privileges over brutes. According to Lee, man is better than brute because he has ability to use general principles and to arrive at general truths. Sergeant's *Solid Philosophy Asserted* contains criticism of Locke, which is not very unlike the criticism of Lee. According to Yolton, Leibniz's "criticism of Locke's empiricism echo's that of Lee."⁵⁰ According to Leibniz, not only mathematics and geometry contain truths that are independent of experience, even theology and juris prudence contains truths that are necessary. According to all the three, Lee, Sergeant and Leibniz, no knowledge is possible without the help of general principles and general principles cannot come from experience. As Yolton refers to them, "Lee, Leibniz and Sergeant were concerned with laying bare what they took to be the necessary rational presuppositions of any theory of knowledge. All three were committed to a theory of knowledge which in effect removed analysis and investigation from experience and gave it an a priori foundation in general principles."⁵¹ If general principles have to function as the foundations of knowledge then there is no question of obtaining them as the end product of the process of knowledge. For they themselves make knowledge possible. The present discussion of course does not mean that Lock made no contribution to philosophy through his attack on innate ideas. He certainly made a significant contribution by attacking the innateness hypothesis. It is his attack

on the doctrine of innate ideas that led philosophers to give more attention to mind and its capacities to operate.

Locke has rejected innate ideas simply for showing that the child takes birth without having any ideas in his mind. It is his birth in the world that is responsible for ideas arising in his mind. It is not *reason* but *sense* which is causally responsible for the birth of ideas. Sense is again divided into two kinds, outer and internal sense i.e. *sensation* and *reflexion*. It is the contact of mind with the external world that leads to the generation of ideas. What is the epistemological status of an idea once it has been generated? The epistemological status of an idea is that it is an object of thought when a man is involved in the process of thinking. As Locke points out referring to the term 'Idea', "It being that term which, I think, serves best to stand for whatsoever is the object of the understanding when a man thinks, I have used it to express whatever is meant by *Phantasm*, *notion*, *Species*, or whatever it is which the mind can be employed about in thinking."⁵² In order to explain the meaning of an unfamiliar term we take the help of familiar terms. But the terms phantasm, notion and species are as much familiar or unfamiliar as is the term idea. No progress is made in clarity except that the ideas occur in thinking. As Bishop says, "As to the *term of ideas*, I have no objection to the use of the word itself; provided it be used in a common sense, and no weight be laid upon it more than it can bear; for I am for no new affected *terms* which are apt to carry men's Minds out of the way; they are like *Ignes fatui* which seem to give light, but lead to those that follow them into bogs."⁵³ Bishop means to say the term idea has been given a new technical meaning, which is different from its ordinary meaning. Locke has hardly succeeded in explaining the new meaning of the term idea.

Several of Locke's contemporaries including Lee and Sergeant were quite dissatisfied with Locke's use of the word 'idea'. However, Locke is not muddled as his critics have made him. The term 'idea' was already in use. When the rationalist

philosophers from the days of Plato to the days of Leibniz have used the term idea they gave it some meaning. Locke too is giving the same meaning to this term idea except that it should not be considered as innate to the mind. Mind has not taken birth with any kind of ideas, they have come to one's mind through the senses. The matter is quite simple but Locke's critics have unnecessarily made it complicated. The only difference between Lock and the rationalists is that some rationalists like Plato considered ideas as objective and real, having existence outside the mind of a man, they were not restricted to mind. But for Locke ideas exist nowhere except in mind. Thinking depends on ideas and ideas depend on thinking, there is a reciprocal type of dependence. Not only that ideas do not exist outside the mind; they do not exist even in the mind without the acts of thinking. This point is important because Locke's concept of mind is little different from the Cartesian concept of mind. Locke does not accept that mind is occupied in thinking all the time. There are occasions when mind does not have thoughts at all. On those occasions mind would also fail to have ideas. So ideas are in the real sense thought dependent objects. This would make ideas into some kinds of objects existing in between the thoughts of a man and the external reality. Man is not directly in contact with the external reality. He is in contact only with his ideas. As Chappell points out, "The epistemological objection is that the presence of such objects in perception creates an impenetrable "veil" between perceivers and the external world, making it impossible for them to know that any thing exists outside their minds;"⁵⁴ Our knowledge of the external world would be completely inferential. There is no chance for removing the veil of ideas and looking into the external world. There is no possibility of being acquainted directly with the objects of the external world. The external world is represented through the ideas. So if we have any knowledge of the external world, it is only through the mediation of ideas.

Locke considers 'red', 'blue', 'hard', 'soft', 'sweet', 'cold' etc. as examples of simple ideas which come through *sensation*. Mind acts on its own operations and

produces the simple ideas of reflection such as perception, thinking, doubting, reasoning etc. Any simple idea, which is in the mind of a man, has come through either by sensation or by reflection. Mind has no ability to generate any simple idea by itself. However, it can produce compound ideas by joining simple ideas. So in a way complex ideas also are not generated by the mind except the compounding of the simple ideas. The examples of compound ideas are the ideas of substances, modes and relations.

Mind, not only compares ideas and compounds them, but it also involves in the acts of abstraction. For the human mind is not only having the simple and the complex ideas, it also has abstract ideas, which involve generality. The abstract general ideas are possible through the mental activity of abstraction. Consider how the abstract general idea of *man* is formed? Those who are involved in abstraction “make nothing new, but only leave out of the complex *idea* they had of *Peter* and *James*, *Mary* and *Jane*, that which is peculiar to each, and retain only what is common to them all.”⁵⁵ The general idea of man is formed by abstracting what is common to Mary, Jane and Peter, leaving out what is peculiar to each one of them. Certain remarks of Locke on the nature of abstract general ideas have exposed his view to bitter criticism by Berkeley and Hume. As Locke says concerning general idea of a triangle that it “must be neither oblique, nor rectangle, neither equilateral, equierurl, nor Scalenon, but all and none of these at once. In effect, it is something imperfect that cannot exist, an idea wherein some parts of several different and inconsistent *Ideas* are put together.”⁵⁶ So the general ideas for Locke are self-inconsistent because they are constituted out of inconsistent parts. Both Berkeley and Hume, as we will see, refused to accept that mind has any such ideas. These ideas are pure fictions of Locke’s mind.

Mind is equipped not only with simple, compound and abstract general ideas, but according to Locke, there are also ideas of two other kinds, the ideas of primary qualities and the ideas of secondary qualities. The distinction between perception and secondary

qualities was popularised by the scientists of Locke's time. Primary qualities are such as shape, size number, motion or rest and solidity. The secondary qualities are such as sweet, cold, heat, color, soft etc. Primary qualities are held as intrinsic properties of material objects. But the secondary qualities are only powers of material objects to produce their ideas in human mind. Concerning the ideas of these qualities in our mind Locke maintains that the ideas of primary quality is resemble the qualities existing in physical objects. But the ideas of secondary qualities do not have their counterparts in the physical world. This implies that size and shape are really part of the physical world. But the colour that we see in an object does not belong to it. So also sweetness, softness, etc. do not belong to the world.

Apart from the primary and secondary qualities, there is also a material substance. Qualities are always qualities of something or the other. Qualities cannot float in the void; they require a substratum to stick on. Material substance is that base. In postulating material substance and its primary and secondary qualities Locke has broken his ties with rigid empiricism. He has accepted the existence of unobservable entities, for neither primary qualities nor the substance in which they exist, can ever be observed. These entities are unobservable in principle.

Though Locke considered the reality of mind independent of the reality of body, he was not a Cartesian. He refused to reduce mind to thinking and body to extension. There is no doubt that mind thinks, but not continuously. It has ability to think, and ability is not an occurrence. So also is not extension but solidity, which is the real character of matter. Locke's views on mind-body dualism have led him to extremely novel views about personal identity. The specialists on personal identity generally begin their work by quoting Locke. According to Locke, a *person* stands for "a thinking intelligent being that has reason and reflection and can consider itself as itself, the same thinking thing in different times and places."⁵⁷ There are two important implications of

Locke's view. First is the distinction between a person and a man. A man is a biological entity. Locke is concerned with the identity of a person. The second important implication is that a person is not restricted to one and only one body. A person may occupy more than one body. What is required for an identity of a person is not the identity of the body; it is the identity of consciousness. It is quite imaginable that two persons exist in the same body. So also it is imaginable that one person is occupying more than one body. Locke gives the example of a prince, leaving his own body and then occupying the body of a cobbler who recently died. As Locke remarks, "should the soul of a prince, carrying with the consciousness of the prince's past life, enter and inform the body of a cobbler as soon as deserted by his own soul, every one sees he would be the same person with the prince, accountable only for the prince's action."⁵⁸ It appears that Locke refuses to define personal identity in terms of bodily identity. He considers continuity of consciousness as the criterion of personal identity. But continuity of consciousness presupposes memory, so memory becomes the criterion of personal identity. There are so many implications of Locke's views, which are not relevant in the present context.

Let us finally consider Locke's view of knowledge. Most of Locke's contemporary critics considered him as a committed sceptic. How far is the characterization of Locke as a sceptic correct? If he was a sceptic then he was a constructive sceptic, as we have already pointed out. Locke considered, like Descartes and Leibniz, mathematics as the paradigm of knowledge. He refused to consider empirical sciences as giving us true knowledge. Natural philosophy would cover empirical sciences in our sense of the term. Everything other than the demonstrative and intuitive knowledge was only opinion or belief. His idiom was quite unlike the idiom of our age. We make distinction between a priori knowledge and a posteriori knowledge. Locke did not consider a posteriori knowledge as a case of knowledge, because it was not having any certainty in its truth. Therefore Locke considered a posterior knowledge

as a kind of belief or opinion. For Locke only that was knowledge which is a case of a priori knowledge. Therefore it would not be wrong to think that Locke was influenced by scepticism so far as our knowledge of empirical truths is concerned. What may be shocking to the philosophers of our age would be placing morality among the science capable of demonstration. Locke has put ethics on the same level as geometry. Maybe Spinoza was responsible for Locke's giving as much importance to ethics and morality as to geometry. So having ideas in one's mind does not mean that one would also have knowledge. Ideas are necessary but not a sufficient condition of knowledge. Sometimes they succeed in giving only opinion.

Locke is the founder of British empiricism, which has placed empirical knowledge in its proper context vis-a-vis mathematical knowledge. Locke did not put empirical knowledge above mathematical knowledge, yet he considered it as a case of knowledge though with less certainty. Certainty in its true sense is found in the domain of mathematics and logic.

However, it cannot be held that Locke left human knowledge vulnerable to sceptical attack. In so far as empirical knowledge is based on our sense-contact with the world, we cannot doubt its validity. All that we must concede to empirical knowledge is probability, which is as much reliable as certainty in mathematics. Empirical knowledge is surely based on firm foundation in our experience of the world.

5. BERKELEY'S CONTINUATION OF THE EMPIRICIST MODEL:

According to Woolhouse, "Berkeley, the first great British philosopher after Locke, reacted against what he saw as the sceptical and atheistical consequences of Locke's philosophy."⁵⁹ Berkeley seems to be free from the influence of scepticism. As Grayling, an interpreter of Berkeley, writes "Berkeley had two related aims, which were

to defend 'common sense' by refuting scepticism and to defend religion by refuting atheism."⁶⁰ The defense of common sense does not mean that one must refute scepticism. There is no inconsistency involved in being both a sceptic and a holder of the common sense view. Ryle once suggested to Bertrand Russell that Locke invented common sense. Russell's immediate reaction was "By God, Ryle, I believe you are right. No one ever had common sense before John Locke and no one but Englishmen have even had it since."⁶¹ Berkeley was simply working on Locke's invention of common sense and in spite of this invention Locke retained scepticism. Though Berkeley professes that he is anti-sceptic, he uses scepticism to develop his own philosophy. Berkeley was certainly influenced by the "revival of interest in epistemological scepticism generated by the *Meditations* and reported, with some relish, in Bayle's *Dictionary*."⁶² Bayle's *Dictionary* depicts the arguments of the Pyrrhonians. According to Grayling, "Bayle sets out arguments for scepticism which are echoed, even in phraseology, by Berkeley."⁶³ Bayle has argued against the distinction between secondary and primary qualities. If secondary qualities were mind-dependent, so would be the primary qualities.

Some details of Bayle's arguments have been brought out by Popkin in his article on "Berkeley and Pyrrhonism."⁶⁴ In the remark B in the article on Pyrrho Bayle writes "if the objects of our senses appear to us coloured, hot, cold, smelling, tho' they are not so, why should they not appear extended and figured, at rest, and in motion, though they had no such thing."⁶⁵ Bayle is trying to show that all qualities of physical objects, whether primary or secondary, are mere appearances.

In his remark G on Zeno, Bayle argued against the non-mental existence of extension. Extension for Descartes was essence of a material body. Once it is shown that extension is not unlike other secondary qualities it would be shown that there are no real material bodies having extension. According to Bayle, modern philosophers have

recommended the suspension of judgement “with relation to sounds, odours, heat, and cold, hardness, and softness, ponderosity, and lightness, savours and colors, etc., that they teach that all these qualities are perceptions of our mind, and do not exist in the objects of our senses. Why should we not say the same thing of extension?”⁶⁶ Bayle cited passages from Malebranche and Fardella in support of this thesis. Bayle even discusses Arnauld’s charge against Malebranche for holding “some extravagant propositions, which strictly taken, tend to the establishment of a very dangerous Pyrrhonism.”⁶⁷ These three sets of arguments were meant for showing that Bayle succeeded in making a rigid distinction between the world of appearances that is known to us and the world of real objects which is not known to us. Bayle’s attempt was similar to the attempt made by Sextus Empiricus in his *Outlines of Pyrrhonism*. Sextus attempted to show that we are acquainted only with appearances. We are completely ignorant of the nature of reality.

Berkeley, not only understood scepticism, but also tried to solve the sceptical difficulties. Whatever aspect of scepticism was desirable, Berkeley assimilated it into his philosophical thought. The remaining part of it he rejected. Abolition of the distinction between primary and secondary qualities by sceptics was accepted by Berkeley. But he rejected the view that the *ideas* of these qualities have no reality. Berkeley discovered the source of scepticism in the rigid distinction between appearances and the real objects, between what is perceived and what exists beyond perception. Popkin quotes the crucial remark of Berkeley concerning the source of scepticism. Berkeley remarks, “All this scepticism follows, from our supposing a difference between *things* and *ideas*, and that the former have a subsistence without the mind, or unperceived. It were easy to dilate on the subject; and show how the arguments urged by sceptics in all ages, depend on the supposition of external objects.”⁶⁸ The distinction between *things* and *ideas* has been crucial to the sceptics. From the time of Pyrrho to the time of Sextus, and again from the time of Montaigne to the time of Bayle,

the sceptics were fond of talking about the distinction between things as they appear to us and the things as they really are. We are restricted to the realm of appearances, and this realm too is full of inconsistency and contradictions, for the reason that the realm of appearances is a mind-dependent realm.

Berkeley thought that once the *things* are reduced to *ideas*, the unknown and unknowable reality is reduced to known and knowable reality, that is, reality is reduced to appearances, there will be no scope for scepticism to intervene. Therefore in his writings Berkeley started reducing the existence of things to the existence of *ideas*. He came to accept the view that objects do not exist independently of, or apart from, the ideas. The reason is very simple that they are numerically identical with *ideas*. As Grayling points out referring to Berkeley's reductionism, "In essentials Berkeley's maneuver is to deny the appearance - reality gap by saying that appearance is reality; there is no divide between ideas and things because things are ideas, not independently existing items in some way lying inaccessibly behind or beyond experience."⁶⁹ This is an interesting maneuver by Berkeley; he is not reducing things to ideas but converting *ideas* into *things*. As Philonous says to Hylas "I am not for changing things into ideas, but rather ideas into things; since those immediate objects of perception, which according to you, are only the appearances of things, I take to be real things themselves."⁷⁰ The real things are given more serious thought because they are supposed to be permanent and enduring whereas things that appear are only transitory and non-enduring. This image has to be wiped out; appearances have to be converted into real things. There should be no reality over and above appearances. This is Berkeley's move, and not the opposite one.

In order to convert *things* into *ideas* two steps have to be taken. In the first step *things* are reduced to their sensible properties; at the second step sensible properties are reduced to *ideas* in the mind of a person. A *thing* is characterized by something that is

red, hot, and round, but these sensible properties are nothing but *ideas* in the mind of a person. But no such steps are taken if *ideas* are considered as *things*. *Ideas* are supposed to be subjective and *things* objective and public. One and the same *thing* can be perceived by different people but one and the same *idea* cannot occur in the minds of different people. So Berkeley's problem is how to convert an *idea*, which is subjective and restricted to a given mind, into something that is public and shared by different minds. Berkeley converts *ideas* into *things* by making God to play a role. The *ideas* in the mind of men have not been generated by those men, they have been generated by God. God has put the same *idea* into the minds of different people. Berkeley has succeeded in removing subjective element from human *ideas* and converting them into some kind of common *ideas*, shared and sharable by different people. One may not be very happy with the introduction of God for the conversion of *ideas* into *things*. Besides, no type of conversion or reduction or translation is free from difficulties and objections. Consider the reduction of physical objects to sense-data by the modern phenomenologists like Russell and Ayer. They are supposed to be the academic descendants of Berkeley. The phenomenology of Russell and Ayer is considered as phenomenology of Berkeley without the involvement of God. Sense-datum by definition is something which is private and subjective. No numerically the same sense-datum can occur in the minds of two different people. Even the same sense-datum cannot occur in the mind of the same person at two different times. A sense-datum is a highly subjective and private entity. In contrast, an object is a public entity shared and sharable by different people. When Russell and Ayer reduce objects to sense data they are reducing a public object to a set of private objects. There is no objection if the same set of private objects occur in the sense-field of different people. In such a situation perception of numerically the same object is possible. But this is self contradictory and nonsense to say that the same set of the same bundle of sense-data occurs in the sense fields of different people. A sense datum is as a convenient entity for explanation as is Berkeley's God. They have been introduced for the convenience of explanation, and

both of them become inconvenient on some occasions of explanation. A sense-datum explanation involves its own difficulties, in the same way in which explanation in terms of God involves its own difficulties. Berkeley is convinced of the fact that without God the ideas are likely to be subjective and private. Hence subjective idealism can't be presented if God's presence is not allowed.

The major difficulty with Berkeley's reduction of *things* to *ideas* is that there is no guarantee that it would stop scepticism. He proposes this reduction for condemning and rejecting scepticism. He had historical glance over scepticism and discovered that its being consists in the distinction between *things* and *ideas*. So he thought that the removal of this distinction would take away the base of scepticism. However, Hume more than Berkeley is known for the reduction proposed by the later. But Hume was a well known sceptic. In spite of successfully demolishing of the distinction between *things* and *ideas* Hume was a Pyrrhonist. As Popkin points out, "Hume maintained in far clearer and more significant fashion than Pyrrhonists or quasi-Pyrrhonists like Montaigne, LeVayer, Glanvill, Huett or Bayle, that we can never have grounds for beliefs, whether factual, moral, or demonstrable."⁷¹ There are hundreds of ways in which a sceptic would knock out a system of philosophy. If you stop one way he will find the other way. The issue of justifying a belief is no less important than the reduction of one belief to another belief. In spite of his opposition to Pyrrhonian thinking, Berkeley has been charged with Pyrrhonian prejudices. As Popkin writes, "Berkeley refused to give up the Pyrrhonian thesis that all we can ever know is appearance, and in offering a foundation for appearance, offers one that makes appearance real, not unreal.... The uniqueness of Berkeley's immaterialism is that it provides a basis for the Pyrrhonian world of appearances in the mind."⁷² In his attempt to meet sceptics Berkeley has imbibed in him the spirit of a sceptic. Referring to three major influences on Berkeley's thought, Luce comments, "Locke taught him, but Malebranche inspired him,.... Bayle alarmed and altered him."⁷³ So Berkeley owed to

the sceptic Bayle as much as he owed to Locke and Malebranche. He rejected the views of Bayle on several issues, so also he rejected the views of Locke and Malebranche. Berkeley totally rejected Locke's material substances. This rejection followed the rejection of primary qualities. Once the primary qualities were abolished, there was no need of a place to house them. A material substance was nothing but a house to accommodate them. Berkeley wished to prove the non-existence of matter in order to prove that he was an immaterialist. Locke's material substance was nothing but a piece of matter. By abolishing the matter and the modifications of matter, Berkeley has reduced the whole reality to the reality of mental substances (spirits) and their ideas. Some ideas of a finite spirit depend on him but other ideas are provided to him by God. So there is a direct transaction of ideas, not only between two finite spirits but also between finite spirits and God. Luce gives a pictorial account of Berkeley's ideas and the spirits which hold them. As he remarks, "There is something entirely distinct from ideas. There is what perceives ideas, wills, imagines, and remembers them. There is what I call mind, spirit, soul, or myself. This rather ego-centric account passes soon into the account of spirit as "one simple undivided active being' whose two main operations are understanding and willing. Spirit, by denotation, divides into the infinite spirit and finite spirits, and in the later sections, more precisely, into God, myself, and other spirits."⁷⁴ So Berkeley's spiritual realm is complete. Commenting on this realm Russell writes, that Berkeley "undertook to prove that there is no such thing as matter at all, and that the world consists of nothing but minds and their ideas."⁷⁵ Is this the common sense view of the world? Does the sense of the common man accept a world in which only the spirits and their ideas exist? Not only is Berkeley's view theologically oriented, it is also highly sophisticated, and a common man would hardly make any sense out of it. But then according to Pitcher, Berkeley perhaps had "a low opinion of the general spiritual condition of most people: he saw them as the victims of error and selfishness. And so he naturally had no great respect for the deliverances of ordinary common sense, although he paid lip service to it."⁷⁶ It is better to pay lip-service than paying no service

to common sense. The Lockean tradition of common sense had to be retained.

Consider now Berkeley's treatment of 'existence'. *Existence* is no less important than *idea* in Berkeley's philosophy. Berkeley converted *Idea* into a *thing*. Similarly he converted existence into 'to be perceived or to perceived'. Berkeley's dictum 'esse est percipi' means that existence lies in perception, that is, in being perceived by spirits. Existence, according to him, is mind-dependent. This is Berkeley's idealism about the external world.

One gets some new information about a billiard ball when it is said that it is red, round and hard, but there is no new information obtained when it is added that the billiard ball exists. Berkeley is quite aware of the situation. He knows very well that existence is not an extra property of objects. Berkeley comes to conclude that saying that a billiard ball exists simply means to say that it has been perceived. And this is true about the existence of all kinds of objects except the human souls or spirits. In the case of spirits, to say that they exist means to say that they perceive. The conclusion is obvious: 'Existence' means 'to be perceived or to perceive'. So the analysis of existence justifies Berkeley's ontology of spirits and their ideas.

Berkeley's epistemology, as already discussed, follows his ontology of spirits. His empiricistic model of knowledge considers naturally as an extension of his theory of perception by spirits. The spirits, including the infinite spirit, that is, God, are capable of seeing and having ideas. Thus knowledge is based on the ideas or perceptions.

So far as his meeting the sceptic's challenge is concerned, it is evident that he rejects scepticism and atheism of the philosophically unenlightened. Knowledge, according to him, is fully secured in the human capacity to perceive. The real world is commensurate with our perceptions. So there is no possibility of our being misled in our

beliefs and perceptions. Our perceptions are true more often than not.

6. HUME'S SENSATIONALISM:

We have already discussed Hume's scepticism in the first chapter. His scepticism was the outcome of his empiricism. Once empiricism was taken to its logical conclusion the result was scepticism. So we must discuss in depth the nature of Hume's empiricism. This discussion is complementary to the discussion of Hume, which we have already done in the first chapter. Perceptions are the foundational entities of Hume's empiricism. Whatever sort of knowledge we have, or fail to have, is on account of perceptions. However, these perceptions Hume divides into impressions and ideas. Impressions are those perceptions, which knock at the door of mind for the first time. It is through impressions that mind becomes acquainted with perceptions. Every perception by definition is short-lived. So impressions too are short-lived. As soon as they enter into the mind and get their presence registered, there they come to an end. However, though the impressions die out, they leave behind them their shadows. Hume calls these shadows ideas or thoughts. So what continues to exist in the mind is only an idea or thought. Hume defines an 'idea' as a faint copy of an impression. Hume says that, "Those perceptions, which enter with most force and violence, we may name *impressions*;.... By *ideas* I mean the faint images of these in thinking and reasoning."⁷⁷ It is obvious that the force and vivacity cannot be the character of ideas, because they are only copies or images and not the original objects. Only impressions can have force and vivacity. Only in abnormal circumstances like sleep, fever and madness ideas acquire force and vivacity. They cannot be distinguished from impressions. Similarly on some occasions impressions are very faint.

Mind cannot manufacture on its own simple ideas. All simple ideas are copies of simple impressions. The exception is given by Hume of a simple idea of a shade of a

colour of which one had no impression. If one has seen many shades of a given colour his mind can invent the simple idea of a shade of that colour of which he did not have any impression. The mind can manufacture complex ideas which may not directly resemble the compound impressions. But a complex idea is analysable in terms of those ideas which represent the impressions. Though we may not have the impression of golden mountain we certainly have the impression of gold and the impression of mountain, and the mind has manufactured the idea of golden mountain by adding the idea of gold to the idea of mountain. So there can be nothing in the mind of which the source is not in the impressions. The invention of the term impression has helped Hume in eliminating all those thoughts and ideas of which the source is not in the impression. When we entertain, according to Hume, “any suspicion that a philosophical term is employed without any meaning or idea (as is but too frequent), we need but enquire, *from what impression is that supposed idea derived?* And if it be impossible to assign any, this will serve to confirm our suspicion.”⁷⁸ So the technical term impression has been used by Hume as scissors to eliminate philosophical views which cannot be ultimately reduced to perception. ‘Impression’ is only a technical name for perception. Hume simply means that nothing can be in the mind in the form of an idea or a thought of which the source is not in perception.

Ideas do not occur in a jumbled fashion. They occur in a connected fashion. Ideas do not occur in the fashion of a jungle of ideas. They occur in the fashion of a garden of ideas, where there is regularity. As Hume remarks, “even in our wildest and most wandering reveries, nay in our very dreams, we shall find, if we reflect, that the imagination ran not altogether at adventures, but that there was still a connexion upheld among the different ideas, which succeeded each other.”⁷⁹ Imagine that a gardener arranges flower plants in three different ways. In one part of the garden the flower and plants form a circular figure, in another part they had been arranged in a triangular fashion, and in the third part they give an impression of two straight lines. Ideas too

occur in a similar fashion. Ideas follow three principles of association namely, “*Resemblance, contiguity, in time or place, and cause or effect.*”⁸⁰ It is on the ground of resemblance that sometimes one idea leads to me to other idea.

The discussion above refers to the objects of sense. The next important issue is the issue of objects of human reason. He divides these objects into two kinds to which references have already been made in the first chapter of this thesis. The two kinds are ‘relations of ideas’ and ‘matters of fact’. The former do not depend for their truth on anything existing anywhere in the universe. In short their truth is independent of reality. ‘Matters of fact’ are wholly unlike the relations of ideas. For their truth the ‘matters of fact’ are dependent on reality, because their whole purpose is to describe the reality. The negation of every matter of fact implies a possible situation. As Hume remarks, “*That the sun will not rise to-morrow is no less intelligible a proposition, and implies no more contradiction, than the affirmation, that it will rise.*”⁸¹ Hume reduces all empirical knowledge to probability. If *Sun will not rise tomorrow* is intelligible then there is no absolute guarantee for the truth of the affirmation that it will rise. In his *Treatise*, Hume maintained that “all knowledge resolves itself into probability.”⁸² In that work Hume also maintained that there is possibility of error not only in connection with the matters of fact but also in connection with demonstrative sciences. As he remarks, “In all demonstrative sciences the rules are certain and infallible; but when we apply them, our fallible and uncertain faculties are very apt to depart from them, and fall into error.”⁸³ This is sufficient for a Pyrrhonian to reduce even demonstrative sciences to probabilities. All that goes in the name of knowledge is nothing but probability. What is the fun in calling the rules of demonstrative sciences certain and infallible when the manipulations of demonstrative sciences, the algebraist or mathematicians are themselves fallible beings. Though Hume had made a very rigid distinction between relation of ideas and matters of fact, this rigidity seems to be quite elastic. The two scales, which Hume evolved for judging the truths, has recently been questioned by

Quine. According to him all truths belong to one and the same scale. Though Hume gave birth to the two scales, he has also taken a step for the dissolution of these two scales. The Pyrrhonian influence on his thought is responsible for this destructive step.

Empiricism means that philosophy which makes a start from experience and also ends with experience. An empiricist cannot therefore avoid the claims of memory. The experience that is momentary is not of much use. Only the experience that has duration can lead to the construction of the universe. But duration presupposes memory; therefore, Hume was led to discuss the nature of memory. Hume distinguishes it from imagination, though contents of both are ideas. Ideas of memory, according to Hume, retain some vivacity of impressions. Ideas that occur in imagination lose their vivacity completely. The second important distinction is “that the memory preserves the original form in which objects were presented.”⁸⁴ But in the case of imagination it can “transpose and change its ideas.”⁸⁵ Memory is said to recollect what was perceived earlier. There is no such restriction on imagination. There is no doubt that Hume takes the help of memory at every step. Memory is required for explaining the relation of cause and effect, for personal identity, for future prediction etc. However the concept of memory is riddled with difficulties. For example, Hume is saying that memory that reproduces the order of past events involves him in an impossible position. How does one know that a given piece of memory has reproduced the order of the past events? Is it possible for my mind to be directly acquainted with the past events without the involvement of memories? It is only in such a condition that I can compare the two, the memory and the past events. If not, then how can we say that memory has reproduced the order of the events correctly? And if it is possible to be acquainted with past events without memory, then why to introduce memories? It is because mind cannot be directly acquainted with the past that the medium of memory was introduced. Comparing memory with memories solves no problem.

In Hume's philosophy both memory and imagination play crucial role. For example, though Hume maintains that there is no external world, he also maintains that the human beings do have a belief in the external world. How does this belief take place? How do we come to believe in an external world? Memory helps us in remembering the perceptions that I had in the past. Imagination later introduces identity in the resembling perceptions. So it is with the help of both memory and imagination that belief in the external reality that exists independently of human mind, arises. Both memory and imagination are structural items of Hume's empiricism.

Abstract or general ideas in the form in which they were accepted by Plato and Locke were not acceptable to Hume. Plato invented an independent world of general ideas, over and above the world of particular ideas. Acceptance of such a world cannot be approved by a consistent empiricist. So Locke was wrong about the general ideas though he was an empiricist. He attempted to obtain general ideas through the process of abstraction. What is common to different particulars is abstracted. After abstraction a general idea is formed. Take for example the objects that we call horses, general idea of horse is formed by what is common to different horses. One horse may be white and the other gray, so what is common to two horses is not white or gray. What is common to them is only colour. Similarly about size and figure etc., different horses have different sizes but all of them have size. So size is common to all of them. So abstraction of what is common to different objects means not abstracting any precise quality or quantity. It is only the general character that is abstracted. Hume would say that he tried his best to form the general idea of the horse but failed. In his mind only those ideas exist that have precise colour, shape and figure. As he says, "*that the mind cannot form any notion of quantity or quality without forming a precise notion of the degrees of each.*"⁸⁶ This means that Hume can find the notion of white horse or gray horse but not just of a coloured horse. Our mind does not entertain any such thing as general idea. All ideas that exist in one's mind are particular ideas. Abstract general

ideas are fictions introduced by such great philosophers as Plato and Locke.

The function of an abstract or general idea is to bring different particulars together. But this can also be done by a particular itself. Suppose I take up a particular object and call it 'leaf'. All objects, which resemble this object, may be called leaves. So particular leaf has been put to perform the same function, which is being performed by a leaf in general. Hume succeeds in placing particular ideas in place of general ideas.

Just as Plato gave more importance to universals over particulars, there were philosophers who preferred particulars to universals. The latter tendency has origin in Aristotle. Protagoras was wholly devoted to particulars. Hume maintained, not only the superiority of particular over universals, he was interested in totally demolishing the universals. However, he failed to do so. He has taken the help of at least one universal. The universal in question is 'resemblance'. This universal can have its own instances.

Hume has made very penetrating remarks about academic disciplines. Consider his remarks, "It is not solely in poetry and music, we must follow our taste and sentiment, but likewise in philosophy.... When I give the preference to one set of arguments above another, I do nothing but decide from my feeling concerning the superiority of their influence."⁸⁷ It is not only in philosophy, even in science, taste and sentiments are given importance.

Hume became a controversial figure simply because it is quite difficult on our part to decide Hume's preferences. He maintains that "there is a direct and total opposition betwixt our reason and our sense."⁸⁸ This opposition led him to scepticism. One would feel that he rejects both reason as well as senses. However, he is on the side of senses. It is the senses, which lead us to form certain habit or custom. Custom, according to Hume, "is the great guide of human life. It is that principle, alone which

renders our experience useful to us, and makes us expect, for the future, a similar train of events with those which have appeared in the past. Without the influence of custom, we should be entirely ignorant of every matter of fact beyond what is immediately present to the memory and senses.”⁸⁹ It is such remarks as these, which would lead one to think that Hume, was no kind of a sceptic or that he was not serious about scepticism. If he was a sceptic then perhaps he was sceptic about philosophy and theology rather than about sciences. As his famous remark goes, “If we take in our hand any volume; of divinity or school metaphysics, for instance; let us ask, *Does it contain any abstract reasoning concerning quantity or number?* No. *Does it contain any experimental reasoning concerning matter of fact and existence?* No. Commit it then to the flames: for it can contain nothing but sophistry and confusion.”⁹⁰

Thus Hume has shown that nothing less than the relations of ideas in mathematics and matters of fact in science is acceptable to philosophy. Empiricistic philosophy cannot accept the so-called metaphysical truths, because they are not certain like mathematical truths, nor are they probable like the truths in sciences. Hence metaphysics as a non-empirical and non-mathematical discipline is impossible.

Hume has thus prepared the ground for a critical examination of the grounds of our knowledge later by Kant. Hume awakened Kant from his dogmatic slumber. He made possible the emergence of transcendental or critical philosophy in the Continent.

7. KANT'S CRITICAL MODEL OF KNOWLEDGE:

The rationalist and empiricist model of epistemology differed in their account of the possibility of human knowledge. The conflict was very simple. Empiricists gave over-importance to experience. Similarly the rationalist gave over-importance to reason. One gave no importance to reason, other gave no importance to experience. Both were

wrong. Knowledge is possible neither without experience nor without reason. Kant tried to resolve the conflict between rationalists and empiricists. He was a historical necessity, if philosophy had to make any progress. Progress means not the repetition of what has already been done, but the production of something new. It was no surprise that Kant was influenced by the rationalist tradition. Perhaps he would have remained a rationalist philosopher if he had not come in contact with Hume's sceptical thought. It is Hume's scepticism that awakened Kant from his dogmatic slumber. If he had not read Hume he would have remained a dogmatist. If one studies the fundamental structure of Hume's thought one would find a way to Kantian thinking. All those entities, which Hume failed to find in experience, such entities as 'self', 'cause', etc., were converted by Kant into a priori presuppositions of experience. According to Korner, Kant never "ceased to admire Hume's philosophical acumen. For his anti-metaphysical argument he remained avowedly grateful. It had taught him that whoever wishes to engage in a metaphysical inquiry must first be clear about the nature of the undertaking."⁹¹ Kant was convinced by Hume's attack that not all metaphysics is genuine. Therefore the question arises, put crudely, how is genuine metaphysics possible?

There was another conflict that also required resolution. The conflict was between the idealists who thought that the reality is created by human mind and the realists who thought that the human mind only records what is there outside the mind. According to the realists, mind only records what is given to us. But the idealists reject any objective reality. This conflict was no less important than the conflict between the rationalists and the empiricists.

To Kant the human mind appeared quite complicated. It is through the study of human mind that Kant could think in terms of creating a Copernican revolution in philosophy. The kind of revolution that Copernicus made in astronomy, Kant claimed to have made in philosophy. In the pre-Copernicus days it was thought that the earth is the

centre and all the other planets move around the earth. Copernicus converted earth into one of the planets moving like other planets around the Sun. Kant created a similar revolution in philosophy by giving higher importance to mind over objects. Though mind does not create objects, it constructs them, so in a way recreates them. The pre-Kantian position was that our knowledge had to conform to objects. The Kantian position is that the objects have to conform to our knowledge. Human knowledge is produced by mind, but mind is not a simple receptor of any kind. Knowledge is the end product of the processing done by sensibility and understanding.

The reality that is given to our experience, i.e. the objects that we see, hear, touch, taste and smell etc. are not as they really are. Our seeing, touching, tasting, hearing etc. i.e. our perceptual activities, have introduced changes in them. Primary change that occurs to them is the placement in space and time. Each object occupies some part of space and occurs at a given time. According to Kant, we cannot conceive an object without space and time. But one can conceive space and time without objects. Kant considers space and time as a priori forms of sensibility. They cannot be abstractions from experience, because they make experience possible. After giving a spatio-temporal structure to the data given to sensibility, the data are forwarded to the understanding where they are brought under categories. The categories provide a logical structure to the sense-manifold.

The reality with which we are in contact all the time, which is spread out in space and time, is described by Kant as phenomenal reality. The phenomenality presupposes some reality, which is beyond the phenomenal reality, and which is in some sense the ground for the phenomenal reality. Kant calls it as noumenal reality i.e. reality as it is in itself. Man has not brought noumenon into existence, but in some sense he has brought phenomenon into existence. For phenomenon is the result of the contact of reality with human mind.

Kant's philosophy is called critical because it evaluates the extent of reason critically. Kant did not accept Hume in rejecting metaphysics. But he wished to construct metaphysics on a secure foundation. The critical method was designed to provide a secure foundation not only to metaphysics but also to epistemology.

Kant affirmed that we possess a faculty that is capable of giving us knowledge without an appeal to experience. He agreed with the empiricists that our knowledge begins with experience, but he added that "though all our knowledge begins with experience, it does not follow that it all arises out of experience."⁹² For Hume all our knowledge consists of a series of impressions, which we derive through our senses. We clearly possess a kind of knowledge that does not come out of experience even though it begins with experience. Hume was right that we do not experience causal necessity but Kant rejected his explanation that causality is simply a psychological habit of connecting two events that we call cause and effect. Kant believed that we have knowledge about causality, and we get this knowledge not from sense experience but directly from the faculty of rational judgement, and therefore is a priori. What is a priori knowledge? Kant replies that if one desires an example from science, one needs only to look at any proposition in mathematics. If one desires an example from the commonest operations of understanding, the proposition that every change must have a cause can serve one's purpose. Kant says that this kind of knowledge cannot be derived from experience. Experience cannot show us that every change must have a cause since we have not yet experienced every change. Nor can experience show us that connections between events are necessary. Experience cannot give knowledge about necessary connections. Hume's theory would work for the ideas of things we have actually experienced. If I ask, how do I know that the chair is brown? My answer is that I can see it and if my assertion is challenged, I refer to my experience which settles the question, because we all agree that experience gives us a kind of knowledge that conforms to the nature of

things. But we also have a kind of knowledge, which cannot be validated by experience. For example, every straight line is the shortest distance between two points. What makes it possible for me to make judgements about events before they even occur? What makes it possible to have judgements that are universally true? For Kant, mind makes judgements about all objects, even those that have not yet been experienced. It is the seat of the necessary and universal judgements. Kant was forced to try a new hypothesis regarding the relation between the mind and its objects. Kant's hypothesis was that it is the objects that conform to the operations of the mind. He came to this hypothesis following Copernicus. Kant says "Hitherto it has been assumed that all our knowledge must conform to objects. But all attempts to extend our knowledge of objects by establishing something in regard to them *a priori*, by means of concepts, have, on this assumption, ended in failure. We must therefore; make trial whether we may not have more success in the task of metaphysics, if we suppose that objects must conform to our knowledge."⁹³ He further says: "If intuition must conform to the constitution of the objects, I do not see how we could know anything of the latter *a priori*, but if the objects (as object of the senses) must conform to the constitution of our faculty of intuition, we have no difficulty in conceiving such a possibility."⁹⁴

Kant did not mean to say that the mind, creates objects, nor did he mean that mind possesses innate ideas. He says that the mind brings something to the objects it experiences. That is, mind is structured in such away that it imposes its way of knowing upon its objects.

Kant says that there are two sources of human knowledge, which perhaps spring from a common but to us unknown root, namely sensibility and understanding. Knowledge is a cooperative affair between the knower and the thing known. Although I am able to distinguish between myself as a knower and the thing I know, I can never know that thing as it is in itself. I know it as my structured mind permits me to know it.

So Kant says, "Without sensibility no object would be given to us, without understanding no object would be thought. Thoughts without content are empty, intuitions without concepts are blind."⁹⁵

The distinct activity of the mind is to synthesis and to unify our experiences. It achieves this synthesis first by imposing on our various experiences in the sensible manifold two forms of intuition, namely space and time. But space and time are not ideas derived from the things that are experienced. The manifold of experience is judged by us through certain fixed forms or concepts such as quantity, quality, relation and modality. When we assert quantity, we have in mind one or many. When we make a judgement of quality we make either a positive or a negative statement. When we make judgement of relation, we think of cause and effect and subject and predicate. When we make judgement of modality we have in mind that something is either possible or impossible. All these ways of thinking are what constitute the act of synthesis through which the mind strives to make a consistent single world out of the manifold of sense impressions. Kant says, the mind transforms the raw data given to our sense into a coherent and related set of elements. This leads to the unity of our experience which must imply the unity of the self, for unless there be a unity between the several operations of the mind, there can be no knowledge or experience. To have such knowledge involves, in various sequences, sensation, imagination and memory, as well as the powers of intuitive synthesis. Thus, it must be the same self that at once senses an object, remembers its characteristics, imposes upon it the forms of space and time and the category of cause and effect. All these activities must occur in some single subject, otherwise there could be no knowledge, for if one subject had only sensations, another only memory, and soon, the sensible manifold could never be unified. Kant calls the single subject that accomplishes this unifying activity as 'transcendental unity of apperception'. He uses the term "transcendental" to indicate that we do not experience the self directly even though such a unity or self, is implied by our actual experience.

Thus the idea of this self is a priori, as a necessary condition, for our experience of having knowledge of a unified world of nature. In the act of unifying all the elements of experience, we are conscious of our own unity, so that our consciousness of a unified world of experience and our own self - consciousness occur simultaneously. Our self-consciousness is affected by the same faculties that affect our perception of external objects.

The major impact of Kant's critical philosophy is the insistence that human knowledge is forever limited in its scope. This limit takes two forms. In the first place, knowledge is limited to the world of experience. Secondly, our knowledge is limited by the manner in which our faculties of perception and thinking organize the raw data of experience. Kant distinguishes between the world as we experience it and the reality. There is the reality external to us that exists independently of us, but that we can know only as it appears to us and is organized by us. The concept of a thing in-itself does not increase knowledge but reminds us of the limits of our knowledge.

If the human knowledge were limited to the faculties of sensibility and understanding then the kind of metaphysics, which would arise, would also be limited. Strawson distinguishes metaphysics into two kinds, descriptive and revisionary. He places Kant and Aristotle in the class of descriptive metaphysicians. Philosophers like Plato and Hegel belong to the group of revisionary metaphysicians. Descriptive metaphysician does not use reason-crossing boundaries of understanding, he keeps the reason limited to the understanding. According to Strawson, metaphysicians like Kant are only making explicit transcendental presuppositions of thought. Transcendental presuppositions of thinking are those presuppositions, which make thinking possible. Therefore this is very different kind of metaphysics, than the kind of metaphysics that was done by Plato, Hegel etc.

Kant's critical method thus brings out the transcendental presuppositions of our knowledge of the external world. The transcendental account of knowledge explains the a priori possibility of knowledge; that is, it brings out the a priori principles, which underlie knowledge. In this way the sceptic's argument that knowledge is not possible is refuted by Kant.

Kant's argument against scepticism is the strongest because he shows that knowledge is not only possible but is founded in our faculty of sensibility and understanding. Because of these a priori foundations our knowledge is certain and indefeasible. There is an element of necessity not only in our mathematical knowledge but also in our empirical knowledge of the world. The concept of necessity will be discussed in the following chapters.

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CHAPTER III

LOGICAL NECESSITY AND SCEPTICISM

Transition from Greek to modern scepticism is marked by the fact that even the extreme sceptic of the modern time, David Hume, allows 'logically true propositions' to be free from doubt. He allows the notion of certainty to them. 'Logically true propositions' does not mean only those propositions, which belong to the discipline of logic. 'Logically true' means not 'empirically true': their truth is independent of experience. Not only the propositions of logic, the propositions of geometry, arithmetic, algebra etc., are all 'logically true'. This lead a philosopher to think that 'logically true' propositions are absolutely certain, that is, are beyond doubt.

In order to clarify the notion of logical certainty, i.e. certainty applied to 'logically true propositions', we have to consider the nature of several allied concepts. Some of these concepts form pairs. For example, the concept of a priori is paired with a posteriori: the concept of necessity is paired with contingency, transcendental with empirical. Perhaps the most important pair is that of analytic and synthetic. Out of these concepts some of them are favoured by the rationalists and others are favoured by the empiricists. Rationalists roam in the world of necessity, which is characterised by a priority, certainty, analyticity, transcendentality, etc. Opposing them, the empiricists roam in the world of contingency, which is characterised by a posteriority, probability, syntheticity, empiricity, etc. The constituents of these pairs are so intimately related that the discussion of one of them involves the discussion of the other. If you wish to know about 'contingency', you have also to know what 'necessity' means? So whether one is a rationalists or an empiricists he is required to study all these concepts.

1. LEIBNIZ'S DISTINCTION BETWEEN NECESSITY AND CONTINGENCY:

The invention of logical truths has reduced the scope of scepticism. It is now restricted only to empirical propositions. But Leibniz, who is responsible for so many distinctions and divisions which we hold these days, did not allow doubt with respect even to 'empirically true propositions'. For him, all true propositions, be they empirical or a priori, are analytic. He did not distinguish analytic judgements from synthetic judgements as we do these days. Our distinction is rooted in Kant and the post-Kantian philosophers whose views were very different from Leibniz. As Ishiguro points out, it is better "not to use 'analytic' and 'synthetic' at all, with their post-Kantian associations, to characterize Leibniz's theories."¹

Leibniz and Kant are two philosophers who have drawn the attention of the philosophers of our time; therefore we begin our discussion with Leibniz who was historically prior to Kant. Logical truths have been described by Leibniz as truths of reason. According to Leibniz, "There are also two kinds of truths: truths of *reasoning* and truths of *fact*. Truths of reasoning are necessary and their opposite is impossible; those of fact are contingent and their opposite is possible. When a truth is necessary, the reason for, it can be found by analysis, that is, by resolving it into simpler ideas and truths until the primary ones are reached."² So, according to Leibniz, necessity is attached to those propositions of which the opposite is impossible. Thus Leibniz is applying the law of contradiction to necessary propositions. Necessary propositions can be of two kinds, either they are primary or axiomatic or deducible from these primary truths. Concerning primary truths Leibniz says, "Primary truths are those which either state a term of itself or deny an opposite of its opposite. For example, 'A is A', or 'A is not not - A'; 'if it is true that A is B, it is false that A is not B, or that A is not - B'; again, 'Each thing is what it is', 'Each thing is like itself, or is equally to itself', 'Nothing is greater or less than itself' and others of this sort which, though they may have their own grades of priority, can all be included under the name of 'identities'."³ By

'grades of priority' Leibniz means the steps that are required in reducing a proposition to the primary truths. Suppose a given proposition takes four steps for its reduction to primary truths, then it has a lower grade to the proposition which requires only two steps for its reduction to primary truths.

Those truths of reason that are not primary truths are reduced to primary truths with the help of definitions of certain constituents of propositions. Leibniz gives the following example. "A proposition accepted as an axiom by the mathematicians and all others alike is 'The whole is greater than its part', or 'A part is less than the whole'. But this is very easily demonstrated from the definition of 'less' or 'greater', together with the primitive axiom, that of identity."⁴ So an axiomatic truth 'a part is less than the whole' is derived from the primitive axiom of identity together with the definition of 'less'. As Leibniz further writes, "that which is equal to a part of the whole is less than the whole (by the definition of 'less'); therefore a part is less than the whole."⁵

Leibniz did not believe in indeterminacy of truth. According to him, a proposition is either true or false. He further believed that all affirmative truths are analytic. As he remarks, "An affirmative truth is one whose predicate is in the subject; and so in every true affirmative proposition, necessary or contingent, universal or particular, the notion of the predicate is in some way contained in the notion of the subject, in such a way that if anyone were to understand perfectly each of the two notions just as God understands it, he would by that very fact perceive that the predicate is in the subject."⁶ Obviously we are not Gods, therefore the subjects of many affirmative truths do not appear to us to contain their predicates. Only a few subjects contain their predicates. We distinguish the proposition 'The table is made of wood' from the proposition 'The table is extended'. Though the proposition 'the table is made of wood' is true, 'wood' is not included in the subject, the table. It is for the reason that

the table could have been made out of iron. But whether the table is made of iron or of wood, it would remain extended. Therefore the predicate of the proposition 'the table is extended' is included in its subject. So the analytic propositions could be both necessary as well as contingent. So neither the notion of analyticity nor that of contingency held by Leibniz is the same as held by the philosophers of our time. A contingent proposition for us is synthetic. But it is absurd to maintain that an analytic proposition is synthetic.

Perhaps Leibniz was conscious of our difficulty. He makes a distinction between an absolutely necessary proposition from other kinds of proposition, which would satisfy us. He says, "An *absolutely necessary* proposition is one which can be resolved into identical propositions, or, whose opposite implies a contradiction."⁷ He further distinguishes necessary proposition from those that are *impossible* and *possible*. So there are three classes of propositions *necessary*, *impossible* and *possible*. Referring to his necessary propositions he says, "This type of necessity, therefore, I call metaphysical or geometrical. That which lacks such necessity I call contingent, but that which implies a contradiction, or whose opposite is necessary, is called *impossible*. The rest are called *possible*."⁸ What we call these days logical necessity is described by Leibniz as metaphysical or geometrical necessity. For him, necessity is contrasted with impossibility and possibility, that which is not necessary could be either impossible or possible.

Just as Leibniz reduces all truths of reason to primary truths, he reduces all propositions to the subject-predicate form of propositions. He considers subject of a proposition as its *antecedent* and the predicate as its *consequent*. He uses a spatial metaphor in thinking that the consequent is contained in the antecedent. In affirming a proposition we are bringing out the consequent from the antecedent. Even in the case of

a contingently true proposition the predicate is a consequent, therefore it is contained in the subject which is antecedent. But unfortunately human understanding is not the understanding of God. So we do not have a perfect understanding of the notions of subject and predicate. It is the failure of human understanding that the notion of predicate in a contingent proposition does not appear to us to be included in the subject. Perhaps it is owing to this failure that certain propositions appear to us only contingent. Perhaps for God all propositions are of equal value. It is because of the failure of human understanding that "In the case of a contingent truth, even though the predicate is really in the subject, yet one never arrives at a demonstration or an identity."⁹

The distinction between truths of reason and truths of fact has also been explained in terms of 'essences' and 'existences'. As Leibniz remarks, "there are some propositions which pertain to essences, and others to the existences of things. Propositions of essence are those which can be demonstrated by the resolution of terms; these are necessary, or virtually identical, and so their opposite is impossible, are virtually contradictory. The truth of these is eternal; not only will they hold whilst the world remains, but they would have held even if God had created world in another way. Existential or contingent propositions differ entirely from these.... These propositions are such as are true at a certain time; They express, not only what pertains to the possibility of things, but also what actually exists, or would exist contingently if certain things were granted - for example, that I am now alive, or that the Sun is shining."¹⁰ The propositions pertaining to essences i.e. the metaphysically necessary propositions, are the propositions whose opposite is impossible and which are true eternally. Eternal truths for Leibniz mean the truths, which hold not only in this world that exists but also in the possible world that could have existed if God willed it to exist. Rather, for Leibniz, the truths in question hold in all possible worlds. These truths do not pertain to the existence of things, whether actual or possible. According to Leibniz, only those

propositions pertain to essences “which are true with absolute universality, and which cannot be violated even by miracle.”¹¹ The absolute universality covers all possible worlds.

Leibniz gives supreme importance to the truths of reason. So he explains their nature in different ways. Consider the following remark of Leibniz. “If I should discover any demonstrative truth, mathematical or other, while dreaming (as might in fact be), it would be just as certain as if I had been awake. This shows us how intelligible truth is independent of the truth of the existence outside of us of sensible and material things.”¹² One may find some similarity between Leibniz and Descartes concerning the nature of mathematical or demonstrative truths. In his First Meditations when Descartes came to doubt the mathematical truths, he failed. His dream argument failed to displace these truths. These truths remain certain whether one was dreaming or one was awake. It is these demonstrative truths that led Descartes to introduce the hypothesis of the demon. But Leibniz requires no demon. For Leibniz the truth of demonstrative propositions is independent of what exists in an actual or a possible world. In dream the existing reality is duplicated. It is the images of sensible and material things that occur in our dream. Neither the material things nor their images are relevant for the truth of mathematical propositions.

So far as the nature of truths of facts is concerned, the hangover of the Cartesian thinking is clearly visible on the thoughts of Leibniz. Consider his remark “The immediate perception of our existence and of our thoughts furnishes us with the first truths a posteriori, or of fact, i.e. the *first experiences*, as the identical propositions contain the first truths a priori, or of reason, i.e. *the first lights*. Both are incapable of proof, and may be called immediate.”¹³ In the Cartesian idiom Leibniz is concerned with the propositions ‘I think’ and ‘I exists’. We are led to these truths through immediate

perception. They are a posteriori truths and not a priori truths. However, they behave like a priori truths among the body of a posteriori truths. The truths of 'I think' and 'I exists' have great importance. They function like axiomatic truths, the truths that are known a priori. Just as primary truths are axiomatic among the truths of reason, so the truths of 'I think' and 'I exists' are axiomatic among the truths of fact i.e. among the truths that are discovered a posteriori.

According to Chisholm, "the traditional term for those a priori propositions which are 'incapable of proof' is *axiom*."¹⁴ This means that the propositions 'I think' and 'I exists' are as axiomatic as are the propositions 'the whole is greater than its part' and 'A part is less than the whole'. Of course the former pair of propositions is not a priori, it is a posteriori. Not very unlike Descartes, Leibniz seems to be suffering from two opposite pulls. One pull is to dissolve the distinction between truths of reason and truths of fact. The opposite pull is to retain the distinction between the two. Of course both Leibniz and Descartes were mathematicians and attempted to give mathematical foundation to our knowledge of the world. But most of the interpreters of Leibniz believe that Leibniz retained a rigid distinction between truths of reason and truths of fact.

The distinction between necessary and contingent truths has been attacked by Russell in his work on Leibniz. Since the world that was created by God is the best of all possible worlds, perfect in every respect, it cannot be considered as free creation of God. God was necessitated to create this world. Not only this, all that happens in the world is necessary. How can there be any kind of contingency in the world? As Rescher writes about Russell's view on this issue, "He views Leibniz's system as *au fond* necessitarian, and regards the painfully drawn distinction between the necessary and contingent truths as null and void. He charges Leibniz's system with involving that universal necessitation

which its author was so ready to decry in Spinoza.”¹⁵ Though Leibniz rejected necessitarianism of Malebranche and Spinoza, according to Rescher, his “thinking came perilously close to an acceptance of necessitarianism.”¹⁶ Rescher quotes Leibniz to exhibit his necessitarianism. According to Leibniz, “since God is the most perfect mind, however, it is impossible for him not to be affected by the most perfect harmony, and thus to be necessitated to do the best by the very ideality of things.”¹⁷ So God was necessitated to do what was the best. Russell was certainly not wrong in attacking Leibniz on the distinction between contingent and necessary truths. According to Rescher, Leibniz became free from necessitarianism of Malebranche and Spinoza at a later stage of his life. “He became increasingly discontent with a necessitarianism that blocked the way to genuine contingency in nature.”¹⁸

Leibniz was himself troubled with the distinction between necessary and contingent propositions. He was unable to distinguish them. However, he solved the difficulty by applying mathematics to the situation. Referring to the perplexity caused by the subject - predicate analysis of the contingent propositions and the removal of this perplexity. Leibniz writes, “There is something which had perplexed me for a long time - how it is possible for the predicate of a proposition to be contained in (in esse), the subject without making the proposition necessary. But the knowledge of Geometrical matters, and especially of infinitesimal analysis, lit the lamp for me, so that I came to see that notions too can be resolvable in infinitum.”¹⁹ So the predicate of the proposition that is necessary is analysed out of the subject by taking finite steps. But the predicate of the proposition that is contingent is analysed out of the subject by taking infinite steps. If some thing is achieved by taking infinite steps then it is humanly impossible to achieve it. A human being can achieve only by taking finite steps. So, though both the true necessary propositions and true contingent propositions are analytic, it is possible to demonstrate the analytic character of the former without succeeding in exhibiting the

analytic character of the later. So the former are demonstrative propositions and the non-demonstrative propositions. So, Leibniz has succeeded in saving the contingent propositions from being converted into necessary propositions without abandoning the subject-predicate analysis of propositions.

Leibniz is not satisfied with the modal concepts *necessity*, *possibility* and *impossibility*, so he introduces further modalities. He introduces the concept of physical or moral necessity. Physical or moral necessity is non-logical necessity. It is different from metaphysical necessity. Though contingent truths are not metaphysically or logically necessary, they too are necessary because they refer to an existence which is the best possible under the given circumstances. Rescher comments that, "Leibniz calls the 'necessity' of contingent truths moral necessity as opposed to the logical or geometrical or absolute or metaphysically necessity of necessary truths, and he states that 'moral necessity stems from the choice of the best'".²⁰ Rescher's comment can be justified in Leibniz's own words. Leibniz writes, "although the world is not metaphysically necessary, such that its contrary would imply a contradiction or logical absurdity, nevertheless it is necessary physically, that is, determined in such a way that its contrary would imply imperfection or moral absurdity."²¹ Not only that this is the best of all possible worlds but, also any event occurring in the world is the best possible event under the given circumstances. If metaphysical necessity exhibits the essence of this world, then moral or physical necessity gives content to that essence. Contingent truths are governed by physical necessity in the same way in which necessary truths are governed by metaphysical necessity. Though not a strict determinist like Malebranche and Spinoza, Leibniz certainly exhibits the hangover of determinism. The principle of perfection has led him to this subtle form of determinism.

In our days Leibniz is known through his concept of the possible world. This concept requires clarification. The modern logicians and non-logicians who use modal concepts trace their views to Leibniz. Though Leibniz talked about possible worlds he accepted the doctrine of 'one-substance', 'one-world'. Each substance is restricted to its own world. It is impossible for numerically the same substance in different possible worlds. As Rescher points out referring to Leibniz, "No substance can - even in hypothesis - be pried loose from its world - environment and transposed into some other possible world. No possible substance can populate two distinct possible worlds, and no member of one world can be compatibly united with any member of any other."²² If Caesar and Tom have taken their birth in this world then it is impossible for them to have taken birth in any other possible world. Of course it is possible that Caesar and Tom are the names of some individuals also in other possible world. But those individuals would be numerically different from Caesar and Tom of this world. Therefore there is no question of understanding the trans-world identity of Caesar and Tom. To maintain the possibility of other Caesars and Toms, occupying their position in other possible worlds, is prohibited by Leibniz. Such an imagination would be possible only if one rejects the doctrine of one-substance to one-world. One has to be careful about the notion of contingency that Leibniz introduced. Though he restricts a given substance to a given world he allows the possibility of another substance in another world that differs only in one or two respects from the substance that exists in the actual world. We can imagine two Julius Caesars, one who exists in this world, whose name is recorded in history, the other Julius Caesar, occupies his position in other possible world. The only difference between these two Caesars is that the historical Caesar crossed the Rubicon whereas the possible Caesar did not. When Leibniz considered 'Caesar crossed the Rubicon' as a contingent truth he thought that the proposition 'Caesar did not cross the Rubicon' could be true in some other possible world. As Hide Ishiguro points out, Leibniz "regarded proposition like 'Caesar crossed the Rubicon' as

being contingent because God could have made a world in which that was not the case.”²³ Talking about possible Caesars is not an irrelevant talk because we make counterfactual statements like ‘had Caesar not crossed the Rubicon, Pompey would have defeated him’. This counterfactual conditional makes no sense if we do not imagine a Caesar who failed to cross the Rubicon. So we have to imagine a possible world in which Caesar did not cross the Rubicon. History of Caesar in the possible world would be very different from that of the Caesar who existed in our world. For example, Pompey, who failed to defeat Caesar in our world, would have defeated Caesar of the possible world. Ishiguro’s analysis is based on the following remark of Leibniz, “These worlds are all here, namely in thought. I will show you where one can find, not exactly the same Sextus whom you have seen (this is not possible, he carries always within himself what he will be), but future Sextuses who will have all that you already know of the real Sextus, but not all which, without our perceiving it, is already within him, nor consequently all that will happen to the real Sextus...”. Like Sextus, Caesar who was defeated by Pompey would have very a different history from the history in which Pompey failed to defeat Caesar.

The distinction between *essence* and *existence* and further maintaining that the truths of reason pertain to essences and the truths of fact pertain to existences may lead one to think about the possibility of a world which is restricted only to essences. But this would be wrong. The concept of the possible world is the concept of the world that could possibly exist. So a possible world is a world of essences and in those essences is written the potentiality to exist. No world is deprived of essences. So also there is no world which is deprived of its potentiality to exist. Existence is rooted in essences and contingent truths have their foundation in eternal truths. According to Leibniz, it is “Out of truths that are eternal or essential or metaphysical there arise truths that are temporal, contingent, or physical. First we must notice, from the very fact that something exists

rather than nothing, that there is in things that are possible, or in possibility or essence itself, a certain need for existence, or (if I may so put it) a claim to exist; and, to put it in a word, that essence in itself tends towards existence.”²⁵ Our existing world is one of the possible worlds, which has been actualised by God. So existence is rooted in the very essence of a possible world. Leibniz has reached this conclusion through the perplexity ‘why is there something rather than nothing’. This perplexity has brought existence closer to essence. The rigid distinction between the two has disappeared. The perplexing question, why is there something rather than nothing, has taken rebirth in existentialism. But the existentialists came to very different conclusion from that of Leibniz. The existentialists give priority to existence over essence. They seem to have rejected Plato who gave priority to essence over existence. Leibniz has not given priority to existence over essence. He has simply put existence potentially in essences. No essence is deprived of its potential existence. According to Blackham, both Heidegger and Sartre accepted that “existence precedes essence”,²⁶ But the primacy of existence has been explained in terms of essence. Therefore, essence would become prior to existence. While explaining Heidegger’s view Blackham points out that for Heidegger “The essence of *Dasein* is in its existence.”²⁷ *Dasein* means the existence of human beings. The fact that one can talk about essence of the *Dasein*, itself means essence is prior to existence. Whatever may be the view of Leibniz, it is objectionable if Leibniz had not allowed the possibility of existence to its essence. An essence, which could not possibly exist, is no kind of essence for Leibniz.

Echo of Leibnizian thought can also be heard in Wittgenstein. According to Wittgenstein, “Objects make up the substance of the world.”²⁸ Substance is what is common to all possible worlds. According to Wittgenstein, “The configuration of objects produces states of affairs.”²⁹ In the idiom of Leibniz objects are essences whereas their configurations exhibit ‘truths’ that are temporal, contingent, or physical.

According to Wittgenstein, “ If things can occur in the states of affairs, this possibility must be in them from the beginning.”³⁰ In the Idiom of Leibniz every essence claims to exist, it tends towards existence. The possibility of existence is in essences from the very beginning. Of course this does not mean that Wittgenstein’s view is the same as that of Leibniz’s. According to Leibniz, the quantity of essence exhibited in one possible world may be different from the quantity of essence exhibited in another possible world. Leibniz came to the conclusion, “That out of the infinite combinations of possible, and the infinite possible series, that one exists by whose means the greatest possible amount of essence or possibility is brought into existence.”³¹ Our world, the possible world that exists, therefore has the greatest amount of essence. Perhaps Leibniz means to say that a world which exhibits less amount of physical or moral necessity would also be a world in which there would be less amount of metaphysical necessity i.e. less amount of essence. Our world is the best of all possible worlds therefore it exhibits the highest amount of physical and metaphysical necessities. Other possible worlds are less perfect than our’s.

The philosophical views of Leibniz are quite complicated. However, it is clear that he wished to show that contingent truths and necessary truths do not exist independently of one another. It is not the case that necessary truths are true about one possible world and contingent truths are true about another possible world. Contingent truths presuppose the necessary truths, therefore they hold only in that world where necessary truths prevail. Eternal truths are the grounds for the temporal truths. It is no surprise that our world is governed by not only the eternal laws, but also by the contingent laws, not only by the material necessities but also by the formal necessities. As Leibniz points out “indeed in actual fact we find that everything in the world takes place in accordance with the laws of the eternal truths, not only geometrical but also

metaphysical laws; that is, not only according to material necessities, but also according to formal necessities.”³²

In the end it would be interesting to consider the reaction of Leibniz to Descartes’ dream argument. Dreams have been used to question the reality of the external world. According to Leibniz “we must admit it to be true that the criteria for real phenomena thus far offered, even when taken together, are not demonstrative, even though they have the greatest probability; or to speak popularly, that they provide a moral certainty but do not establish a metaphysical certainty, so that to affirm the contrary would involve a contradiction. Thus by no argument can it be demonstrated absolutely that bodies exist, nor is there anything to prevent certain well-ordered dreams from being the objects of our minds, which we judge to be true and which, because of their accord with each other, are equivalent to truth so far as practice is concerned.... Indeed, even if this whole life were said to be only a dream, and the visible world only a phantasm, I should call this dream or this phantasm real enough if we were never deceived by it when we make good use of reason. But just as we know from these marks which phenomena should be seen as real, so we also conclude, on the contrary, that any phenomena which conflict with those that we judge to be real, and likewise whose fallacy we can understand from their causes, are merely apparent.”³³ Since our statements about physical phenomena fail to establish metaphysical certainty, they fail to demonstrate the existence of physical bodies. This follows from the fact that their denial does not involve a contradiction in terms. These statements express only contingent truths of which the negation is possible. Suppose on the ground of my visual experience I say that ‘there is an apple on the table’. Negation of this statement does not involve a contradiction in terms. I can very well imagine a world in which this statement is false. Now at this time everything occurs in another possible world except the presence of apple on the table in that world. Our statements about physical phenomena, therefore,

lack metaphysical necessity. If they exhibit any kind of necessity, they exhibit only moral or physical necessity. For Leibniz 'necessity' has the same meaning as 'certainty'. So in this context he has used the expression 'metaphysical certainty' rather than 'metaphysical necessity', so also he used 'moral certainty' rather than 'moral necessity'. So Leibniz has come to conclude that it is impossible to demonstrate the existence of physical bodies or physical reality. We are familiar with this kind of argument offered by the empiricist philosophers from John Locke to A.J.Ayer. In this context, Leibniz appears as the founder of empiricistic thought. Referring to Leibniz, Rescher points out "If holding that only by observational experience can man obtain knowledge of "matters of fact and existence" makes the empiricist, then Leibniz is as much an empiricist as any."³⁴

Leibniz has attacked dream argument in his own fashion. He has shown the futility of this argument. He accepts that 'well-ordered dreams' may not differ from the experiences that occur when we are awake. But no damage would be done to our practical life even if it is accepted that our whole life is a dream. It would hardly introduce any kind of obstruction to our actions. The possibility that the whole life is a dream would fail to prohibit us from making the distinction between 'reality and appearance'. Anything that conflicts with our ordered dreams would be rejected. So we will continue rejecting any thing that conflicts with our waking experience. The only difference would be that we would be calling our waking experience as dream experience. Soon we would become acquainted with this new idiom. The sceptic is only producing a new idiom. Our 'waking experiences' occur as 'dreaming experiences' in the idiom of the sceptic.

2. HUME ON NECESSARY TRUTHS:

Concerning Hume's place in the History of Philosophy, Stroud points out, "Hume's assigned role was to carry the empiricist philosophy of Locke and Berkeley to its logical and incredible conclusion, thus setting the stage for Kant and eventually for the final Hegelian liberation."³⁵ But on the distinction between a priori and empirical knowledge, Hume was closer to Leibniz than either to Locke or to Berkeley or to Kant and Hegel. His distinction between the judgements concerning relations of ideas and judgements concerning matters of facts echoes Leibniz's distinction between 'truths of reason' and 'truths of fact'. For Leibniz the truths of reason and truths of fact exhaust the realm of truths. No third variety of truths existed for Leibniz. So also Hume's dichotomy of relations of ideas and matters of fact is exhaustive and complete. According to Hume, judgements concerning the relations of ideas are the property of "the sciences of Geometry, Algebra, and Arithmetic; and in short, every affirmation which is either intuitively or demonstratively certain."³⁶ Leibniz too accepted only those truths as truths of reason, which were either self-evident axioms or those, which were reducible to them. There seems to be no difference between the views of Hume and Leibniz on this issue. So also Leibniz's truths of fact correspond with Hume's matters of fact. Judgements concerning matters of fact would be deprived of certainty because their negation does not involve a contradiction in terms. As Hume points out, "The contrary of every matter of fact is still possible; because it can never imply a contradiction, and is conceived by the mind with the same facility and distinctness, as if ever so conformable to reality. *That the Sun will not rise to-morrow* is no less intelligible a proposition, and implies no more contradiction than the affirmation, *that it will rise*. We should in vain, therefore, attempt to demonstrate its falsehood. Were it demonstratively false, it would imply a contradiction, and could never be distinctly conceived by the mind."³⁷ So, like Leibniz, Hume uses the law of contradiction to exhibit the contingency of truths of fact. Negation of a truth of fact does not involve a contradiction in terms; its negation is possible. In the idiom of Leibniz we can very well conceive of a world in which 'The Sun will not rise

tomorrow' is true. So the truth of 'The Sun will rise tomorrow' is restricted to this world. Hence, it fails to exhibit mathematical certainty. We have already shown how 'Caesar crossed the Rubicon' is only contingently true because its truth is restricted to this world. It is quite possible to imagine a world in which Caesar did not cross the Rubicon. In the same way, it is quite possible to imagine a world in which the Sun will not rise tomorrow. Therefore 'The Sun will rise tomorrow' is contingently true i.e. true in this world without being truth in any other world. Trans-world truth is restricted to the propositions of geometry, algebra and arithmetic.

Hume accepted only one kind of necessity or certainty, that which is restricted to mathematical propositions. Call this necessity logical or metaphysical. There is no such necessity as physical or moral. Leibniz, as we have already seen, allows physical or moral necessity to operate in the matters of fact. But Hume would oppose Leibniz. From Hume's point of view Leibniz does not have a pure concept of contingency. A pure concept of contingency would not allow any kind of necessity operating in the physical world. Since every fact is independent of every other fact no kind of necessity is possible in the world of facts. So the Humean picture of the physical world is very different from the picture that Leibniz had. For Leibniz, any event that occurs in the world, any fact that it is actualised, is the most suitable occurrence or fact under a given circumstance. So he came to believe in the physical or moral necessity operative in our world. This picture had led Russell to oppose Leibniz on this issue, because this picture dissolves the distinction between necessary and contingent truths. All truths become necessary. Thus Leibnizian contingent truths carry the impurity of necessity. Hume believed in pure concept of contingency. Neither metaphysical nor physical necessity governs such a fact. The opposite of metaphysical or logical necessity is contingency, and not physical or moral necessity. Hume believed in the dichotomy of necessary and contingent truths. For him there existed no such dichotomy as the dichotomy of metaphysical and physical

necessity. The truths of geometry, algebra and arithmetic are necessary. Whereas those truths that pertain to empirical sciences are contingent. Either a truth is necessary or contingent i.e. either it belongs to the system of necessary truths or to the system of contingent truths. There is no third variety of truths such as physically or morally necessary truths. So Hume rejects outrightly the Leibnizian interpretation of the matters of fact.

If the events of the world are not allowed any kind of certainty or necessity then to many the worlds would appear as a chaos. In such a situation such a question as, why a given event occurred and not another, cannot be answer. Such a question cannot even be asked. Rejection of the picture of a chaotic world has led philosophers to the Leibniz type views. Hume rejects the operation of necessity and certainty in the world, yet saves the world from turning into a chaos.

In order to show that there is no necessity that governs the nature, Hume has denied the necessity of causal relation, the relation that exists between cause and effect. He has reduced the quest for observing necessity in nature to the quest for observing necessity in a causal situation. According to him, "All reasonings concerning matters of fact seem to be founded on the relation of *Cause* and *Effect*. By means of that relation alone we can go beyond the evidence of our memory and senses."³⁸ Once it is shown that the causal relation is not a necessary relation, it would be shown that all our judgements concerning matters of fact are purely contingent without having any kind of necessity. For the foundation of these judgements is the relation of cause and effect. Hume has attacked the foundation rather than attacking what is erected on that foundation. Once the foundation falls what is erected on the foundation would also fall. Hume uses the notions of cause and effect in a wider sense. We generally restrict our judgements to states or events. We say that one state or event has been caused by another

state or event. Concerning the relation of cause and effect, according to Ayer, "Hume's intentions are best represented by construing the relation, in his view of it, as holding between matters of fact, into which objects and events, actions and passions, states and processes, whether physical or mental, can be made to enter."³⁹ So Hume studies the relation of cause and effect under diverse situations. The situation in which one moving billiard ball causes another billiard ball to move is different from the situation in which a wound causes pain or meeting a friend causes happiness. Though these situations are diverse, what is not diverse is the relation of cause and effect. This relation is common to all the situations. If the causal relation were necessary then the movement of one billiard ball would necessarily cause another billiard ball to move. Similarly, a wound necessarily leads to pain and the appearance of a friend would necessarily lead to happiness. Are we right in awarding necessity to a causal relation? If right, How? If not right, why? So the analysis of causation is one of the most important issues of Hume's philosophy. Hume's view of the world is grounded in this analysis.

If the idea of causal necessity is genuine, then it must have its source in impression. All ideas that occur to our mind have their source in impression. So he is led to analyse the casual situation in order to see whether he has any impression corresponding to the idea of causal necessity. So a causal situation, for Hume, involves three constituents. One is the relation of priority i.e. the event which is supposed to be the cause is prior to the event which is supposed to be its effect. The second is the relation of contiguity i.e. the event which is the cause is contiguous with the event which is its effect. The third and the most important constituent of the causal situation is the necessary connection between cause and effect, i.e. an event which is the cause is necessarily connected with the event which is its effect. Hume has no difficulty with relations of priority and contiguity because he finds their sources in impression. He has difficulty only with necessary connection. He fails to discover the source of necessary

connection in impression. How could Hume have the impression of necessary connection when he even fails to have the impression of connection? He succeeds in having “experience of the frequent *Conjunction* of objects, without being ever able to comprehend anything like *Connexion* between them.”⁴⁰ What is true about objects is also true about events and states. Hume finds conjunction of events and states without finding any connection between them. These conjoined states and events exhibit contiguity. But the necessary connection between them would be missing. As Hume remarks, “It appears that, in single instances of the operation of bodies, we never can, by our utmost scrutiny, discover anything but one event following another, without being able to comprehend any force or power by which the cause operates, or any connexion between it and its supposed effect.”⁴¹ While discussing Leibniz we have seen there is no such thing as a chance occurrence of an event. Only the best under the circumstance was allowed to occur. But, for Hume, events are like heaps of stones, each stone is distinct from the other, and it is only a chance which has brought them into a given heap. They could have been lying elsewhere. Hume treats events like objects. As he remarks, “All events seem entirely loose and separate. One event follows another; but we never can observe any tie between them. They seem *conjoined* but never *connected*.”⁴² So it is a matter of chance that one event is contiguous with the other or is prior to it. It is this kind of chance that leads us to imagine that there exists a causal connection between two events. The connection is not a constituent of the causal situation. It is invention of our mind. If a given set of events recurs again and again in the same fashion, exhibiting the relations of priority and contiguity, then according to Hume, “The mind is carried by habit, upon the appearance of one event, to expect its usual attendant, and to believe that it will exist. This connexion, therefore, which we *feel* in the mind, this customary transition of the imagination from one object to its usual attendant, is the sentiment or impression from which we form the idea of power or necessary connexion.”⁴³ So the necessary connection which our mind has invented does not have any corresponding

impression. There can be no genuine idea in our mind of which the source does not lie in the impression. Hume is not ready to accept like Kant that the idea of causal connection is a priori. For Hume the concept of a priori idea is a contradiction in terms. All ideas take their birth in sense experiences. Hence, Hume rejects idea of necessary connection between events because we fail to experience any such connection.

Since causation is the foundation of our reasoning concerning matters of fact, our reasoning would never lead us to conclusions that are certain and necessary. There can be no empirical generalisation, which would be necessary and certain. They would exhibit only probable truths. Certainty and necessity is restricted only to mathematical truths. This is Hume's achievement. Though he has prohibited his scepticism to penetrate into the realm of mathematical truths, he has allowed it a free access into the realm of facts, the realm of experience. If empiricism means allowing scepticism to have its say in the matters of empirical knowledge, then Hume was undoubtedly an empiricist. If he were right then no empirical judgement would be free from uncertainty and doubt. There is no doubt that by prohibiting rationalism to have its say in the matters of empirical knowledge, he has closed the doors of empirical knowledge to dogmatism. But then he has opened these doors for scepticism.

To conclude, consider the nature of Hume's generalisation that all reasoning concerning matters of fact has its foundation in the relation of cause and effect. Is this generalisation deductive or inductive? It is impossible for it to be deductive. Philosophy is certainly not a deductive science. Therefore what Hume says does not belong to any deductive science. The other alternative is that Hume has produced an empirical generalisation concerning human reasoning. But if it is an inductive generalisation than it is only probably true. Maybe there are instances concerning matters of fact which are not founded on the relation of cause and effect, and those instances of reasoning which

are free from the relation of cause and effect may possibly exhibit certainty and necessity. There may be empirical propositions which may exhibit necessity and certainty. This conclusion follows from Hume's own distinction between the relations of ideas and matters of fact. So Hume has produced a philosophical system which is self-refuting.

2. KANT'S IDEA OF NECESSITY:

Kant seems to be influenced by two philosophers more than by any others: one was his own German predecessor Leibniz and the other was the British predecessor Hume. If Hume brought the British empiricism to its logical conclusion, Leibniz brought the Continental rationalism to its logically conclusive stage. Kant's strategy was to struggle against both Leibniz and Hume, against the Continental rationalism and the British empiricism. The result of the strategy was the emergence of Critical philosophy, which both absorbed and transcended the Continental rationalism and British empiricism.

For Kant the distinction between a priori and empirical knowledge is most important. Therefore *The Critique of Pure Reason* opens with this distinction. Kant accepts the temporal priority of experience over knowledge, because it is 'with experience all our knowledge begins'. But this does not mean that it ends with experience. According to Kant "though all our knowledge begins with experience it does not follow that it all arises out of experience."⁴⁴ Kant accepts the possibility of a priori knowledge, that is, knowledge that begins with experience but does not arise out of it. A priori knowledge is independent of experience, "not knowledge independent of this or that experience, but knowledge absolutely independent of all experience."⁴⁵ In order to explain further the nature of a priori knowledge, he uses logical or metaphysical notion

of necessity. A priori and a posteriori are epistemic concepts. They characterise knowledge. But the concepts of necessity and contingency are applied to propositions to be known; they express their logical character. According to Kant, necessity and strict universality are “Criteria of *a priori* knowledge, and are inseparable from one another.”⁴⁶ This means all those propositions which are necessary and universal are a priori; Conversely, we can say that all a priori propositions are universal and necessary. Kant has made a priori and necessity as interchangeable concepts. Leibniz and Hume would hardly have any disagreement with Kant on his distinction between a priori and a posteriori knowledge.

Leibniz’s and Hume’s dichotomy of truths of reason and truths of fact came to be questioned by Kant. Like Leibniz he accepted the explanation of truth in terms of subject - predicate form of propositions, as if all propositions are reducible to this form. He further accepted, like Leibniz, that the predicate of analytic proposition is contained in its subject. But unlike Leibniz he talked about synthetic propositions in which the predicate is not contained in its subject. As Kant says, “In all judgements in which the relation of a subject to the predicate is thought... this relation is possible in two different ways. Either the predicate B belongs to the subject A, as some thing which is (covertly) contained in this concept A; or B lies outside the concept A, although it does indeed stand in connection with it.”⁴⁷ The range of analytic propositions for Kant is restricted only to those propositions, which are for Leibniz only finitely analytic. What Leibniz described, as infinitely analytic propositions are synthetic propositions according to Kant. Kant gives the example of ‘all bodies are extended’. This is the example of an analytic proposition. The concept of ‘extension’ in this proposition has been analysed out of the concept of ‘body’. A synthetic proposition is like ‘all bodies are heavy’. The concept of ‘heavy’ is not included in the concept of ‘body’. Since the expression ‘extension-less body’ is a contradiction in terms, the concept of extension is included in

the concept of body. But the expression 'weightless body' is not a contradiction in terms. Therefore the concept of weight is not included in the concept of body. So saying that a body has weight gives us some new information about a body, the information which I do not have when I know that something is a body. But saying that body is extended I obtain no new information. I could not have known what a body is unless I know what it is for it to have extension. If in an analytic proposition I analyse the predicate out of the subject, in a synthetic proposition the predicate adds something new to the subject. If in one case the process of analysis is involved, in the other case the process of synthesis is involved. For his view on mathematics Kant rejects both Leibniz and Hume. Though mathematical propositions are a priori they are not analytic, they are synthetic. So universality and necessity are the marks not only of analytic propositions, they also characterise some synthetic propositions. Of course all synthetic propositions are not a priori. All synthetic propositions of mathematics are a priori and some synthetic propositions of physics are a priori. He could succeed in showing that mathematical propositions are synthetic by introducing the concept of time into mathematics.

Kant considers the principle of contradiction as the principle of analysis. Not in all cases one may succeed in conceiving a predicate to be contained in a subject. In such cases the principle of contradiction may be applied. If the denial of a proposition involves a contradiction in terms then its assertion would be analytic. It is in this sense that the principle of contradiction would be considered as the principle of analysis. The expressions 'container' and the 'contained' may simply be metaphorical. These expressions may have no literal significance. However, they acquired some literal significance by focusing our attention on the law of contradiction. Saying that 'the subject' of a proposition contains its predicate simply means, according to Korner, that "its denial would be a contradiction in terms."⁴⁸ So Kant has provided logical

grounding for his analytic propositions. Our success in extricating predicate from the subject depends on the logical instrument of contradiction. The cases where law of contradiction fails in showing the analytic character of propositions belongs to the discipline of mathematics in general and some fundamental propositions of physics in particular.

Kant defines the synthetic character of mathematical judgements not terms of the law of contradiction. He assigns them synthetic character by virtue of the fact that mathematical propositions like $5 + 7 = 12$ show the genuine construction of a concept in time. 12 is constructed out 5 and 7 and so it is not contained in the latter. Consider his remark “we might, indeed, at first suppose that the proposition $7 + 5 = 12$ is a merely analytic proposition, and follows by the principle of contradiction from the concept of a sum of 7 and 5. But if we look more closely we find that the concept of the sum of 7 and 5 contains nothing save the union of the two numbers into one, and in this no thought is being taken as to what that single number may be which combines both. The concept of 12 is by no means already thought in merely thinking this union of 7 and 5; and I may analyse my concept of such a possible sum as long as I please, still I shall never find the 12 in it.”⁴⁹ Kant thus rejects the law of contradiction in analysing the mathematical propositions as synthetic a priori.

The critics may, however, ask how could Kant overlook the law of contradiction? He calls it the principle of analysis. How could he call it a principle of analysis if he could manage to overlook it? Further the principle of contradiction has to be satisfied by each and every proposition, be it synthetic or analytic. Any significant proposition has to be self-consistent. Self-consistency of a proposition means that it is free from contradiction. It is in this sense that Leibniz called the law of contradiction as a different name for the law of identity. They are two different faces of the same coin. For

converting mathematical propositions into synthetic propositions Kant completely gives up logical consideration. In this case, only psychological consideration has been used. The law of contradiction shows that the proposition 'all bodies are extended' is analytic. But the law of contradiction has been suppressed for showing the analytic character of $7+5=12$. Different criteria govern different kinds of propositions. There would hardly be any objection to Kant's view that the mathematical propositions are a priori. That their truth does not depend on experiential verification. So also there would hardly be any disagreement that these propositions are universally and necessarily true. In the idiom of Leibniz they are true in all possible worlds. But calling these propositions synthetic creates problems. Since the time of Hume synthetic propositions have been considered contingent, but Kant has introduced the possibility of synthetic necessary propositions. In connection with Kant's use of two different criteria for distinguishing analytic from synthetic propositions Ayer points out, "Kant does not give one straightforward criterion for distinguishing between analytic and synthetic propositions; he gives two distinct criteria, which are by no means equivalent. Thus his ground for holding that the proposition ' $7+5=12$ ' is synthetic is, as we have seen, that the subjective intention of ' $7+5$ ' does not comprise the subjective intention of ' 12 '; whereas his ground for holding that 'all bodies are extended' is an analytic proposition is that it rests on the principle of contradiction alone. That is, he employs a psychological criterion in the first of these examples, and a logical criterion in the second, and takes their equivalence for granted. But, in fact, a proposition which is synthetic according to the former criterion may very well be analytic according to the later."⁵⁰ Kant has certainly not confused the two criteria, logical and psychological, as one and the same criterion. He simply withholds the logical criterion for its application on mathematical truths. He is quite convinced that one is not thinking of 12 when one is thinking of the addition of $7+5$. This ends the matter. Once the proposition $7+5=12$ has been granted a synthetic

character, there is no necessity for contemplating the possibility of seeing whether it is analytic.

Kant failed to detach mathematics from its application to reality. He discovered that the physical reality follows the mathematical principles. Mathematical propositions therefore could not be non-informative. But if mathematical propositions are considered as analytic then there is a risk for them to be considered as non-informative tautologies. It is to provide the informative dimension to mathematical propositions, that he was led to make them synthetic. Kant was also interested in extending the horizon of a priori knowledge, but no such extension is possible if all a priori knowledge is analytic. For the predicate of an analytic proposition gives us no new knowledge, it only explicates the knowledge which we already have. It is only a priori synthetic propositions, which can extend horizon of our knowledge. Of course this does not mean that Kant has completely done away with analytic propositions from the domain of mathematics. Though all mathematical propositions are synthetic, they *presuppose* certain propositions which are analytic. The propositions that are analytic function as foundations of mathematical propositions. Referring to the mathematical science of Geometry Kant remarks, "some few fundamental propositions, presupposed by the geometrician, are, indeed, really analytic, and rest on the principle of contradiction. But, as identical propositions, they serve only as links in the chain of method and not as principles; for instance, $a = a$; the whole is equal to itself; or $(a+b) > a$, that is, the whole is greater than its part,"⁵¹ The principle of identity, which has been given supreme importance by Leibniz, has been given nominal importance by Kant. The reason why Kant has not given much importance to the principle of identity is that this principle does not extend the horizon of a priori knowledge. Of course, like Leibniz, Kant puts both, the principle of identity and the principle of contradiction, on the same level. Both these principles succeed only in explicating the knowledge which we already have.

They fail to extend our knowledge. Of course they are fundamental presuppositions of mathematics. Hence they make mathematics possible. They are fundamental truths. Without them there would have been no mathematical knowledge. Though themselves analytic these fundamental truths generate propositions which are synthetic. There is a sense in which Kant has also given high importance to the logical principles, Principle of identity and principle of contradiction. He has converted them into foundational truths of mathematics, but the mathematical propositions, which have been generated by these foundational truths, are quite unlike their foundations. They are synthetic and informative. Kant finds no paradox in accommodating analytic truths in the field of mathematics, but they have been put as the limits of this field. All mathematical propositions are synthetic a priori. But they have become possible because of propositions that are analytic a priori.

Empirical knowledge is synthetic by definition since it extends our knowledge of the world. But mathematical propositions have been made synthetic by extension by Kant. It is not the defining character of a priori proposition that it is synthetic. Only some and not all a priori propositions are synthetic. A good number of them remain analytic. The restriction of a priori to analytic, and empirical to synthetic, has been removed in Kant's transcendental philosophy. Neither Leibniz nor Hume consider the possibility of synthetic a priori propositions. Kant's philosophy of mathematics, and knowledge in general, demanded the availability of synthetic a priori truths.

Mathematical propositions are undoubtedly a priori. If they are made synthetic then there would be extension of a priori knowledge. Kant shows awareness of the universal application of the principle of contradiction when he says "The universal, though merely negative, condition of all our judgements in general, whatever be the content of our knowledge, however it may related to the object, is that they be not self-

contradictory; for if self-contradictory, these judgements are in themselves, even without reference to the object, null and void.”⁵² So freedom from contradiction is the necessary condition for the possibility of knowledge. As Kant further points out, “The proposition that no predicate contradictory of a thing can belong to it, is entitled the Principle of contradiction, and is a universal, though merely negative, criterion of all truths.”⁵³ The principle of contradiction functions as a positive and sufficient criterion of truth only in the case of analytic knowledge. As Kant further remarks, concerning this principle that, “beyond the sphere of analytic knowledge it has, as a *sufficient* criterion of truth, no authority and no field of application.”⁵⁴ The pull towards the extension of a priori knowledge has certainly drawn towards it. There is certainly no contradiction involved in saying ‘ $7+5=12$ ’ so the principle of contradiction is satisfied. Further, ‘12’ is not included in ‘ $7+5$ ’. So the proposition ‘ $7+5=12$ ’ becomes synthetic. So this proposition does not belong to the sphere of analytic knowledge. Therefore the principle of contradiction cannot function as the criterion of the truth in this case. According to Kant, besides mathematics there are synthetic a priori truths in science like physics. One may question Kant for his views on mathematics without questioning his views on the fundamental judgements of physics. Consider two such judgements. ‘Every thing which happens has its cause’ and ‘In all changes of material world the quantity of matter remains unchanged’. These examples have been given by Kant. Both these propositions are synthetic. The concept of ‘cause’ is not given in the concept of ‘some thing which happens’. So also in the concept of matter is not given its permanence. Though synthetic, these propositions are universal and necessary. Their truth does not wait for experiential verification. For their truth is not restricted to what happens in experience: they go beyond experiences. Experience presupposes their truth. So one is not in a position to verify their truth. It is not only Physics where we come across certain propositions which seem to be synthetic and a priori: we come across such propositions even in our daily life. Consider the proposition ‘being red excludes being blue’. If some

thing is red then at the same time it is not blue. It is certainly not an analytic proposition. It is synthetic proposition. But this proposition can not be the result of inductive generalisation. For it holds also true in the future. We cannot imagine a world in which something may be both red and blue at the same time. So this appears to be true in all possible worlds. But then it would be true universally and necessarily. Universality and necessity are marks of an a priori proposition according to Kant. This show that 'being red excludes being blue' is an a priori synthetic proposition. Consider another proposition 'being coloured implies being extended'. If something is coloured then it is also extended. This proposition is also synthetic. The truth of this proposition is also not restricted to this world. We cannot conceive a world in which something may be coloured but fail to have extension. The proposition 'being coloured implies being extended' is universally and necessarily true. So this proposition too appears to be synthetic a priori.

Kant's synthetic a priori propositions are very different from inductive generalisations. Aristotle distinguishes inductive generalisation into two different kinds. There is a kind of induction in which we have to encounter many instances. After observing many swans we have come to the generalisation that all swans are white. But there is another kind of generalisation in which a few instances are sufficient. This kind of generalisation is the result of "intuitive induction."⁵⁵ One has not to see many instances for coming to know that 'being red excludes being blue'. One or two instances would lead one to the intuition that 'being red excludes being blue'. So also one or two instances would lead one to the intuition that 'being coloured implies being extended'. So these propositions 'being red excludes being blue' and 'being coloured implies being extended' are necessary. They are also the result of induction, a special kind of induction. But this approach has its own difficulties. Intuitive induction has no deductive validity. All inductive generalisations could possibly be false. Can we

imagine the possibility, which makes 'being red excludes being blue', false? To meet such a possibility we have to imagine a universe in which some thing is both blue and red at the same time. No such universe is conceivable. Therefore this proposition can not be the result of induction. The same is true about the proposition 'being coloured implies being extended'. Thus according to Kant, the concept of necessity does not seem to be restricted to analytic truths. Some synthetic truths also seem to be necessary. Kant is certainly right about synthetic necessary truths.

3. LOGICAL NECESSITY: THE POSITIVIST POINT OF VIEW

The logical positivists who formed the Vienna Circle in the early part of this century opposed Kant's idea of synthetic a priori truths. They rejected the concept of synthetic necessity. They questioned the idea that mathematical propositions are synthetic. According to them, there are only two types of meaning for propositions, such as the tautologies or analytic truths in logic and mathematics, and the synthetic propositions of the empirical sciences. There are no propositions, which are both synthetic and a priori.

Following the British empirical tradition A.J.Ayer, the British representative of logical positivism, rejects Kant's synthetic a priori. According to him, all a priori propositions are analytic and all a posteriori propositions are synthetic. Opposing Kant he maintains that the propositions of mathematics and logic, though a priori are analytic. Similarly the fundamental propositions of physics are synthetic a posteriori. The attitude of positivists to analytic a priori truths is quite different from the attitude of rationalists towards these truths. The sceptics believe that one can have no knowledge of reality. As against them the rationalists maintained that one could have knowledge of essential features of reality even without taking the help of experience. A priori analytic propositions provide such knowledge. Kant further added to our a priori knowledge of

reality by introducing synthetic a priori propositions. We have already seen those logical truths; that is, the truths of mathematics and logic, demonstrate the essence of reality. They are truths that penetrate into all possible worlds. The fact that they are known a priori shows that one has a priori knowledge of the essential features of reality.

Wittgenstein initiated a move to detach the so-called a priori truths from the reality, what was considered as true in all possible worlds became true in no possible world. Wittgenstein converted a priori truths into non-informative tautologies. According to him, "I know nothing about the weather when I know that 'it is either raining or not raining'."⁵⁶ This proposition is a *function* of the *arguments* 'it is raining' and 'it is not raining'. Independently of the function both these propositions give us information about reality. When one says it is raining, one gives information about the weather outside. So also when one says, it is not raining, one gives information about the weather outside. But once these propositions are united with the connective 'or', they give no information about the weather outside. For the simple reason that the truth of this resultant proposition does not depend on the condition of weather outside. By using logical connectives ordinary propositions are converted into logical truths, the truths that gave us no information about outside reality. No kind of character certificate has been provided for a person if it is said about him that 'either he is honest or he is dishonest'. If Wittgenstein and his followers are right, then logical truths are not truths about reality. Neither essential nor nonessential features of reality have been described by them.

Following Wittgenstein and opposing Kant, Ayer provides his own distinction between analytic and synthetic propositions. Referring to synthetic propositions he says "the proposition 'there are ants, which have established a system of slavery' is synthetic proposition. For we cannot tell whether or not it is true or false merely by considering

the definition of the symbols which constitute it. We have to resort to actual observation of the behaviour of ants.”⁵⁷ But no such observation is required for establishing the truth of an analytic proposition. This is for the reason that the analytic proposition gives us no information about any matter of fact. Concerning the analytic proposition ‘either some ants are parasitic or none are’ Ayer says, “it is independent of experience ... provides no information whatsoever about the behaviour of ants or indeed about any matter of fact ... is entirely devoid of factual content.”⁵⁸ Any proposition, be it analytic or synthetic, involves the use of symbols and these symbols have their own definitions. However, in the case of an analytic proposition the definition of symbols plays a major role. It is these definitions which provide truth to an analytic proposition. As Ayer further points out that “a proposition is analytic when its validity depends solely on the definition of the symbols it contains and synthetic when its validity is determined by the facts of experience.”⁵⁹ The symbols ‘either’ and ‘or’ confer truth on the proposition ‘either some ants are parasitic or none are’. The behaviour of these ants is irrelevant. One may find the echo of Leibniz in this analysis of an analytic proposition. We have already seen how Leibniz demonstrates the truth of the proposition ‘the whole is greater than its part’ with the help of the definition of ‘greater’. Similarly the truth of the proposition ‘a part is less than the whole’ depends on the definition of ‘less’. The view that the truth of an analytic proposition depends on the definitions of certain symbols in it is as old as Leibniz. What is anti-Leibnizian or un-Leibnizian is the positivistic attempt to detach these propositions from reality. For Leibniz an analytic proposition is true in all possible worlds. But for Ayer it is true in no world at all. Analytic truth is nothing but a tautology. What about self-contradiction? No world accommodates it. It is false in every possible world. Since tautologies are independent of the world, they too fail to touch the world like self-contradiction. Tautology and self-contradictions belong to their own world, not to any possible worlds of Leibniz. Wittgenstein remarked “not only must a proposition of logic be irrefutable by any possible experience, but it must also be

unconformable by any possible experience.”⁶⁰ The world of experience can neither refute nor confirm a logical truth. And if mathematics is reducible to logic then mathematical truths behave in the same fashion. But can we imagine a world, which is illogical, which failed to follow the laws of logic. We can imagine a world, which breaks the existing physical laws. But can we also imagine a world which breaks the logical laws. For example, where square become round etc. Our world seems to follow the laws of logic essentially and the laws of physics contingently. Total detachment of analytic truths from the world seems to be impossible. Of course Wittgenstein manages to escape from this difficulty. For he also maintained that “the propositions of logic describe the scaffolding of the world, or rather they represent it.”⁶¹ Scaffolding of the world corresponds with scaffolding of logic. It is very easy to make the Hegelian step. The scaffolding that occurs in the world is identical with the scaffolding of our logical thinking. It is impossible to detach logic completely from the world. This is what both Leibniz and Hegel were trying to say. Ultimately Wittgenstein comes closer to Leibniz and Hegel and seems to have deserted the logical positivists like Ayer.

According to Ayer, the validity of an analytic proposition depends on the definitions of certain symbols occurring in it. But could a synthetic proposition be valid if its symbols are not well defined? As Quine points out, “It is obvious that truth in general depends on both language and extra linguistic fact. The statement ‘Brutus killed Caesar’ would be false if the world had been different in certain ways, but it would also be false if the word ‘killed’ happened rather to have the sense of ‘beget’.”⁶² No proposition would be true, be it analytic or synthetic, if one is not using symbols with their clear meanings. In defense of Ayer one may say that some symbols are more important in analytic propositions than other symbols. For example, the symbols ‘either’ and ‘or’ are more important than other symbols occurring in the proposition ‘Either it is raining or it is not raining’. We can construct any number of propositions of

this form. The following propositions are of the same form, 'either it is snowing or it is not snowing', 'either he is a fool or he is not a fool' and so on. The truth of all these propositions depends on the symbols 'either' and 'or'. It is in this sense that Ayer means to say that the truth of an analytic proposition depends on the symbols used in it. This definition of an analytic proposition rejects the definition in terms of the container and the contained. The propositions that have been considered are not of the subject-predicate form, yet they are analytic. And the fact that their negation involves a contradiction in terms shows that the law of contradiction is not a principle of analysis in the Kantian sense of the term. Like Kant, Ayer too provides two distinct definitions of analyticity. The second definition is in terms of synonymy of two expressions. Ayer provides this definition in the context of his criticism of Kant. Ayer says "our knowledge that no observation can ever confute the proposition '7+5=12' depends simply on the fact that the symbolic expression '7+5=12' is synonymous with '12', just as our knowledge that every oculist is an eye - doctor depends on the fact that the symbol 'eye-doctor' is synonymous with 'oculist'. And the same explanation holds good for every other *a priori* truth."⁶³ For Ayer all analytic truths are *a priori*. Therefore saying that some thing holds for *a priori* truths means that it will also hold for an analytic truth. So a proposition is analytic if the symbols involved in it are synonymous. The proposition 'an oculist is an eye-doctor' is analytic because the symbol 'oculist' is synonymous with the symbol 'eye-doctor'. The definition of analyticity in terms of the synonymy of symbols is not sufficiently general to cover all analytic propositions. Though the proposition 'Either some ants are parasitic or none are' is both *a priori* and analytic, yet it does not possess a pair of synonymous symbols as is the proposition 'An oculist is an eye-doctor'.

Even in its limited application, the definition of analyticity in terms of the synonymy of symbols involves its own difficulties. How is synonymy to be defined?

One way to discover that the symbols in a proposition are synonymous is to discover that the proposition in question is analytic. The synonymy of 'eye-doctor' with 'oculist' follows from the fact that one knows that the proposition 'an oculist is an eye-doctor' is analytic. For a proposition is analytic only if the symbols involved in it are synonymous. But this would be circular. Analyticity itself has been defined in terms of synonymy therefore a distinct rule of synonymy is required. In the context of an explicit definition of a symbol Ayer makes the following attempt to define synonymy. He says, "We define a symbol explicitly when we put forward another symbol or symbolic expression which is synonymous with it. And the word, 'synonymous' is here used in such a way that the two symbols belonging to the same language can be said to be synonymous if, and only if, the simple substitution of one symbol for the other, in any sentence in which either can significantly occur, always yields a new sentence which is equivalent to the old. And we say that two sentences of the same language are equivalent if, and only if, every sentence which is entailed by any given group of sentences in conjunction with one of them is entailed by the same group in conjunction with the other. And in this usage of the word 'entail' a sentence *s* is said to entail a sentence *t* when the proposition expressed by *t* is deducible from the proposition expressed by *s*; while a proposition *p* is said to be deducible from, or to follow from, a proposition *q* when the denial of *p* contradicts the assertion of *q*."⁴⁴ These remarks show that the notion of synonymy is not so simple. One may know the sense of an expression, so also he may know the sense of another expression. But one has to take several steps in order to know whether these expressions have the same sense or different senses. In order to know that two expressions are synonymous one has to know several other notions. In order to clarify the nature of synonymy, Ayer has used such other notions as: equivalence of sentences, relation of entailment, notions of deduction and contradiction etc., All these notions themselves requires explanation. As Ayer's remarks show, it not impossible, though it is quite difficult, to know whether two

method of knowing the truth of these sentences and not concerning the fact that they are true of reality. The fact that a given sentence is such that its truth is known by logical analysis does not imply that it is not true of reality or that it does not hold in the case actually before us or that it is completely cut off from reality. To draw any such implication is to misunderstand the nature of L-true sentences.

It might have become clear that there is hardly any disagreement between the empiricist Carnap and the rationalist Leibniz. The L-true sentences, that is, the sentences which express analytic propositions are true in all possible worlds, which includes the actual world. It is only the synthetic truths that are restricted to this world. Logical positivism seems to be a very accommodative system. There are those logical positivists who wish to keep logico-mathematical truths to be independent of the world. But there are also those logical positivists who allow the penetration of logico-mathematical truths into the world.

4. QUINE'S ATTACK ON ANALYTIC-SYNTHETIC DISTINCTION:

Though Leibniz brought focus to the issue of synonymy in the context of identity statements, this issue had taken a new turn with Frege and Russell. Through his examples of 'morning star' and 'evening star' Frege distinguished sense from reference. 'Morning star' refers to the same planet, which is referred by the expression 'evening star'. But 'morning star' has different meaning from 'evening star'. Two expressions may have different senses but the same reference. Similarly Russell found that 'Scott' and 'the author of Waverley' refer to the same person. Two expressions, according to Russell and Frege, may have different senses but the same reference. Quine has taken a step forward. He has created a wider gulf between two expressions, which have the same reference but different meanings. According to him, "The general terms 'creature

with a heart' and 'creature with kidneys' for example, are perhaps alike in extension but unlike in meaning."⁶⁶ For several years philosophers struggled with the issue whether it is analytic or synthetic if one says that 'The morning star is the evening star'. Similarly, whether it is analytic or synthetic if one says 'Scott is the author of Waverley'. This shows at least that there are propositions of which the status is dubious. One faces difficulty if one calls them analytic. But this does not mean that there are no difficulties in calling them synthetic. The proposition 'the morning star is the evening star' is not a straightforward analytic proposition like 'Red colour is a colour'. So also it is not a straightforward synthetic proposition like 'The rose is red'. This has led Quine to attack the analytic-synthetic distinction. According to Quine, the analytic/synthetic distinction is only a dogma of empiricists. As he says "a boundary between analytic and synthetic statements simply has not been drawn. That there is such a distinction to be drawn at all is an unempirical dogma of empiricists, a metaphysical article of faith."⁶⁷ The distinction in question may be a metaphysical article of faith but certainly not an 'unempirical dogma of empiricists'. For it has its genesis in Leibniz who was a branded rationalist. Kant, who carried the tradition of Leibniz, was also not an empiricist, for he was equally a rationalist. The present day logical positivists carry the empiricistic tradition of Hume, opposing both Leibniz and Kant. According to Strawson, "Quine is certainly at odds with a philosophical tradition which is long and not wholly disreputable. But there is no need to appeal only to tradition; for there is also present practice we can appeal, that is, to the fact that those who use the terms 'analytic' and 'synthetic' do to a very considerable extent agree in the applications they make of them. They apply the term 'analytic' to more or less the same cases, withhold it from more or less the same cases, and hesitate over more or less the same cases."⁶⁸ Frege and Russell provided cases in which analytic/synthetic distinction fails. Quine has attempted to add his own list where analytic/synthetic distinction fails. Following 'the morning star' and 'Scott' examples, Quine has created the example of 'the creature with a heart' and this

has been contrasted with 'creature with kidneys' not very unlike 'the author of Waverley' and 'the evening star'. Strawson seems to be right that there are instances of propositions which are generally accepted as analytic. So also there are propositions which are generally accepted as synthetic. A few propositions do not fit into this dichotomy. It is because of them that philosophers from the time of Leibniz to the time of Quine have been trying to evolve different criteria for analyticity and syntheticity. Even Quine, who accepts that any proposition is revisable, also accepts that there are propositions which one may not revise, "come what may".⁶⁹ Quine has proposed a single unitary scale in which propositions occupy different places. His attack on analytic/synthetic distinction is meant for evolving a single scale. Would not what are known as analytic propositions by philosophers in general occupy a higher place than the place occupied by what are generally known as synthetic propositions. Of course all of them are revisable, but some of them resist revision.

The other dogma, which Quine has attacked, is the dogma of reductionism. This dogma presupposes that the complex propositions are reducible to simpler propositions, and finally to propositions which directly record experiences. For example, material object statements are reducible to sense data statements. Quine's major objection to reductionism is "our statements about the external world face the tribunal of sense experience not individually but only as a corporate body."⁷⁰ This attack against atomism is in favour of holism. To an empiricist, be he a Hume or Russell, the world appears as a totality of atomic facts, each fact independent of the other. Atomic facts are mirrored by atomic propositions, which are the ultimate ground for all non-atomic propositions. Propositions form a hierarchy according to their complexities. Quine is arguing against this kind of picture. According to him, "The totality of our so called knowledge or beliefs, from the most causal matters of geography and history to the profoundest laws of atomic physics or even of pure mathematics and logic, is a man-made fabric which

impinges on experience only along the edges. Or, to change the figure, total science is like a field of force whose boundary conditions are experience."⁷¹ So knowledge forms a whole which includes all kinds of propositions, ranging from logico-mathematical propositions to the propositions which directly touch experiences. So Quine clearly rejects the two epistemic worlds, grounded into two logical categories, the analytic and synthetic. Those who believe in analytic/synthetic distinction, creating two distinct streams through which knowledge flows, do not wish to dissolve the distinction between history, physics and mathematics. Perhaps Quine too does not wish to dissolve the distinctions of academic disciplines. So also not only Quine but also all those whom he opposes find total human knowledge having connection with experience. As Kant pointed out, all knowledge begins with experience. Experiences are required for making such a statement as 'This is red' no less than for saying 2 and 2 make 4 or for saying 'Every thing is what it is'. According to those who believe in analytic/synthetic distinction, some propositions become independent of experiences as soon as experiences have given birth to them. Quine does not allow independence to them. All propositions have to face the ultimate tribunal of experiences. Experience is the boundary condition of all our knowledge. There exists no such boundary as boundary between analytic and synthetic propositions.

Quine talks about propositions that are "remote from the experiential periphery."⁷² He does not give examples of these propositions. As a matter of fact when Quine comes to discuss his own position in the sixth section of his paper, he has stopped giving examples in support of his position. While criticising analytic/synthetic distinction he has given a number of examples. It is through those examples that he has criticised the analytic/synthetic distinction. But in order to understand and expound Quine's position one has to construct examples. What are the examples of propositions that are remote from the experiential periphery? They are certainly different from the

propositions that are nearer to the experiential periphery. What are those propositions, which are nearer to the experiential periphery? Again, Quine talks about certain statements, which are felt "to have a sharper empirical reference than highly theoretical statements of physics or logic or ontology."⁷³ This shows that the statements of physics, logic and ontology have quite dull or thin empirical reference. Are they the same sort of statements, which are remote from the experiential periphery? If they are, then Quine is simply providing a fresh criterion for distinguishing analytic from synthetic propositions. Propositions, having sharper empirical references, would be considered synthetic, whereas those, which have, dull or thin empirical reference would be analytic.

Though Quine believes that all propositions have to face the tribunal of experiences, he is not another Mill. For Mill all propositions are inductive generalisations, be they the propositions belonging to mathematics or to history and geography. Since one could be mistaken about any inductive generalisation, one could also be mistaken about mathematical generalisations. But when Quine thinks about the revisability of analytic truths then he certainly is not following Mill. He is producing a novel thesis. We will be discussing his thesis of revisability later after considering his ontology. Common sense philosophers give high regard to ordinary material objects like tables and chairs. Even philosophers who are not so ordinary continue giving importance to material objects over scientific entities like sound waves, light waves, electrons etc. Scientific entities are considered having hypothetical existence. Their existence is assumed for explaining or describing the physical phenomena. This leads to the question of ontological priority. Since scientific entities are not known prior to ordinary physical objects like tables and chairs, they are given a secondary ontological status. Primary ontological status is given to ordinary material objects. The status of sense data too is given a secondary importance because they are explained in terms of ordinary material objects. Since Quine is measuring all propositions through one and the

same scale, therefore there is a sense in which he has put all propositions on the same platform. But then all objects, be they physical like tables and chairs, or nonphysical like sound waves and electrons, have to be put on the same platform. Physical objects, for Quine, are no less mythical than are the scientific objects like sound waves and electrons. Conversely we can say that scientific objects are as real as physical objects. Quine says, "positing does not stop with macroscopic physical objects. Objects at the atomic level are posited to make the laws of macroscopic objects and ultimately the laws of experience, simpler and more manageable."⁷⁴ Experience seems to be the only non-posit. But what are those experiences that are not posited like physical and scientific objects? It is to explain or describe the nature of experience that all kinds of myths have been introduced, ranging from the gross material objects to the sub-atomic entities. But one may not find any novelty in Quine's mythology, except a new idiom. To the followers of Hume the material objects are only myths, which are analysed away by reducing them to sense experiences. So also the myth of self is analysed away through its reduction to occurrences of such experiences as cold, hot, happiness, un-happiness etc. But this would be reductionism, and Quine rejects reductionism. The fashion in which the myth of physical object is removed by reduction to sense experience, the myth of sound wave is removed by its reduction to auditory experiences. But Quine is not a crude empiricist like Hume or Mill, who suffered from the reductionistic tendency. Of course Quine also suffers from the reductionistic tendencies. He has reduced gross physical objects to myths, to posits, to Homer's Gods. Again, he has reduced the hypothetical scientific entities to non-hypothetical entities like tables and chairs.

Quine has come to an interesting conclusion about human knowledge. Common man's 'physical objects', scientist's 'force' and 'energy' and mathematician's 'abstract entities' are all myths. These myths have been generated for the sake of 'experience', which is the non-mythical core. Does it not mean that human knowledge as such is

mythical or fiction? This implies that for Quine there is no real knowledge that is non-mythical and non-fictitious. Freedom from myths and fictions is possible only when one transcends human knowledge. But could any piece of knowledge become mythical or fictitious if there are no pieces of knowledge that are real and non-mythical. Quine's position does not seem to be different in quality from the position of the philosopher for whom the whole world appears to be a dream. His position is self-refuting. Unless there are waking experiences there cannot be any dreaming experiences. So also Quine's position is. How can human knowledge be mythical unless there is human knowledge, which is real and non-mythical?

Though Quine believes that all statements are revisable, ranging from logical laws to statements that record immediate experiences, he does not mean that a single recalcitrant experience would lead to the revision of the whole system. Revision of a few statements would do without disturbing the system. As he says, "I envisage nothing more than a loose association reflecting the relative likelihood, in practice, our choosing one statement rather another for revision in the event of recalcitrant experience."⁷⁵ But situations are imaginable when our experiences have become so wild, so unlike our present experiences, that the whole system of our present knowledge has to be revised. New grounds have to be introduced for the new system. Of course it does not mean that every thing from the top to bottom has to be changed, nothing of the world is retained in the new system. May be what was a bottom-proposition in the old system occupies a middle position in the new system, and the occupier of the top position in the old system now becomes a bottom-proposition in the new system. According to Quine, "any statement can be held true come what may."⁷⁶ This means that only *positions* in the new system are constant, the *statements* that occupy those positions are variable.

Though Quine distinguishes between the state in which the recalcitrant experiences lead to minor changes in the system from those where the whole system requires a change, he has not given any concrete examples. He has left to his readers to construct examples. To understand the distinction one can take the help of Wittgenstein. According to Wittgenstein, a switch from one world-picture to the other is required when normal cases acquire abnormal dimension. As he remarks, "it is only in normal cases that the use of a word is clearly prescribed; we know, are in no doubt, what to say in this or that case. The more abnormal the case, the more doubtful it becomes what we are to say. And if things were quite different from what they actually are.... if rule became exception and exception rule; or if both became phenomena of roughly equal frequency -- this would make our normal language-games lose their point."⁷⁷ So new language-games are required to convert the abnormal cases into normal cases. A new world-picture would replace the old world picture. The following remarks of Wittgenstein clarify the issue further. He says, "it would strike me as ridiculous to want to doubt the existence of Napoleon, but if someone doubted the existence of the earth 150 years ago, perhaps I should be more willing to listen, for now he is doubting our whole system of evidence. It does not strike me as if the system more certain than a certainty with it."⁷⁸ Doubting the existence of Napoleon does not doubt the present history. What is doubted only is an item of history. We have not to construct a new history in order to accommodate doubt concerning the existence of Napoleon. But doubting the existence of the earth 150 years ago would lead us to construct a new history of the world, a history that began 150 years ago. Our present world picture, with the system of evidence, has been doubted. In order to satisfy the latter doubt we have to create a new world-picture. We have to have a re-look on all items of the old system. For we are entering into a new world. The theoretical possibility of such re-looking is not ruled out. It is not only a matter of rewriting history; it is a matter of rewriting every thing. Perhaps this is what Quine means when he contemplates about the revision of the

whole system of knowledge. So Quine is not alone in having such thoughts. Wittgenstein seems to share his views.

For Quine a proposition isolated from the system has no sense. In having a given world-picture, according Wittgenstein, "what I hold fast to is not one proposition but a nest of propositions."⁷⁹ Much later he again says, "our knowledge founds an enormous system. And only within the system has a particular bit the value we give it."⁸⁰

According to Quine, any statement can be held true come what may. Wittgenstein explicitly says, "it might be imagined that some propositions were hardened and functioned as channels for such empirical propositions as were not hardened but fluid; and this relation altered with time, in that fluid propositions hardened, and hard ones became fluid."⁸¹ Certainty and necessity that we attach to a given proposition is contextual. What is certain and necessary at one time may become uncertain and doubtful at other time. And what is doubted at one time may become certain and necessary at other time. Certainty and necessity are not the defining characters of propositions; they are their contextual characters.

Finally, Wittgenstein considers his world-picture as "a kind of mythology."⁸² And concerning this mythology he says, "the mythology may change back into a state of flux, the river-bed of thoughts may shift. But I distinguish between the movement of the waters and the river-bed and shift of the bed it self; though there is not a sharp division of the one from the other."⁸³ The propositions that are supposed to be foundations of our knowledge are not as strong as we expect them to be. They may be washed away. And their place may be occupied by new propositions. This is the only way in which knowledge can be saved from its total collapse.

5. KRIPKE ON NECESSITY:

Kripke has not rejected the analytic/synthetic distinction. But he has rejected the older approach to this distinction. He has re-considered all the four notions, a priori a posteriori, necessary and contingent. Following Hume the logical positivists restricted a priori to necessary truths and a posteriori to contingent truths. Kripke appears to have advanced over Kant. Kant, as we have already seen considered the possibility of a priori synthetic truths. Kripke believes in the further possibility of a priori truths that are contingent. So a priori truths are both, those that are necessary as well as those that are contingent. If contingent truths are non-universal then according to Kripke there are a priori truths that are not universal. So Kripke totally rejects Kant's concept of a priori. Similarly a posteriori truths are considered as contingent. But Kripke considers the possibility of a posteriori truths that are necessary. So his approach is quite novel.

In order to show the possibility of a priori contingent truths Kripke starts with an attack on Wittgenstein? He quotes Wittgenstein's remark from *Philosophical Investigations*. Wittgenstein remarked, "There is *one* thing of which one can say neither that it is one metre long, nor that it is not one metre long, and that is the standard metre in Paris.- But this is, of course, not to ascribe any extraordinary property to it, but only to mark its peculiar role in the language-game of measuring with a metre-rule."⁶⁴ Keeping a blind eye to Wittgenstein's arguments, Kripke formulates the statement concerning the Paris-stick that 'the stick S is one metre long'. Then raises question concerning this statement whether it expresses "a necessary truth."⁶⁵ The statement could not be necessary. It must be contingent. The length of the stick may vary in time. According to Kripke, "In some counterfactual situations the stick might have been longer and in some shorter, if various stresses and strains had been applied to it."⁶⁶ So the statement 'stick S is one metre long' could not express a necessary truth. But he has reached this

conclusion not in a straightforward way. He has introduced the distinction between rigid and non-rigid designators. He has shown that 'one metre' is a rigid designator whereas the 'the length of S' is non-designator. This is sufficient to show that the statement 'S is one metre long' is contingent, "under certain circumstances S would not have been one metre long."⁸⁷

Kripke's next step is to show that the statement 'stick S is one metre long' is known a priori. He argues, "what then, is the *epistemological* status of the statement 'stick S is one metre long at t_0 ', for someone who has fixed the metric system by reference to stick S? It would seem that he knows it a priori. For if he used stick S to fix the reference of the term 'one metre', then as a result of this kind of 'definition' (which is not an abbreviative or synonymous definition) he knows automatically, without further investigation, that S is one metre long."⁸⁸ So Kripke has defined a priori knowledge in terms of automatically knowing something. Does it mean that a posteriori knowledge is that which is obtained in a non-automatic way, that which requires some effort on our part? If one knows something without any effort then one's knowledge is a priori. Obviously this is quite a novel definition of a priori knowledge. A priori knowledge is easiest to have. Most of our empirical knowledge would become a priori because it is automatic; it is obtained without making any effort. I have made no effort in knowing that there is a book in front of me and the author of the book is Kripke. Of course the statements of empirical sciences are not a priori. They are not automatically known, much effort is put in order to know them. But Kripke may object to this argument. It is only when one stipulates definition in order to fix the reference of a term that one knows automatically the application of that term. Suppose I wish to fix the reference of 'red' in terms of the colour of the object before me, then my saying this is red would exhibit a priori knowledge. This means that only those people have a priori knowledge of truths who are involved in the stipulative definitions in order to fix the

references of terms. I got everything ready-made. I have not to stipulate definitions. I had not to fix the references of terms. So my knowledge is not a priori. It is a posteriori. Not only I talk about tables and chairs and the shapes and colours, I also talk about numbers, causes, electrons etc., without ever fixing the references. All my knowledge is a posteriori, whether it is about the logical laws or about the water that is boiling in my pot. Kripke is worried about the possibility of a priori knowledge. "Possible for whom? For God? For the Martians? Or just for people with minds like our?"⁶⁹ Kripke has solved his own worry. Only those people have a priori knowledge who are involved in stipulative definitions of terms in order to fix their reference. All others have only a posteriori knowledge. No proposition is in itself a priori or a posteriori. In some hands they are a priori. In other's they are a posteriori.

Kripke has certainly not taken Wittgenstein's reflections seriously. Following Strawson consider the distinction between sentence and the use of a sentence⁷⁰. Consider the sentence 'the stick S is one metre long'. I may use this sentence while referring to the stick lying on my table. My friend looks at the stick, scrutinises it and points out that this stick is not one metre long. His reasons for rejecting the length of the stick are that it has been produced by crude hands belonging to careless manufacturers. To satisfy my friend I bring out an old stick that was produced by other hands and that had ISI mark. After measuring the new stick with the old stick it was discovered that the new stick is less than one metre long. So my friend was right. Suppose both my friend and me are in Paris and we got the opportunity to look at the Paris-stick. Referring to the Paris stick I say 'stick S is one meter long'. This time my friend does not object to my observation. He does not say this stick is not one meter long. The reason is simple, there is no other stick more accurate than the Paris-stick. The Paris-stick is the standard of measurement. Other sticks are measured in terms of the Paris-stick. So there exists no other stick in the world with the help of which it can be decided whether or not the

Paris-stick is one meter long. As a matter of fact I am neither in a position to say that the Paris-stick is one meter long nor in a position to say that it is not one meter long. For there exists no stick in the world, which may show that the Paris stick is or is not one meter long. In saying that 'the stick S is one meter long', while referring to the Paris-stick, I am making no statement that could possibly be true or false. The sentence 'the stick is one metre long' uttered in front of the Paris-stick has failed to express a statement that could possibly be true or false. The use of the sentence on this occasion is very different from its use when I referred to the stick lying on my table. When the sentence 'the stick S is one metre long' I used in the context of Paris-stick then it fails to express a statement that could possibly be true or false. This means that the sentence in question fails to express any statement whatsoever. And if it fails to express any statement whatsoever then there is no question of saying whether the statement is contingent or necessary. Any characterisation of a statement presupposes its expression, therefore, Kripke's contention that the statement 'stick S is one metre long' is contingent a priori is simply wrong.

All this does not mean that sentence 'stick S is one metre long' does not express a statement even when I am referring to Hyderabad-stick. It does express a statement. In the case of Hyderabad-stick my statement 'the stick S is one metre long' was wrong and the statement was contingent. Since I used empirical investigation in order to establish the truth of the statement therefore it was undoubtedly a posteriori. Kripke's difficulties are rooted in the fact that he is unable to distinguish paradigmatic cases from non-paradigmatic cases. He is unable to distinguish the Paris-stick from the Hyderabad stick. He gives the same status to the Paris-stick, which one would have given to the Hyderabad-stick. He says, "even if S is used as the standard of a metre, the *metaphysical* status of 'S is one metre long' will be that of a contingent statement, provided that 'one metre' is regarded as a rigid designator: under appropriate stresses

and strains, heatings or coolings, S would have had a length other than one metre even at t_0 .”⁹¹ How could S be the standard of a metre if the stresses and strains have not been neutralised? Perhaps Kripke rejects the possibility of paradigms, of standards. But if no paradigms are possible then no such activities as the activity of measurement is possible. Unless a scale of measurement is set up, how could any thing we measure? If Paris-stick is fluid, goes on changing from time to time, then we have to invent some other stick which may not be fluid. No universe is possible with the Heraclitian flux.

Consider now Kripke's arguments for the possibility of necessary a posteriori statements. In the case of a contingent a priori statement there was one designator and one non-designator. Now Kripke uses two rigid designators in order to bring necessity to a statement about them. What is a rigid designator? According to Kripke, all proper names are rigid designators. So Nixon, Aristotle, Socrates, Sextus can be called rigid designators. One may imagine the possibility that Nixon was not U.S president in 1970, but one can not imagine the possibility that Nixon was not Nixon in 1970. So if someone is Nixon he remains Nixon in all possible worlds. Kripke has formulated the notion of possible worlds in his own fashion. For Leibniz it is impossible that numerically the same Nixon may occur in two possible worlds, though qualitative identity of two Nixons is not denied. So Kripke has deviated from the historical Leibniz who introduced the notion of possible worlds. Frege's 'evening star' and 'morning star' had their resurrection in Kripke's 'Hesperus' and 'Phosphorus'. Kripke has brought sharpness to Frege's expressions in order to convert them into genuine proper names. According to Kripke, the statement that 'Hesperus is phosphorus' is necessary. It is not contingent. Though necessary I do not know it a priori. It is only after empirical investigation that it was discovered that 'Hesperus' is the name of the same planet to which the name 'Phosphorus' was given. He quotes with approval Quine's remark, "we may tag the planet Venus, some fine evening, with the proper name 'Hesperus'. We

may tag the same planet again, some day before Sunrise, with the proper name 'Phosphorus'. When we discover that we have tagged the same planet twice our discovery is empirical."² So the knowledge that 'Hesperus is Phosphorus' is the result of an empirical investigation. But it does not mean that in saying 'Hesperus is Phosphorus' I am making a contingent statement. The statement is necessary, only its knowledge is a posteriori. If two rigid designators refer to the same object than the resultant statement would be necessary. Kripke rejects the view that all necessary statements must be a priori. As he remarks concerning the rigid designators 'Cicero' and 'Tully', "its true that someone can use the name 'Cicero' to refer to Cicero and the name 'Tully' to refer to Cicero also, and not know that Cicero is Tully. So it seems that we do not necessarily know a priori that an identity statement between names is true. It doesnot follow from this that the statement so expressed is a contingent one if true."³ The sum and substance of Kripke's argument is that one can have a posteriori knowledge of necessary truths. Identity between names exhibits such knowledge.

If Kripke and Quine are right then we hardly have any a priori knowledge of necessary truths. Most of the necessary truths, if not all, have been derived with the help of experience. In geometry experience plays its role more visibly than in other areas. But experience has its genetic role in all our knowledge. It is this truth that led Kant to say that all our knowledge begins with experience. And it is this genetic role of experience that led Mill to say that all our knowledge is empirical. But necessary and contingent are metaphysical or logical characterisations. Genetic question about them should not be raised. In saying that necessary statements are a priori what is meant is simply that their truth does not depend on experience. Kripke and Quine seem to share the attitude of Mill rather than that of Kant. Of course since 'Kripke' and 'Quine' are rigid designators, they refer to certain individuals that are wholly different from all other individuals existing in this or any other possible world.

The concepts that we have analysed in this chapter had their origin in Leibniz. Leibniz led us to Hume, Kant, Ayer, Carnap, Quine, Wittgenstein and Kripke. It was a kind of survey to see how these concepts were interpreted and reinterpreted from the time of Leibniz to the time of Kripke. All have affirmed that there are necessary truths in our language and conceptual system. Thereby they have affirmed that scepticism regarding necessary truths is wrong.

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CHAPTER – IV

QUEST FOR EMPIRICAL CERTAINTY

In this chapter my aim is to consider the notion of empirical certainty. Philosophers have not only found out logical necessity in human knowledge, as we have seen in chapter III, they have also searched for empirical certainty. Empirical certainty lies in those propositions which are directly evident in our empirical experience. They provide foundation to our empirical knowledge. The sceptical arguments can hardly refute such immediately given certainty in our knowledge.

1. RUSSELL'S DEFENCE OF SENSE-DATA

Descartes invented the dream argument to meet the sceptic on his own terms. He came to conclude that even if one dreams one thinks. One's thinking is beyond doubt, because doubting itself is a form of thinking. If one thinks then one exists. Dreaming and doubting led Russell to a very different conclusion. According to Russell, Descartes is wrong in considering the thinking self as an indubitable truth. Dreaming and doubting have led Russell to what he calls sense-data. He describes sense-data as 'hard-data', distinguishing them from 'soft-data'. The hard data are those which are not the result of any kind of inference. Rather, they function as the ground for inference. Soft-data on the other hand, say more than what is given to experience, so they are quite unlike the hard-data. Explaining the meaning of sense-data Russell points out, "What I mean is just that patch of colour which is momentarily seen when we look at the table, or just that particular hardness which is felt when we press it, or just that particular sound which is heard when we rap it."¹ So sense-data are distinguished from the physical objects that present them. Tables, chairs, books etc present to our senses colours, hardness, softness, sounds etc. In his earlier work Russell defined sense-data in the following way. "Let us give the name of 'sense-data' to the things that are immediately known in sensation: such things as colours, sounds, smells, hardnesses, roughnesses, and so on. We shall give the name 'sensation' to the experience of being immediately aware of these things. Thus, whenever we see a colour, we have a sensation of the colour, but the colour itself

is a sense-datum, not a sensation. The colour is that *of* which we are immediately aware, and the awareness itself is the sensation. It is plain that if we are to know any thing about the table, it must be by means of the sense-data — brown colour, oblong shape, smoothness etc- which we associate with the table.”² This means that, according to Russell, we are not directly aware of physical objects. If physical reality consists of tables, chairs and books, etc. then by definition they become physical, and if they are physical then we are not immediately aware of them. What we are immediately aware of are colours, sounds, smells, etc.,are. This means that sense-data are nonphysical. At least, if it is said that colours, sounds, smells too are physical, they are certainly not physical in the same sense in which chairs, books, tables etc, are. For, we are immediately aware of colours, sounds, smells etc. No such immediate awareness has been granted by Russell to tables, chairs, books etc. Our knowledge of physical objects, if we have any such knowledge, depends on the existence of sense-data.

Russell, like Descartes, wishes to save knowledge from the challenge of the sceptic. He rejects the Cartesian proposal, his *Cogito*. According to Russell, “‘*I* think, therefore *I* am’ says rather more than is strictly certain.”³ What is strictly certain? What goes beyond doubt? According to Russell, it is certainly not the self that thinks. As he remarks, “When I look at my table and see a certain brown colour, what is quite certain at once is not ‘*I* am seeing a brown colour’, but rather, ‘a brown colour is being seen.’”⁴ So it is not *my* existence but the existence of the brown colour which is free from uncertainty and doubt. The existence of the brown colour is the existence of a sense-datum. Russell fails to doubt the existence of sense-data. As he says, “the more we reflect upon these, the more we realize exactly what they are, and exactly what a doubt concerning them really means, the more luminously certain do they become.”⁵ The introduction of sense-data is the introduction of the kind of entities, which occur equally in dreams. Existence of material objects is denied in dreams. But dreams accommodate sense-data. The difference between a material object and a sense-datum is that the

former is restricted only to waking experience, but no such restriction can be imposed on a sense-datum. As Russell points out, "In dreams a very complicated world may seem to be present, and yet on waking we find it was a delusion; that is to say, we find that the sense-data in the dream do not appear to have corresponded with such physical objects as we should naturally infer from our sense-data."⁶ This means that the sense-data that occurred in dreams failed to produce physical objects. It is because of their failure to produce physical objects that led us to say that what we saw in the dreams was all delusion. Of course this does not mean that we saw nothing in dreams. We certainly saw a lot of things in dreams, only the things seen were not physical. They were sense-data. So sense-data are not prohibited from occurring in dreams.

It might have become clear that Russell brought sense-data into existence to neutralize the dream argument. But the introduction of sense-data and, their distinction from material objects has led to the introduction of two distinct worlds, the world of which the occupiers are sense-data and the world which is occupied by physical objects. If the occupiers of one world are noises, smells, colour patches etc., then occupiers of the other world are books, chairs tables etc. The world of sense-data is a subjective world whereas the world of physical objects is an objective world. As Russell points out, "our sense-data are situated in our private spaces, either the space of sight or the space of touch or such vaguer spaces as other senses may give us."⁷ So the distinction between private subjective space and the physical objective space must be made. The two worlds have a big gulf between them. The gulf is not physical, it is logical. A table cannot occupy the kind of space that is occupied by sense-data. Similarly, a colour patch cannot occur in the space which is suitable for physical objects. If not impossible, it is quite difficult to bridge the gulf between private subjective space and the physical objective space. There is no such thing as one private subjective space. There are as many private subjective spaces as are the *kinds* of sense-data. A red patch differs in kind from the sound, though both are sense-data. The red patch is seen whereas the sound is heard.

Similarly, smells are different from hardness, sounds and red patches. Each sense generates its own space. As Russell points out, "The first thing to notice is that different senses have different spaces. The space of sight is quite different from the space of touch... And besides touch and sight, there are other kinds of sensation which give other, though less important spaces."⁸ One all embracing subjective space is a fiction. Each space is qualitatively different from the other. Therefore there cannot be any common bond with them. Of course, this does not mean that these spaces cannot have correlation. Though visual space is unlike an auditory space and the tactual space, the correlation is established between these spaces. As Russell points out, "it is only by experience of infancy that we learn to correlate them. In later life, when we see an object within reach, we know how to touch it, and more or less what it will feel like; if we touch an object with our eyes shut, we know where we should have to look for it, and more or less what it would look like. But this knowledge is derived from early experience of the correlation of certain kinds of touch-sensations with certain kinds of sight-sensations. The one space into which both kinds of sensations fit is an intellectual construction, not a datum."⁹ So the fact that space of tactual sensation is different from the space of visual sensation does not mean that we would fail in correlating a colour-patch with hardness. Rather it is because of this correlation that a material object statement can possibly be verified. Suppose on the basis of a colour patch I make the statement 'this is a table'. My statement is not restricted to the colour patch. It also refers to the possible tactual, auditory and other sensations. There is an expectation involved that if I touch the object presented by the colour-patch, I will have the sensation of hardness. If I strike it, it will produce a sound, and so on. Unless different spaces are correlated it would be impossible to verify a material object statement. I may not even be in a position to make such a statement.

Consider now the temporal duration of a sense-datum. Can we sense the sense-data twice? Suppose I sense a colour-patch. Soon there is an interruption in my sensing.

I hear a noise coming from the other room, so my attention has been diverted. Suppose this diversion is removed after some time. I come back to the colour-patch again. Have I seen two colour-patches, one before the interruption and the other after the interruption, or, I have seen only one colour-patch that involves longer duration with an interruption? If the latter alternative is accepted then it is possible to see the same sense-datum twice. But this would dissolve the distinction between sense-data and physical objects. It is possible to see the same physical object twice, because they continue to exist when we are not seeing them. It is because of the hypothesis that a material object can exist even when we do not see it, that it makes sense to say that a material object can be seen twice or thrice. Interruption in perception does not bring about an interruption in the existence of a material object. Same thing cannot be said about a sense-datum. A sense-datum by definition is sensed. Therefore it would be non-sense to talk about unsensed sense-data, and if it is a necessary condition for a sense-datum that it is sensed, then it impossible for the same sense-datum to be sensed twice. A sound that is heard again is numerically different from the sound that was heard earlier. A colour-patch that was seen again is different from the colour-patch that was seen earlier. A sense-datum is sensed only once, whether it is a visual sense-datum or an auditory sense-datum or a tactual sense-datum. Life of a sense-datum is extremely short. Material objects have longer duration, they are quite unlike sense-data. If they do not have longer duration then they would not be material objects at all. If material objects are complex then a sense-datum is simple. There is a sense in which a material object is complex. It is that which is hard, sweet, and white etc. But neither whiteness nor sweetness nor hardness is complex, which may be constituted out of further simpler constituents.

If the same sense-datum cannot be sensed twice, then it is impossible for the same sense-datum to be sensed by numerically two different persons. The colour-patch that I sense is numerically different from the colour-patch sensed by some other person. Of course, all this follows from the subjectivity of sense-data. The issue of subjectivity

presupposes the possibility of objectivity. The possibility of objectivity on its own turn presupposes the hypothesis of other persons or other perceivers. The objective world contains not only physical objects but also other persons. Since our issue is sense-data, so the other persons have to be considered as perceivers, so they have to have minds. In knowing persons or other minds, we have more difficulties than in knowing physical objects. For, physical objects do not have minds, but other persons have minds. Since other persons are not reducible to physical bodies, they pose a greater challenge than the one posed by the physical objects.

So far we have talked about actual sense-data. But we also sometimes refer to possible sense-data. For we talk about, not only those sense-data that are occurring now, we also talk about sense-data that may occur in future if certain conditions are satisfied. When I see a colour-patch, I also expect that if I touch the object that owns the colour-patch, I will have the tactual sense-datum. When the visual sense-datum is occurring, the tactual sense-datum is only a possibility. Consider Mill's view. He defined matter in terms of the possibility of sensations. According to him, matter is a "permanent possibility of sensations."¹⁰ The use of the expression 'permanent possibility' means both actual and possible sensations. Mill's sensations are Russell's sense-data. If Russell has to define matter in Mill's idiom, it would be something like permanent possibility of sense-data. Matter is that which involves actual and possible sense-data. As Russell says in connection with verification that "verification consists always in the occurrence of an expected sense-datum. Astronomers tell us there will be an ellipse of the moon : we look at the moon, and find the earth's shadow biting into it, that is to say, we see an appearance quite different from that of the usual full moon. Now if an expected sense-datum constitutes a verification, what was asserted must have been about sense-data; or at any rate, if part has been verified."¹¹ The expected sense-data are possible sense-data, the data that would occur if certain conditions were satisfied. It is in this sense that matter would become a Permanent possibility of sense-data.

However, for Mill there is no matter besides sensations. According to a pure phenomenalist, there is no reality over and above sense-data. There are no such things as sense-data *and* physical objects. Physical objects are reducible to actual and possible sense-data. But Russell rejects this reduction. For him the total reality consists of both kinds of objects, physical and non-physical. Sense-data are non-physical aspects of reality. They are non-physical for the reason that they can also occur in dreams. His position comes closer to the position of Locke, and deviates from the position of Berkeley and Hume. Russell, like Locke, accepts sense-data as the causal products of physical objects. When the physical objects come in contact with the human mind sense data are generated. It is because sense-data are the causal products of the physical objects, that we can infer the existence of physical objects on the basis of sensing sense-data. According to Russell, it would lead to pure absurdities if one accepts existence of only sense-data. Distinguishing material objects from sense-data Russell remarks, "What can be bought and sold and pushed about and have a cloth laid on it, and so on, cannot be a *mere* collection of sense-data. If the cloth completely hides the table, we shall derive no sense-data from the table, and therefore, if the table were merely sense-data, it would have ceased to exist, and the cloth would be suspended in empty air, resting, by a miracle, in the place where the table formerly was. This seems plainly absurd; but whoever wishes to become a philosopher must learn not to be frightened by absurdities."¹² The unperceived existence of a table is explained in terms of possible sense-data. The table is hidden under the cloth simply means if the cloth is removed there would have occurred those sense-data which constitute a table. Not the actual but the hypothetical sense-data have been used in order to explain the existence of an unseen table. But the hypothetical or possible sense-data are not occurrences of any kind. The table cloth is supported by some thing that occurs, and not supported by something that would possibly occur, if the table cloth is removed. Unless something exists, something occurs, under the table cloth, the table cloth will fall down. It cannot hang in the empty

space. According to Russell, pure phenomenalism i.e. phenomenalism that accepts only the existence of sense-data without accepting the existence of physical objects, would allow the things to hang in the empty space. Allowing physical objects over and above sense-data would be rejecting pure phenomenalism. If Russell is branded as a phenomenalist then he is an impure phenomenalist. For him physical objects are no less real than are sense-data, which disclose their identity. Instead of closing, sense-data disclose the identity of physical objects.

According to Russell, our knowledge has complexities if it is considered in totality. Russell remarks, "There is something that we only believe because of something else from which it has been inferred in some sense, though not necessarily in a strict logical sense, while other parts are believed on their own account, without the support of any outside evidence."¹³ Primitive knowledge is that which is not displaced by dreams and illusions. It is only the derivative knowledge, which is displaced by delusions. A delusion would question a given derivative knowledge. In search for primitive knowledge, Russell gives equal importance to both dreams and waking experience. So far as the primitive knowledge concerned, it is quite useless to make an appeal to the dream argument. As Russell remarks, "Objects of sense are called "real" when they have the kind of connection with other objects of sense which experience has led us to regard as normal; when they fail in this, they are called "illusion". But what is illusory is only the inferences to which they give rise; in themselves, they are every bit as real as the objects of waking life. And conversely, the sensible objects of waking life must not be expected to have any more intrinsic reality than those of dreams. Dreams and waking life, in our first efforts at construction, must be treated with equal respect; it is only by some reality not *merely* sensible that dreams can be condemned."¹⁴ Suppose on the basis of a certain colour-patch I say that 'I see a table'. May be I have the delusion of the table, and as a matter of fact there is no table. But this is not to deny the perception of the colour-patch. What does not exist is the table in question. This is not to deny the

existence of colour-patch that I sensed. My sensing of the colour-patch exhibits primitive knowledge. My declaration that I see a table exhibits the case of a derivative knowledge. I am wrong about my derivative knowledge but not about my primitive knowledge. Primitive knowledge is that which remains valid in spite of dreams. It is by going beyond the primitive knowledge that one may fall into the trap of dreams and illusions. Knowledge of sense-data is primitive which functions as the ground for inferring non-primitive knowledge of physical objects. So Russell puts dreams on the same platform as the waking experience in explaining the nature of the primitive knowledge.

Closely connected with the distinction between primitive and derivative knowledge is the distinction between knowledge by acquaintance and knowledge by description. Knowledge of sense-data is knowledge by acquaintance. As Russell says concerning sense-data "the sense-data which make up the appearance of my table are things with which I have acquaintance, things immediately known to me just as they are."¹⁵ So one is acquainted with those things only which are not the result of any kind of inference. Sense-data are not the result of any kind of inference. One has direct knowledge of them. But knowledge of a physical object is not of this kind. As Russell points out, "My knowledge of the table as a physical object, on the contrary, is not direct knowledge. Such as it is, it is obtained through acquaintance with the sense-data that make up the appearance of the table. We have seen that it is possible, without absurdity, to doubt whether there is a table at all, whereas it is not possible to doubt the sense-data."¹⁶ The distinction between real and illusory holds with respect to material objects but not with respect to sense-data. There can be an illusion about a table. What is seen in illusion is not a table, yet something is seen. That what is seen in illusion is merely a sense-datum. Therefore there is no question of doubting sense-data. Russell considers freedom from doubt as a necessary condition for primitive knowledge and as well as for knowledge by acquaintance. It is only derivative knowledge and knowledge by

description that is open for doubt and uncertainty. Of course the certainty of our knowledge concerning objects with which we are acquainted is empirical certainty. It is not metaphysical or logical certainty. It is not even moral certainty of Leibniz. It is only a contingent fact that there occurs a colour-patch. This colour-patch may very well be imagined not to have occurred. Of course this does not mean that I can doubt the existence of this colour-patch. For the simple reason that even if I consider this colour-patch illusory. It simply means that the colour-patch is an occupant of an illusory world. Only the physical objects cannot be the occupiers of the illusory world. Colour-patches, sounds and smells are bonafide citizens of this world and no less than of the world of waking experience. Colours, noises and sounds succeed in presenting physical objects when one is awake. They fail to present any such objects when one is dreaming. Sense-data appear to be dummies of physical objects. In dreams only these dummies of physical objects are presented.

What would happen to the names of physical objects, if all our knowledge of physical objects were descriptive? What would happen to such names as tables, books, chairs etc.? These words not only denote, they also connote i.e. they are names of many objects at the same time. In the strict sense a name simply denotes i.e. that it refers to one object. There are philosophers who think that all words are names, therefore, there should be no objection for allowing physical objects to have names. Of course, 'table', 'chair', 'book' etc. are not the names in strictly the same sense as 'Caesar', 'London' and 'Charminar' are names. Later three words are supposed to be proper names. They are different from ordinary common names. For proper names are restricted to only one individual. This is the reason why it is said that the proper names only denote, they do not connote. They are conventional. And it would be only an accident of convention that two individuals have the same proper name. Caesar is the name of my dog, and my dog stands for a numerically different individual from the individual who was the Emperor of Rome. But even the universals have names, so there should be no difficulty

in having the names of physical objects. 'Wisdom' and 'honesty' are names of two different universals; though both of them may characterize the same individual. Socrates was not only wise, he was also honest. Any individual can be named, be it a particle of sand, or as big as a planet. Pragmatic consideration restricts our choice of names. Russell gives the same importance to the name 'table' as to the name 'Caesar'. According to him, all our names, the names that we give to the objects, particulars, are disguised descriptions. Consider the statement about Julius Caesar. According to Russell, "it is plain that Julius Caesar himself is not before our minds, since we are not acquainted with him. We have in mind some *description* of Julius Caesar: 'the man who was assassinated' on the ideas of March, 'the founder of the Roman Empire', or, perhaps merely 'the man whose name was *Julius Caesar*'. (In this last description, *Julius Caesar* is a noise or shape with which we are acquainted) Thus our statement does not mean quite what it seems to mean, but means something involving, instead of Julius Caesar, some description of him ..."¹⁷ Julius Caesar is not a genuine name, it is simply a device for descriptions. A genuine name is that which denotes or refers to a particular. It has no other function. Unless there is a reference to a particular the issue of describing does not arise. As we have already seen earlier, knowledge by acquaintance precedes knowledge by description. A genuine name makes us acquainted with a particular. So naming has primacy over descriptions. According to the common sense view we are directly acquainted with such objects as dogs and cats, books and copies, human being and rats etc. Over and above our acquaintance with these objects, we may also have descriptive knowledge of them. But the fact that we have descriptive knowledge of an object does not mean that we cannot be acquainted with it. For example, we may have descriptive knowledge of a dog. It does not mean that we cannot be acquainted with it. Could one have knowledge of a dog by acquaintance? If such knowledge is possible then there should be no impurities of inference involved in it. Knowledge by acquaintance implies that the object which is given to my sense, reports only what is directly given to my senses. Suppose I say there is a dog. Is this statement a direct record of my experience?

Is this statement which could not be possibly false? A material object statement cannot be a direct record of my experience. As Russell says, "when you think you see a dog, what is really given in perception may be expressed in the words "there is a canoid patch of colour". No previous or subsequent occurrence and no experience of others, can prove the falsehood of this propositions."¹⁸

If you wish to describe the world then you must have statements of which the primary constituent is a name. The other constituent may function as a description. This means, we refer to a thing and then describe it. It is only when you are acquainted with things that you can talk about them. This has led Russell to logically proper names. Russell selects 'this' and 'that' as the examples of logically proper names. They are not proper names in the ordinary sense. They are applied to particulars with which one is acquainted. As Urmson points out, "The names that we commonly use, like 'Socrates' are really abbreviations for descriptions; not only that, but what they describe are not particulars but complicated systems of classes or series. A name, in the narrow logical sense of a word whose meaning is a particular, can only be applied to a particular with which the speaker is acquainted, because you cannot name anything you are not acquainted with."¹⁹ So it is the search for acquaintance with objects that has led to names in the logical sense of the word. As Urmson further points out, "The only words one does use as names in the logical sense are words like 'this' or 'that'. One can use this as a name to stand for a particular with which one is acquainted at the moment. We say 'this is white'. If you agree that 'this is white', meaning the *this* that you see, you are using 'this' as a proper name."²⁰ This means that only that word can function as a name which denotes, or designates, or refers to, an object without saying any thing else about it. As Russell points out, "The word "this" appears to have the character of a proper name, in the sense that it merely designates an object without in any degree describing it."²¹ What Russell considers as the characteristic of a logically proper name, according to Urmson, Mill considers as the characteristic of all proper names. As Urmson points

out, that a proper name "should indicate an object without ascribing characteristic, is clearly very like what Mill had said of all proper names, that they have denotation without connotation. Russell's view that ordinary proper names did not fulfil this requirement, but were abbreviated descriptions, was not an eccentricity but almost a platitude at this time;"²²

Closely connected is the issue of 'basic propositions'. They are the records of immediate experiences. Therefore, the propositions of sense-data are basic propositions. Russell defines a basic proposition as follows, "it is a proposition which arises on occasion of a perception, which is the evidence for its truth, and it has a form such that no two propositions having this form can be mutually inconsistent if derived from different percepts."²³ He gives the following examples of basic propositions and provides some further information about them. Examples are 'I am hot', 'that is red', 'what a foul smell'. "All basic propositions, in the above sense, are personal, since no one else can share my percepts, and transitory, for after a moment they are replaced by memories."²⁴ This implies that they are the kinds of empirical propositions, which are incorrigible. It is because they do not go beyond the immediate experiences that there is no possibility for them to become false. Dream argument is futile so far as basic propositions are concerned. As Russell points out, "We should note that basic propositions must be just as true when applied to dreams as when applied to waking life; for, after all, dreams do really occur. This is a criterion for discriminating between what is basic and what is interpretative."²⁵ Consider the statement 'I am hot'. It is a record of my present experience. It is not a prediction about my future experiences. It is possible that in the future 'I may not be hot'. But my failure not to be hot in the future does not show that I am not hot at present. Basic proposition makes no predictions about my future experiences. But the physical statements are interpretative. They are a kind of future predictions. When on the basis of a colour-patch presented to my senses I remarked 'this is a tomato.' I expect that if I bring my hand nearer to the colour-patch

there will be an obstruction. If I press my finger it may get smeared with tomato pulp. Afterwards, if I lick my finger I may have a peculiar taste, and so on. So a material object statement involves the having of a present experience. But it also involves having of certain experiences in the future. It can very well be imagined that I do not have those experiences in the future, which I am expecting now. If those experiences do not occur in the future then I would be led to say that I had a hallucination of a tomato. As a matter of a fact there existed no tomato when I had the perception of a colour-patch. So the statement about a tomato is corrigible, it could possibly be mistaken. But there is no possibility of a mistake in the case of a basic proposition. The reason is that the basic propositions are not the future predictions. Since they are not future predictions, there is no possibility of correcting them in the future. They are incorrigible.

The basic propositions are a sub-class of empirical propositions about which there is no possibility of mistakes. Of course verbal mistakes are possible. Referring to the 'hard-data' Russell remarks "*verbal* doubt concerning even these is possible, but verbal doubt may occur when what is nominally being doubted is not really in our thoughts, and only words are actually present to our minds."²⁶ Suppose I am new at English. When I say 'there is a red patch of colour', I may doubt whether I applied the word 'red' correctly. May be I see a patch of blue colour. When I consulted the experts of English language they tell me that it is neither red nor blue, it is a white patch of colour. So I corrected myself. I was mistaken. But I was not mistaken about the experience, which I had. I was mistaken only about the use of words. Instead of saying 'there is a patch of white colour', I said 'there is a patch of red colour'. This is only a verbal mistake. Verbal mistakes concerning any statement are possible. Freedom from the non-verbal mistakes is the issue. Only basic propositions are those kind of empirical propositions, which are free from non-verbal mistakes, other kind of propositions involve non-verbal mistakes.

We have already seen that Descartes and Leibniz do not allow the Judgements of arithmetic, geometry and logic to become false when one is dreaming. So dream argument is impotent so far as the mathematical judgements are concerned. Basic propositions are non-mathematical propositions, yet they behave like mathematical propositions. They remain true even when one is dreaming. Russell has made an attempt to bring the notion of certainty to empirical domain. His primitive knowledge, knowledge by acquaintance and knowledge of sense-data, which are recorded in basic propositions, are free from uncertainty and doubt. One can doubt the existence of a tomato, but not the existence of a red patch of colour. One can doubt the truth of 'this is a tomato' but not the truth of 'this is a patch of red colour'. Russell rejects the Cartesian attempt at meeting the sceptic. He has provided an alternative step of meeting the sceptic. Russell presents his own hypothesis against the hypothesis of the sceptic. He makes the following interesting remark. "If we are to continue philosophizing, we must make our bow to the sceptical hypothesis, and, while admitting the elegant terseness of its philosophy, proceed to the consideration of other hypotheses which, though perhaps not certain, have at least as good a right to our respect as the hypothesis of the sceptic."²⁷

2. MOORE ON SENSE-DATA

In his preface to the *Problems of Philosophy*, Russell acknowledges that he has "derived valuable assistance from unpublished writings of G.E. Moore As regards the relations of sense-data to physical objects,"²⁸ Moore on his own part refers to Russell's *Lowell Lectures* delivered in Boston in March and April 1914 for the development of his views on sense-data.²⁹ So the invention of sense-data is a joint venture of Russell and Moore. Moore developed the notion of sense-data in his "A Defence of Commonsense". He continued writing on sense-data till late in his life. One may not find much difference between the views of Moore and Russell because they influenced each other's thought. Moore introduces sense-data by considering a situation in which a person is

'seeing his right hand as well as something else'. In such a situation Moore thinks that this person 'must be having a direct visual field which contains at least two objects'. And these objects which are constituents of the direct visual field are, according to him, examples of what sense-data are'. The sense of 'see' in which the objects of the direct visual field are seen is "the visual variety of what Berkeley called 'direct perception' and what Moore himself prefers to call 'direct apprehension'". So, according to Moore, "directly apprehended smells and tastes and sounds are just as much sense-data as directly seen objects". Moore describes his method as an operation for 'picking out' sense-data. If what Moore holds is legitimate, then in perceiving a physical object, such as, my right hand, I am required to apprehend a sense-datum. The apprehension of sense-data precedes the perception of physical objects.

Moore has given the directions for picking out sense-data in his "A Defence of Commonsense". Bouwsma feels difficulty in picking out sense-data with Moore's directions. His main difficulty is that Moore gives directions for distinguishing one sense-datum from the other. But this distinction would be understood only by that person who knows what a sense-datum is. Imagine there are so many varieties of flowers in a garden. You direct someone to pick out two flowers of rose. He can do it only if he knows what a flower of rose is. As Bouwsma remarks, "One who is unacquainted with sense-data, and so has no information with regard to what to pick out, must resort to random picking, and wish for luck."³⁰ Ayer has a slightly different reaction against Moore. According to him, Moore was trying to provide a method of "identifying sense-data in general, and not merely of distinguishing one sense-datum from another. He was addressing himself to people who were assumed to understand what was meant by 'seeing a physical object' but not to understand what was meant by 'seeing a sense-datum' and the point of his example was to show how seeing a sense-datum occurs. But if this is so, the description of a process which consists in concentrating upon one element of a direct visual field is not very helpful, for if the

person to whom one is trying to teach the meaning of the word 'sense-datum' does not understand what is meant by a 'direct visual field' he will not be any the wiser; and if he understands this, it is sufficient to tell him that a visual sense-datum is a constituent of a direct visual field, without introducing the complication of a selective process which turns out to be a process of discriminating between sense-data."³¹ Ayer too accepts that Moore was attempting to provide a method for identifying sense-data in general. But his attempt resulted only into 'discriminating between sense-data'. So his objection against Moore is only slightly different from Bouwsma's objection.

Till the philosophers of our age became acquainted with the writings of Russell, and later of Moore, they were ignorant of the entities called sense-data. It is only after readings the writings of Russell and Moore they came to realise that the perception of physical objects is not so simple as they thought earlier. Seeing of a book or a table, involves seeing of something else according to Moore and Russell. That something else which is seen has been named by them as a sense- datum. So Moore in his "A Defence of Commonsense" tries to explain the difference between two different senses of the word 'see', the sense in which a physical object is seen and a sense in which a sense-datum is seen. Since people do not know what a sense-datum is, so it was also Moore's problem to tell them what a sense-datum is. If you succeed in picking out sense-data, you will show that you are aware of them. However, Moore involved himself in a difficulty, because he wishes to make people aware of sense-data by describing a method to pick them out from a certain background. His 'direct visual field' is the background that makes sense-data emerge. But, unfortunately philosophers like Bouwsma do not find any help from Moore's method.

Moore is far clearer in his *Reply to Critics* than his earlier writings on sense-data³². Moore has responded to the attack of Bouwsma, Mace, Murphy, Marchenke and Ducasse. In defending his earlier position he has introduced a new method of picking

out sense-data. So also he has used different examples for distinguishing two different senses of the word 'see', the sense in which a sense-datum is seen and the sense in which a material object is seen. This is an implicit acceptance on his part that his earlier method of picking out sense-data was not free from difficulty. In his reply Moore gives two examples of picking out sense-data which are also the examples for distinguishing the sense of 'see' in which sense-data are seen as distinguished from the sense of 'see' in which material objects are seen. First example refers to the seeing of an after-image; the second example refers to Macbeth's dagger. Referring to the first example he says "It sometimes happens that if, after looking at a bright object, you close your eyes, you have, while your eyes are shut, an after- image of the object. And it is a quite correct use of "see" to say that you see, though your eyes are shut, e.g., a round blue patch with a red spot in the middle, which is an after-image; though it is also correct to say that you have an after-image, which is a round blue patch with a red spot in the middle."³³ So there are two senses of the word 'see', the sense in which the bright object is seen and the sense in which the after-image is seen. The after-image is seen even when your eyes are shut. But you cannot see the bright object when your eyes are shut. So, there are two senses of 'see' a normal sense of 'see' and that sense of 'see' which deviates from the normal. Referring to the other example Moore writes, " when Macbeth says "is this a dagger which I see before me?" the sense in which she is using 'see' is that which I am now calling "directly see"; for it is, it seems to me, obviously the same as that in which we use "see' when we are talking of "seeing" an after-image with closed eyes. Macbeth is represented by Shakespeare as having directly seen an "object" (though, of course, not a physical object, any more than an after-image seen with closed eyes is a physical object) to which he referred by the word "this", and about which he asked. "Is this, which I see before me, a dagger?" and we all understand perfectly well what sort of experience Shakespeare is representing Macbeth as having had."³⁴ Neither Macbeth's dagger nor the after- images are examples of physical objects. Both of them are directly seen. They are examples of sense-data. With reference to the example of after-image,

Moore says that seeing an after-image is also described as *having* of it. So an after image is treated like having of a pain, something that occurs to you. Both Macbeth's dagger and the after-image seen with closed eyes are examples of hallucinatory objects. Since they are not physical objects, they are not real objects. They are not very unlike the objects that occur in dreams. The only difference is that in dreams all the objects that are seen are hallucinatory. The after-image and Macbeth's dagger, though hallucinatory, are seen while one is awake. Macbeth is not having total hallucination when the dagger is seen. The only hallucinatory object is the dagger. Similarly the after image is the only hallucinatory object. Objects surrounding it are not hallucinatory.

The real difficulty arises that whenever we see something, there is some object which is seen directly. For example, when we see a dog, according to Moore's direction, we directly see a canoid patch of colour. It is on the ground of a canoid patch of colour that I am led to say that I see a dog. Apprehension of a sense-datum precedes the perception of a physical object. Similarly, when I taste an apple I have sweet taste. A noise precedes the hearing of a bell. Not only Macbeth's dagger is directly apprehended object, so is the canoid patch directly apprehended. Directly apprehended noises and tastes are also like directly apprehended after-images and Macbeth's dagger. No qualitative distinction can be made between directly apprehended objects. Then how can we say that Macbeth's dagger is hallucinatory whereas a canoid patch non-hallucinatory? Saying that Macbeth's dagger is not physical does not remove the difficulty. The canoid patch too is not physical. The reply is simple: the distinction between hallucinatory and non-hallucinatory objects is with respect to physical objects, not with respect to sense-data. When it is said that Macbeth's dagger is hallucinatory, what is meant is that what is presented to senses is not something that is real. Only Macbeth is seeing the dagger and not others. If it had been a common object of perception then it would not have been hallucinatory. An after-image also behaves in the same fashion; it is also not a common object of perception. Macbeth's dagger is

well as an after- image are seen while one is awake, yet they have qualities of dream objects. One's dreams are private to oneself. Two different persons cannot have numerically the same dreams.

In order to let others know what a sense-datum is, or what a directly seen object is, Moore has taken the examples of hallucinatory objects, Macbeth's dagger as well as the after-image. Moore has to show that sense-data are numerically different kind of objects from physical objects. No one would accept that Macbeth's dagger and after-images are physical objects. So also one should not doubt that the hallucinatory objects too are seen. From hallucinatory sense-data it is easier to have transition to non-hallucinatory sense-data. Directly seen colour-patches, noises and smell are not unlike the directly seen after-images and hallucinatory swords and daggers. The sense-data that occur in dreams, illusions and hallucinations, are not at all different in quality from the sense-data that occur in waking experience. It is the dream situation that led Russell to introduce sense-data. It is again the dream situation that has led Moore to introduce sense-data. The examples of Macbeth's dagger and the after-image seen with closed eyes show that the argument from illusion is the driving force for Moore's introduction of sense-data. Price and Ayer too are driven to sense-data through the dream situation.

3. PRICE ON SENSE-DATA

Though Russell and Moore gave birth to sense-data, Price is supposed to be their guardian. As Ayer remarks about Price, " Professor Price, who has made himself the guardian of sense-data --- he is not their parent but it is he who has chiefly interested himself in their welfare: it is to him more than anyone that they owe their present position of honour in the philosophical world."³⁵ Like Descartes, he uses the method of doubt to arrive at sense-data. Consider his remarks, " when I see a tomato there is much that I can doubt. I can doubt whether it is a tomato that I am seeing, and not a cleverly

Painted piece of wax. I can doubt whether there is any material thing there at all. Perhaps what I took for a tomato was really a reflection; perhaps I am even the victim of some hallucination. One thing however I cannot doubt that there exists a red patch of a round and somewhat bulgy shape, standing out from a background of other colour-patches, and having a certain visual depth, and that this whole field of colour is directly present to my consciousness."³⁶ Thus Price has started like Descartes and ended up like Russell. Instead of reaching the Cartesian self that thinks, Price, not very unlike Russell, has come to accept that there exists a red patch of colour. Like Moore, Price accepts that the red colour-patch is directly present to my consciousness. So what exists without doubt or what indubitably exists is the colour-patch. He extends argument about visual field to other senses. As he says, "When I am in the situations called 'touching something', 'hearing it', 'smelling it', etc., in each case there is something which at that moment indubitably exists—a pressure (or perment patch), a noise, a smell; and that something is directly present to my consciousness."³⁷ Price further thinks that the acceptance of sense-data is not the result of any particular theory of perception, because all theories of perception take their start from sense-data. According to Price, all past theories of perception take their start from sense-data. As he remarks referring to sense-data. "The ancients and the School men called them *sensible species*. Locke and Berkely called them ideas of sensation, Hume impressions, Kant *vorstellungen*. In the nineteenth century they were usually known as sensations, and people spoke of visual and auditory sensations when they meant colour-patches and noises; while many contemporary writers, following Dr.C.D. Broad, have preferred to call them *sensa*."³⁸ So what Russell and Moore discovered was not something that was new, only the idiom was new.

The fundamental difficulty against Price's method of introducing sense-data is that one could doubt the existence of sense-datum, not very unlike doubting the existence of a physical object. If it is a matter only of my psychology then I cannot be

prevented from doubting the colour-patch. Price is certainly not concerned merely with the psychological state of doubting. As Ayer remarks, "Why can I not doubt it? What prevents me? It is not a question of my psychology. It is not just that I cannot now bring myself to doubt the existence of this bulgy patch, because that leaves open the possibility that I might. If I schooled myself in doubting, I must achieve it. But clearly this is not what Price means. He wants to say that the existence of what he calls the sense-datum is objectively beyond doubt: so that if anyone managed to deny it, he would necessarily be wrong."³⁹ Price himself does not seem to be very happy about the method of doubt. So he introduces another method to make us aware of sense-data. Just as the revised method of Moore is superior to his original method, Price's revised method is superior to his original method of doubt. He says, "To make someone understand the sense-datum terminology, we have to give him suitable instructions, 'Look at a pencil. Push one of your eyes aside with your finger. There will now be two elongated colour-expanses in your visual field, whereas there was only one before. These two colour-expanses are visual sense-data'".⁴⁰ In this case Price tries to manufacture sense-data without taking help of one's faculty of doubt; what is required is simply some physical exercise. Price has created an abnormal situation to bring sense-data into existence. It is by pressing one's eyeball the two colour expanses have emerged. Since pencil is only one, only one colour expanse could belong to it, so one expanse had to be illusory. But both the expanses are illusory because both of them are occupying very different spaces in the visual field from the space occupied by the pencil. The difficulty is that the real colour expanse that belongs to the pencil is numerically different from the two colour expanses, which have been created artificially by pressing the eyeball. However, to talk about the real expanse is nonsense, if unsensed sense-data are nonsense. For the real colour expanse, as distinguished from the two-colour expanses, is a fiction. What is sensed is only two colour expanses, which have been abnormally created. Price has taken for granted that once we understand what is meant by sense-data, it would be possible on our part to pick them out even in the

normal situations. It is not only the abnormal situation in which a Pencil generates sense-data, it would continue generating them even in normal situations. You cannot see a pencil unless you become acquainted with the colour expanse. You cannot touch a pencil unless you feel hard and so on. Price's colour expanses connected with the pencil and tomato are not unlike Moore's Macbeth's dagger and the after-image seen with closed eyes. Similar is the case of Russell's dream-cat. Russell says, "Hitherto, when I have 'seen a cat', there has usually been a cat to be seen, for if this had not been the case I should not have acquired the habits which I now have. We have therefore inductive grounds for holding (on common sense basis) that when I 'see a cat' there probably is a cat. We cannot go beyond 'probably', since we know that people sometimes see cats that are not there, for instance in dreams."⁴¹ The purpose of Russell, Price and Moore is to make us understand the nature of sense-data that are not the result of any hallucination, by bringing to our attention the sense-data, which are the result of hallucination. They have taken for granted that the hallucinatory sense-data are not different in nature from the non-hallucinatory sense-data.

4. A. J. AYER ON THE LANGUAGE OF SENSE-DATA

A.J. Ayer, like his predecessors, Price, Moore and Russell, uses the argument from illusion to establish the existence of sense-data. He argues, "the ordinary way of describing what one perceives appears to make a stronger claim than the perception itself can cover. This follows indeed from the fact that illusions are possible. If I can be undergoing an illusion when, on the basis of my present experience, I judge, for example, that my cigarette-case is lying on the table in front of me, I may, in saying that I see the cigarette-case, be claiming more than the experience strictly warrants. It is logically consistent with my having just this experience that there should not really be a cigarette-case there, or indeed any physical object at all."⁴² So Ayer is in search of that description of experience which does not go beyond what is given to experience. No

element of inference is involved in it. In such a situation the description will not be rejected even if one is undergoing an illusion. So Ayer is in search of a non-physical cigarette-case, a cigarette case that continues to exist even when one is dreaming. Ayer argues, "if I wish to give a strict account of my present visual experience, I must make a more cautious statement. I must say not that I see the cigarette-case, if this is to carry the implication that there is a cigarette-case there but only that it seems to me that I am seeing it,"⁴³ But the suggestion to replace the statement ' I see a cigarette case', by the statement ' it seems to me, that I see a cigarette-case' in no way suggests that the perception of a physical cigarette- case is to be replaced by the perception of a non-physical cigarette-case. Therefore, Ayer takes a further step, " the next step, continuing with our example, is to convert the sentence it now seems to me that I see a Cigarette-case; into 'I am now seeing a seeming cigarette- case'. And this seeming cigarette-case which lives only in my present experience is an example of a sense-datum."⁴⁴ But this final step is very dubious. Ayer himself accepts that he has brought the seeming cigarette case into existence just by a "stroke of the pen."⁴⁵ We have, however, to see whether Ayer's argument does or does not allow that one always perceives a sense-datum, whether in delusive or in veridical perception. If Ayer's view is legitimate, then it is never the case that in some case we may be allowed to perceive a seeming cigarette case, and in others a physical cigarette-case. A physical cigarette case could be perceived in those cases of perception in which there is no possibility that one is dreaming. But, according to Ayer, the possibility that one is not dreaming can never be achieved. One can at the most diminish the probability of a dream, and hence whenever one is perceiving a cigarette case one is allowed merely to be perceiving a seeming cigarette-case.

Ayer's argument inherits all the defects involved in the general argument from illusion for the introduction of sense-data. There are three steps of this argument.⁴⁶ In the first step it is accepted that the object of a veridical perception is physical. The

second step denies that the object of a delusive perception is physical. But the delusive perception is perception of something, if not of a physical object then, to coin a new expression, of a sense-datum. The third and the final step is obvious: the delusive perception is not qualitatively different from a veridical perception; hence if the object of a delusive perception is a sense-datum, then the object of a veridical perception is also a sense-datum. This argument for introducing sense-data is fallacious. Its conclusion clearly contradicts its premise. The premise grants the perception of a physical object in one's veridical perception, but the conclusion denies it. This argument seems to have converted the veridical perception into a delusive perception; for it prohibits the perception of a physical object even in one's veridical perception. The objects, which have been brought into existence to occur in dreams, have even replaced those, which occur in waking experience. There is a simple way of refuting this argument. By parity of reasoning one can argue: since the veridical perception is not qualitatively different from the delusive perception, therefore if one perceives a physical object in one's veridical perception one would as well be perceiving a physical object in one's delusive perception. But this would eliminate the delusive perception altogether. None of the two arguments can be accepted. It is not possible to allow the existence of public physical objects in one's dream. But it is equally not possible to allow the private sense-data to exist in one's waking experience. Both the arguments are defective; for the one seems to have made all perceptions delusive, and the other makes all of them veridical. The absurdity is that a situation of deception presupposes a situation of non-deception. But, for Ayer, the attainment of non-deception is not possible. As Austin remarks, "it is important to remember that talk of deception only *makes sense* against a background of general non-deception. (You can't fool all of the people all of the time). It must be possible to *recognize* a case of deception by checking the odd case against more normal ones."⁴⁷ But, for Ayer, the general background of non-deception is missing. For him the possibility that one is not dreaming can never be removed. Austin's further remark in this context is also relevant. He says "I recognize indeed that people are sometimes

deceived by their senses, but this does not lead me to suspect that my own sense-perceptions cannot in general be trusted, or even that they may be deceiving me now. And this is not, I believe, an exceptional attitude. I believe that, in practice, most people agree with John Locke that ‘ the certainty of things existing *in rerum natura*. when we have the testimony of our senses for it, is not only as great as our frame can attain to, but as our condition needs”⁴⁸. Ayer rejects the testimony of our senses. One could reject the testimony of senses if some superior testimony is available. Senses provide the only testimony, and no better testimony is needed for the existence of things in general.

We have shown above how Russell, Moore, Price and Ayer have introduced sense-data. They have certainly introduced sense-data with the help of words, which stands for material objects. Russell’s ‘cat’, Moore’s ‘right hand’, Price’s ‘tomato’, and Ayer’s ‘cigarette-case’ are words, which stand for physical or material objects. But this shows that we have come to understand what sense-data are with the help of words which stand for physical objects. This implies that we already know the language of physical objects prior to our knowing the sense-datum language. So, knowledge of the physical object language is independent of the knowledge of sense-datum language. If the perception of physical objects depends on the apprehension of sense-data, as the sense-data philosophers maintain, then it is the physical object language that requires to be taught in terms of the sense-datum language. It is surprising how we remain ignorant of sense-datum language, when sense-data have a prior claim for their apprehension than the perception of physical objects. Our ignorance of the terminology of sense-data and its explanation in terms of the terminology of physical objects implies, in the words of Price himself, that “ the material object language of common sense must be understood already.”⁴⁹ This leads Price to the question “how can we have learned to understand it, unless some material-object words have ostensive definition?” But if they have ostensive definition, then they are “empirically cashable by a direct awareness of the objects which are instances of them.” And if these words are cashable by a direct

awareness of the objects, which are instances of them, then the concept of a sense-datum is eliminated; for this concept prohibits one's direct awareness of physical objects. However, Ayer does not find any difficulty in overcoming this objection as he says, "It is, in fact, only by the use of expressions which refer to the perception of physical objects that we have given any meaning to talking of sense-data at all. And it is hard to see how else we could have proceeded, if we were to have any hope of being intelligible. This seems to me however to be a matter of psychology rather than logic. If one has to describe the use of an unfamiliar terminology, the description, in order to be informative, must be given in terms of what is already understood."⁵⁰ Ayer accepts that some of us, if not all of us, are unfamiliar with the terminology of sense-data. But all of us seem to be familiar with the terminology of physical objects. Therefore those who are unfamiliar with the terminology of sense-data are taught this new terminology with the help of physical objects terminology with which we are familiar. Price's objection has only psychological implication. It puts no logical difficulty.

In what sense are we not familiar with the terminology of sense-data, and are familiar with the terminology of Physical objects? We are as familiar with 'colour patches', 'sounds', 'smells' etc as with 'cats', 'tomatoes', 'hands' and 'cigarette-cases'. And if we are ignorant of the *analysis* of the former group of expressions then we are also ignorant of the analysis of the later group of expressions. Suppose it is said that we were ignorant of the fact that the colour-patches, smells, sounds, are apprehended *directly*, then we were also ignorant of the fact that cats, hands, tomatoes, cigarette-cases etc., are perceived *indirectly*. The distinction between *direct* and *indirect* perception is the innovation of philosophers. It seems that we were ignorant of not only sense-data but also of material objects. As Austin points out, "The trouble is that the expression 'material things' is functioning *already* from the very beginning, simply as a foil for 'sense-datum'; it is not here given, and is never given, any other role to play."⁵¹ In order to bring sense-data to our notice, material things have been converted into the unnoticed

things. The situation is like this: either one notices sense-data or one notices material objects, but not both.

Is it possible that one is unfamiliar with the terminology of sense-data, as one is unfamiliar with the terminology of science? Such a possibility cannot be ruled out. It is possible that the terminology of sense-data, having 'colour-patches', 'noises' and 'smells' is of the same type as the terminology of physics, having 'atoms', 'sound-waves' and 'electrons'. Our unfamiliarity with the terminology of sense-data cannot be like our unfamiliarity with the terminology of physics. Sense-data are not hypothetical entities like atoms, sound-waves and molecules. They are not such entities, for it is the occurrence of sense-data that justifies the acceptance of any hypothetical entities. So if sense-data themselves are hypothetical entities they will fail to justify the acceptance of any hypothetical entities. To talk about 'colour-patches', 'noises' and 'smells' is unlike talking about 'electrons', 'atom', and 'sound-waves', for the latter set of terms derives its meaning from the former. Hence, the teaching of the terminology of sense-data through the medium of the terminology of physical objects is unlike the teaching of the terminology of science through the medium of the terminology of ordinary language.

5. G. A. PAUL ON THE PROBLEM OF SENSE-DATA.

We have already seen that the views of sense-datum philosophers like Russell, Moore, Price and Ayer have been expressed in such a fashion that sense-data appear to be a novel discovery. This idiom, according to Urmson, "makes it sound as though philosophers had discovered a new kind of object to which they had given the name 'sense-datum.'" ⁵² Was sense-datum really a new kind of object that some philosophers have succeeded in discovering? It was certainly a new kind of discovery. A teacher of philosophy had reported "that she had often observed her pupils' having the sense-datum experience for the first time." ⁵³ This is not very unlike the students of Physics who are

observing the movement of electrons for the first time. The discovery of scientific entities like electrons is the discovery of the internal structure of physical objects. Similarly sense-data may be considered as exhibiting the external structure of physical objects. The sense-datum philosophers are responsible for bringing into existence a special set of objects, different from the physical objects. If electrons are described as scientific entities, then sense data can be called as philosophical entities. The credit goes to the philosophers for discovering them.

The view that sense-data are novel discovery has been attacked by Paul. According to Paul, sense-data are a verbal novelty rather than a factual discovery. Explaining the view of Paul, Urmson writes, "If one genuinely discovers a new sort of object, say a virus, or, to use Paul's own example, the fovea in the eye, then thereafter any account of the world which does not mention these objects can be seen to be incomplete. Further, it will be possible to give directions for singling out these objects from the rest, e.g. directions for taking a photograph of the virus with an electron microscope. But, said Paul, this is not the case with regard to sense-data. For those who introduce sense-data say such things as 'if it appears to you that you are seeing a red tomato, then you are having a red sense-datum'. That is, if it appears to you that you see a red tomato then it is *logically necessary* that you are having (sensing) a red sense-datum. This may be contrasted with 'if you look through such a telescope in such a direction you will probably see such and such a star'. Genuine discoveries are not logical consequences of what is already known.⁵⁴ Colour-patches, sounds and smells, which are supposed to be sense-data, are certainly not like virus and fovea. The sense-datum philosophers never claim that people were ever ignorant of sense-data. So long they have the ability to perceive material things they would also be bound to sense sense-data. So, we were never ignorant of sense-data. But though people suffered because of virus, only recently they came to know what virus and fovea are. Paul is right in saying that genuine discoveries are not logical consequences of what is already

known. Then what is the achievement of a sense-datum philosopher? Their achievement is introducing a new terminology, and a new way of looking at objects. As Urmson writes about Paul's view, "what philosophers have in fact done is to introduce a new expression 'having a sense-datum' which is defined in terms of the way objects look. To talk about sense-data will therefore be just another way of talking about the way objects look."⁵⁵ Paul finds the sense-datum terminology merely as an alternative to physical object terminology. And saying that they are alternative terminologies means that both are meant to describe the same perceptual situation, that they are simply two different ways of describing it. "We can say a thing this way and we can say it that way."⁵⁶ But these different ways of saying do not imply that there are different objects in view. Paul finds the terminology of sense-data misleading, as he says, "I wish to deny that in order to give a complete and accurate account of any perceptual situation it is necessary to use a noun in the way in which 'sense-datum' is used, for this leads to the notion that there are entities of a curious sort over and above physical objects."⁵⁷ Thus Paul accepts the terminology of sense-data without accepting the ontological implications which this terminology suggests. If Paul's view is legitimate, then one should reject the views of Moore and Price, for their views clearly lead us to think as if sense-datum terminology involves a factual discovery. The sense-datum philosophers of post-Moorean era were attracted by Paul's view, for his view expresses a golden mean. It neither rejects the use of sense-datum terminology nor adds any extra furniture to the world, the furniture which the world did not already have. Welcoming Paul's view, Ayer says "the philosopher who says that he is sensing a sense-datum in a case where most people would say that they were seeing a material thing is not contradicting the received opinion on any question of fact. He is not putting forward a new hypothesis, which could be empirically verified or confuted. What he is doing is simply to recommend a new verbal usage."⁵⁸ The theory of sense-data does not involve more than the elaboration of a special terminology for describing our perceptual experience. The solution of the current philosophical problems about sense-data depended, not upon

our discovering the properties of a strange sort of object, but rather upon our establishing the use of a new set of technical terms... the terminology of sense-data, though philosophically convenient, did not enable us to express any propositions about our perceptual experience that we were not already able to express in the language of commonsense, by referring to physical objects.”⁵⁹ Perhaps these quotations are sufficient to show that Ayer is speaking with the voice of Paul.

From what Paul and Ayer say it follows that our unfamiliarity with the sense-datum terminology is not our unfamiliarity with a new set of non-verbal objects. When a sense-datum philosopher says that he sees a sense datum in the situation in which we say that we see a physical object, it is not the case that the sense-datum philosopher sees some object which we don't see, or that we see some other object. Had our disagreement been of such a type its settlement would have required merely an empirical investigation. When we describe a certain experience by the form of words 'I see a tomato' the sense-datum philosopher prefers, for philosophical reasons, to say, 'I see a red patch'. But the departure of the sense-datum philosopher from our mode of description- which may be described as the ordinary common-sense mode-should not lead us to think that some sudden change has occurred in the experiences of a sense-datum philosopher, as if instead of seeing a tomato he has started seeing colour-patches. If the use of the sense-datum terminology involves such a change in the experiences of a philosopher, then what is required for him is not a philosophical argumentation but a medical adviser. And so also when we are successful in seeing tomatoes and hands we have not achieved something, which we could not have achieved without a medical adviser. Neither the sense-datum philosopher has become abnormal by seeing sense-data, nor have we become normal by seeing physical objects. By describing our experiences of objects differently neither the objects nor the experiences correlated with them have become different. Perhaps this is a sufficient explanation of what is meant by

saying that the sense-datum terminology is an alternative to the terminology of physical objects.

The sense-datum philosophers very reluctantly accept Paul's view. Paul's view saves them from the attack of the philosophers like Ryle and Strawson. Ryle considers sense-data as myths, and Strawson gives secondary importance to them. Paul functions as a good mediator. He wishes to give equal importance to both, physical objects and sense-data, using material object expressions as one way of describing reality, using sense-datum expressions as another way of describing reality. So, they are merely alternative ways in which reality is described. Neither physical objects nor sense-data are cancelled. However, sense-datum philosophers like Ayer continue holding the superiority of sense-datum terminology over the physical object terminology. Referring to the reaction of Price on his *The Foundations of Empirical Knowledge*, Ayer says, "the possibility of applying the 'physical object language' depended upon the constancy of certain relations between sense-data, which might conceivably not have obtained. That is to say, I held it to be a contingent fact that the structure of our sensory experience was such as to make it possible to 'construct' out of it the world of material things: with this Price says that he agrees. Thus, as he remarks "our visual and tactual sense-data might have an eurhythmic rather than a thing-like order, arranging themselves, as it were in visible or tangible tunes". From what Price, suggests Ayer concludes that the sense-datum language is more comprehensive than the physical object language. " For whereas in every case in which it is possible to apply the physical object language, it is also possible, at least in principle, to apply the sense-datum language, one can conceive an order of experience to which the sense-datum language would have application but the physical object language would not."⁶⁰ If the sense-datum language is more comprehensive than the language of physical objects, then how can the former be an alternative to the latter? One language can be an alternative to the other, if all that is described by one language is also described by the other. Before Paul intervened it was

held that sense-data are superior to material objects, because material objects can not occur in dreams. So the application of material object is quite limited, it is restricted to the waking experience. Sense-data occur in both, waking as well as dream experiences, so the application of sense-data is more comprehensive. Even after Paul's intervention the superiority of sense-data over material objects is retained. Now the retention is in terms of two terminologies, that the sense-datum terminology is superior to material object terminology. Even now sense-data continue constructing material things. Sense-datum philosophers are paying only lip service to the concept of the alternative terminology. Sense datum terminology is certainly not an alternative to physical object terminology.

6. J. L. AUSTIN'S REJECTION OF SENSE-DATA

'The chief stalking horse' of Austin's *Sense and Sensibilia* is Ayer's *Foundations of Empirical Knowledge*. This book has particularly been chosen for attack by Austin because it claims to lay down the foundation of whatever knowledge we have of reality. Obviously our knowledge of reality is empirical. Foundation of a building is supposed to be stronger than the other storeys of the building. If foundation is not strong, the building will collapse. In his quest for the foundation of empirical knowledge Ayer was led to discuss sense-data, basic propositions etc. Austin's criticism of Ayer is certainly not exhaustive, because he did not care to look into the other works of Ayer. Ayer's views have continuously been changing. To defend himself from the critics, from time to time, he was forced to change his views. As a matter of fact Austin attacks all the sense-datum philosophers beginning from Russell down to Warnock. In *Sense and Sensibilia* other than Ayer, Austin has mentioned Price and Warnock. Russell and Moore have also been attacked but only under the garb of Ayer and Price. Of course nothing is wrong with this procedure. If Ayer is closer to Russell then Price is closer to Moore.

While discussing Russell it has already been pointed out that some empirical propositions function as foundation for obtaining other empirical propositions. These foundational propositions were described as basic propositions. It was also pointed out that they were incorrigible. According to Austin, “The pursuit of the incorrigible is one of the most venerable bugbears in the history of philosophy. It is rampant all over ancient philosophy, most conspicuously in Plato, was powerfully re-animated by Descartes, and bequeathed by him to a long line of successors.”⁶¹ Russell and Moore were two important successors of Descartes. As Mundle points out about Russell and Moore “The philosophers who introduced the term “sense-datum” (though not the notion in question) were G.E.Moore and Bertrand Russell. Both made it clear from the start that their main motive was that of Descartes-the quest for incorrigible statements, which could provide foundations for a reconstruction, or a justification, of human knowledge.”⁶² Sense data are those incorrigible entities that were introduced by Moore in his lectures in 1911 and by Russell in his *Problems of Philosophy* published in 1912. The propositions which were restricted to the description of sense-data were described by Russell and Ayer as basic propositions. They were considered incorrigible. Empirical knowledge was considered as a *structure*, having foundations. As Austin points out, “it is a structure the upper tiers of which are reached by inferences; and the foundations are the *data* on which these inferences are based (so of course-as it appears -there just have to be sense-data).”⁶³

In the first edition of *Language, Truth and Logic*, Ayer expresses very different views from the views expressed in *the Foundations of Empirical Knowledge*. It is the latter work, which has been attacked by Austin. In the earlier work the incorrigible propositions were missing. As he remarked in his earlier work “Empirical propositions are one and all hypotheses, which may be confirmed or discredited in actual experience. And the propositions in which we record observations that verify these hypotheses are

themselves hypotheses, which are subject to the test of further sense experience. Thus there are no final propositions.⁶⁴ Rejection of 'final propositions' means the rejection of propositions, which are direct records of experiences. Rejection of direct records of experiences means that the verification process does not terminate at any stage. This means that one and all empirical propositions are only *weakly* verifiable. But saying that a proposition is mere probable hypothesis means the same as that there always exists the possibility of being mistaken about it. It is because of this possibility that the process of verification does not come to a terminating point. But believing that all empirical propositions are merely weakly verifiable dissolves the contrast of 'strong' and 'weak' verification. Since all empirical propositions are merely weakly verifiable, the term 'strong verification' loses its meaning. And if 'strongly verifiable' loses its meaning 'weakly verifiable' also becomes a meaningless term.⁶⁵ It is to avoid this awkward situation that in the second edition of *Language, Truth and Logic*, Ayer came to accept the existence of 'basic propositions', not very unlike Carnap and Braithwaite. Carnap maintained that "science is a system based on direct experience and controlled by experimental verification. Verification is based on protocol statements."⁶⁶ Carnap's protocol statements are the same as the final propositions. The process of verification terminates in them. Braithwaite makes a bolder claim concerning knowledge expressed by the basic propositions. As he says, "This knowledge is incorrigible in the sense of not merely being such that it never will in fact be corrected but of being such that its correction is a logical impossibility."⁶⁷ In what condition do we say that the correction of knowledge expressed by a proposition is logically impossible? Correction would be logically impossible when it would be logically impossible to doubt or to be mistaken about the proposition in question. So, saying that the knowledge of a basic proposition is incorrigible or that its correction is logically impossible means the same as that it is logically impossible to be mistaken about it. Ayer affirms our conclusion when he says concerning basic proposition in the second edition of *Language, Truth and Logic*, "What is meant by their being incorrigible is that it is impossible to be mistakes about them."⁶⁸

C.I. Lewis, like Braithwaite, accepts the possibility of basic propositions. Lewis thinks that a basic proposition, being merely the report of the directly given is “neither verifiable nor stands in any need of verification.”⁶⁹ When Lewis thinks that a basic proposition is neither verifiable nor stands in any need of verification, he is proposing a correct definition of the notion of ‘verifiable’. This notion implies the possibility of a mistake or doubt, revision or correction of a proposition. But the possibility of a mistake or doubt in connection with a basic proposition does not make any sense. As Lazerowitz points out, “there is no sense in saying ‘it is probably the case that it looks to me as if there is an elephant in the distance.’”⁷⁰ Similarly, Wittgenstein thinks, “‘it seems to me that I have a headache’ is nonsense.”⁷¹ The use of such phrases as ‘it seems to me’ and ‘it is probably the case’ etc, which symbolise doubt in connection with a proposition, is impossible in connection with a basic proposition. The remarks of Lazerowitz and Wittgenstein support the view of Lewis that basic propositions can not be doubted, therefore, there is no question of correcting, revising or verifying them. It simply does not make sense to prescribe a method of verifying a basic proposition. It is clear that the meaning of a basic proposition does not depend upon the method of its verification.

It does not improve the position if it is accepted that the basic propositions are strongly verifiable. In order to establish the contrast of ‘strong’ and ‘weak’ verification, Ayer made the philosophical move of accepting that basic propositions are strongly verifiable. Obviously, non-basic empirical propositions will be weakly verifiable. So ‘weak’ had its contrast in ‘strong’. But Lewis and Lazerowitz reject the possibility of verifying a basic proposition. And if a basic proposition is not verifiable then how could it be strongly or conclusively verifiable. The concept of verification has no application with respect to the concept of a basic proposition. As Lazerowitz points out, “It makes no sense to say ‘I have established that I have a pain’, any more than it makes sense to

say, ' I probably have a pain'.... "There is not getting to know, or conclusively establishing that you have pain by feeling it, as if in addition to having it, you have to feel the pain in order to know that you have it. Knowledge of the truth of a basic proposition is had without being arrived at by a process of verification. By test you can satisfy yourself that your tooth or your ankle is the cause of our your pain."⁷² What Lazerowitz means to point out is that to keep a genuine contrast between 'strong verification' and 'weak verification', Ayer must accept the possibility of some non-basic empirical propositions to be strongly verifiable.

Since the publication of first edition of *Language, Truth and Logic*, Ayer continued to have the hangover of the corrigibility thesis, the thesis that all empirical propositions can be revised and restated. Even when he revised his position by accepting that basic propositions are strongly verifiable, he continued holding that they too could be revised like other empirical propositions. When he wrote *the Problem of Knowledge* he made an attempt to reconcile the corrigibility thesis with the incorrigibility thesis. In his *Problem of Knowledge* Ayer accepts on the one hand that revisions and corrections regarding basic propositions are possible, and on the other that they are in a certain sense incorrigible. He introduces a new sense of 'incorrigibility' after demolishing its old sense. And according to this new sense the word 'incorrigible' does not necessitate that an incorrigible proposition be free from revisions and corrections. After showing that basic propositions can be corrected and revised he says, " In what sense then is it at all plausible to claim that these statements are incorrigible? Only I think, in the sense that one's ground for accepting them may be perfect."⁷³ Since the expression 'perfect ground' is unclear he goes on to say that statements are known incorrigibly "when they are made by the right person in the right circumstances and at the right time."⁷⁴ And this is explained further by giving an actual case where a statement can be said to be used on the 'perfect ground' or by the 'right person in the circumstances and at the right time'. Ayer says, " the sentences 'he has a headache'

when used by someone else to refer to me, 'I shall have a headache' used by me in the past with reference to this moment, and 'I have a headache' all express the same statement; but the third of these sentences alone is used in such conditions as makes it reasonable for me to claim that the statement is incorrigibly known."⁷⁵ Ayer means to say that 'I have a headache' is the only sentence, out of the three, which has been used in such conditions that it is reasonable for me to claim that it is incorrigibly known. But this is certainly not to give any new meaning to the word 'incorrigible'. Ayer has expressed merely an old view in a new fashion. The conditions, which Ayer has prescribed, are the same as those in which, if a sentence is used, we are reasonable in saying that it expresses a basic statement. So what Ayer really means to say is simply that if a sentence is used as a basic statement its truth is incorrigibly known. Is it giving a new meaning to the word 'incorrigibility'? It is only in connection with basic statements that philosophers have claimed that their truth is incorrigible. Neither Ayer, nor those who oppose Ayer, grant that the sentences 'I shall have a headache' and 'he has a headache' express basic statements. Has Ayer demolished the old sense of 'incorrigibility'? In making explicit the conditions in which a basic statement is used, Ayer is not even giving a new sense to the concept of a basic proposition. He has attempted to reconcile the position of the corrigibilist with that of incorrigibilist. His attempt has failed.

Austin discusses the issue of incorrigible propositions in the tenth chapter of his *Sense and Sensibilia*. His attention is specially devoted to Ayer and Carnap, though rejecting both, at times favouring one over the other. 'The official doctrine' that has been subjected to criticism is the doctrine that "the material-object language *must somehow* be 'reducible' to the sense-datum language. Why? Because in fact sense-data makeup the whole of 'our resources.'"⁷⁶ They are not our ordinary resources, for "in their case no doubt is possible, no mistake can be made. So to find the data, the foundations, look for *the incorrigible*."⁷⁷ We have already seen that Ayer's revised view

implies that there are two distinct classes of empirical propositions, those that are verifiable and those in terms of which verification is done. The later class of propositions is direct records of experiences. They are the same as basic propositions. If Lewis and Lazerowitz are right then these propositions are not of the verifiable kind. When a proposition is said to be verifiable, it is legitimate to ask what are those other propositions, called its verifiers, which are used in order to verify the truth of the proposition in question. For no proposition can be verified by itself, it requires other propositions for its verification. For example, consider the proposition, 'This is a cat'. In order to verify this proposition we require such other propositions as, 'this is striped', 'this is smooth' etc. These propositions may be described as the verifiers of the original proposition. So if a proposition is verifiable there must be other propositions which are its verifiers. What are the verifiers of 'This looks round' or 'I have a pain'? If no such verifiers could be conceived, then it is misleading to say that these propositions are verifiable. Though not verifiable, these verifiers are the direct records of experiences; therefore they can be described as observational propositions. And the propositions that they verify can be described as empirically testable propositions. Austin favours Carnap against Ayer on the question of observational propositions. According to Carnap, the choice of observational propositions is an arbitrary convention. But, for Ayer, it is not an arbitrary convention. It is only through reductive analysis that one reaches an observational proposition. According to Austin, there is no special class of propositions that can function as verifiers. Even a proposition that is not a record of observation can function as a verifier. According to Austin, the distinction between the verifiable propositions and propositions that are its verifiers, is really the distinction between the propositions which are in need of evidence and the propositions which provide evidence. According to Austin, "what kind of sentence is uttered as providing evidence for what depends, again, on the circumstances of particular cases; there is no kind of sentence which *as such* is evidence-providing, just as there is no kind of sentence which *as such* is surprising, or doubtful, or certain or

incorrigible, or true.”⁷⁸ So Austin is not against the distinction between propositions that are verifiable and those that function as the verifiers. What he opposes is the view that only sense-data statements are considered as verifiers. As he remarks, Ayer is wrong “ in holding, as he evidently does hold, that the evidence-providing kind of sentences are always sense-datum sentences, so that *these* are the ones that ought to be picked out.”⁷⁹ Suppose I doubt the truth of ‘that is a giraffe’, because I have never seen one earlier. In this case it is certainly not the sense-data statements connected with the giraffe that would remove my doubt. My doubt will be satisfied if I consult the zoological authorities. The relevant statements that would function as evidence are the statements of the zoological authority. If my doubt about giraffe in question is genuine, then it could be removed not by sense-data statements but by the statements of zoological authorities. Of course Austin does not deny that the sense-data statements do sometimes function as evidence. But then they are not the only statements which function as evidence.

According to Austin, it is the circumstances in which we make a statement that leads us to say that the statement is incorrigible. And the circumstances do not always favour only sense-data statements to be described as incorrigible. Sometimes circumstances also favour material object statement to be described as incorrigible. Consider Austin’s remarks on this issue. “ If I carefully scrutinize some patch of colour in my visual field, take careful note of it, know English well, and pay scrupulous attention to just what I’ m saying, I may say, ‘It seems to me now as if I were seeing something pink’; and nothing whatever could be produced as showing that I had made a mistake. But equally if I watch for some time an animal a few feet in front of me, in a good light, if I prod it perhaps, sniff, and take note of the noises it makes, I may say, ‘That’s a pig’; and this too will be ‘incorrigible’, nothing could be produced that would show that I had made a mistake. Once one drops the idea that there is a special *kind of sentence* which is *as such* incorrigible, one might as well admit (what is plainly true

anyway) that *many* kinds of sentences may be uttered in making statements which are *in fact* incorrigible-in the sense that, when they are made, the circumstances are such that they are quite certainly, definitely, and un-retractably *true*.”⁸⁰ The material object statement ‘that is a pig’ is also incorrigible like the sense-datum statement ‘it seems to me now as if I were seeing something pink’. Austin means to say that any statement could be incorrigible. It is the circumstances, which decide about its incorrigibility.

According to Austin, when the sense-data philosophers say that the material object statements entail sense-data statements, they are using the term entailment not in its usual literal sense. We learn the meanings of words standing for material objects not by referring to sense-data. It is by referring to material objects themselves that we learn the meanings of those words. As Austin remarks, “we learn the word ‘pig’, as we learn the vast majority of words for ordinary things, ostensively – by being told, in the presence of the animal, ‘That is a pig; and thus, though certainly we learn what sort of thing it is to which the word ‘pig’ can and can’t be properly applied, we don’t go through any kind of intermediate stage of relating the word ‘pig’ to a lot of *statements* about the way things look, or sound, or smell. The word is just not introduced into our vocabulary in this way.”⁸¹ Austin refers to ostensive definition of words. Ostensive definition of words is possible in the presence of the object. It is by showing or exhibiting the object that the word or the name is ostensively defined. Unless one is directly acquainted with the object there is no question of understanding the ostensive definition. We have already seen Russell rejecting the possibility that we can ever be acquainted with material objects. According to him, we are always acquainted with sense-data only. This implies that the ostensive definition of material object expression is impossible. Austin is opposing Russell and all those who are following him. According to him it is not through sense-data that we come to know about material objects. We have direct knowledge of material objects. There are no intermediate entities between us and the material objects. Rather the sense-data, if there are any, are

identified in terms of material objects. When Russell refuses to have acquaintance with a dog, his refusal is pointless. The substitute of the dog is the canoid patch of colour . So one is acquainted with the patch through one's acquaintance with dog. Identity of the colour-patch depends on the identity of the dog.

Since one has been made not to be acquainted with material objects, one can very well doubt about their existence. One cannot doubt only those objects with which one is acquainted. So one is free from doubt only in the case of sense-data. So far as material objects are concerned, one would always remain in doubt about them. So knowledge about them is logically impossible. Austin is simply not convinced that one can never know about the existence of material objects. He remarks, "I look at a chair a few yards in front of me in broad day light, my view is that I have (*only*) as much certainty as I need and can get that there is a chair and that I see it. But in fact the plain man would regard doubt in such a case, not as far-fetched or over-refined or some how unpractical, but as plain *nonsense*; he would say, quite correctly, 'Well, if that's not seeing a real chair then I *don't know what is*.'" ⁸² This means according to the common man one could possibly be acquainted with the objects like dog, cat, chair, pig, etc. Guaranteed knowledge is possible only of objects with which one is acquainted. Sense-datum philosophers have withdrawn material objects from their natural habitation. In their new habitation they have been dressed with sense-data. So it is not only the sense-data to which we have been introduced, we have also been introduced to material objects. The material objects that were known to us, prior to our acquaintance with sense-data, had altogether a different nature. According to Austin, "one of the most important points to grasp is that these two terms, 'sense-data' and 'material things', live by taking in each other, washing – what is spurious is not one term of the pair, but the anti-thesis itself."⁸³ Material objects have been redefined in terms of sense-data and sense-data are the result of new meaning given to colour-patches, noises' smell, etc. Therefore what is spurious, according to Austin, is the very distinction between sense-

data and material objects. To make this distinction rigid, even the sense in which a sense-datum is seen has been distinguished from the sense in which a material object is seen. Austin condemns this spurious distinction by taking an analogous case. “ If I am asked ‘What did you kick?’ I might answer ‘ I kicked a piece of painted wood’, or I might say ‘ I kicked Jones’s front door;’ both of these answers might well be correct; but should we say for that reason that ‘kick’ is used in them in different senses?”⁸⁴ Similar is the case of ‘seeing’. It is one and the same sense of ‘seeing’ in which sometimes I see a colour-patch and other times I see pigs and cats. As Austin remarks, “ I may say, ‘ I see a silvery speck’ or ‘I see a huge star’; what I see- in the single, ordinary ‘sense’ this word has – can be described as a silvery speck, or identified as a very large star.”⁸⁵ Perhaps the fear that sense-data may be confused with material objects, that two different senses of ‘seeing’ were introduced, one sense in which a sense-datum is seen and another in which a material object is seen.

We have already seen that both Lewis and Lazerowitz consider it nonsense to talk about doubting or verifying a sense-statement like ‘ I am hot’. Austin extends this possibility also to the statements about material objects. As he remarks, “ It is, of course, not true in general that statements about ‘material things’, as such, *need* to be ‘verified’. If, for instance, someone remarks in casual conversation, ‘As a matter of fact I live in Oxford,’ the other party to the conversation may, if he finds it worth doing, verify this assertion; but the *speaker*, of course, has no need to do this- he knows it to be true (or, if he is lying, false). Strictly speaking, indeed, it is not just that he has no *need* to verify his statement; the case is rather that, since he already knows it to be true, nothing whatever that he might do could *count* as his ‘verifying’ it.”⁸⁶ When Lewis and Lazerowitz deny doubt and verification in connection with such a sense-datum statement as ‘I am hot’ these remarks are restricted to the *speaker*. According to Austin, there are situations in which it may not make any sense for a speaker even to doubt or verify a material object statement. Freedom from doubt and verification are not restricted to

sense-data statements, sometimes this freedom is also extended to material object statements.

7. SENSE –DATA AND PHENOMENALISM

Phenomenalism is the philosophical theory, which reduces reality to phenomena. There is no reality over and above the reality of phenomena. Therefore there is no distinction between appearance *and* reality. Appearances are numerically identical with reality. Phenomenon is what appears. Sense–data are phenomenal entities: they are constitutive of phenomena. Berkeley without his God is supposed to be a phenomenalist. Russell too would be a phenomenalist, if he gives up his view about the public physical reality. Moore and Price would be phenomenologists, if they give up their views concerning the *physical* occupants. Other than the Vienna circle philosophers, Ayer is the only important philosopher of the English speaking world who is committed to phenomenalism.

Consider Berkeley's case. Berkeley remarked that "the table I write on, I say, exists, that is, I see and feel it; and if, I were out of my study I should say it existed, meaning thereby that if, I was in my study I might perceive it, or that some other spirit actually does perceive it."⁸⁷ In this passage Berkeley explains the existence of the table in terms of his perceptions, his seeing and feeling. He further explains the existence of an unperceived table in terms of his possible perceptions and the possible perceptions of other persons like him. So Berkeley has reduced the existence of a material table to the existence of actual and possible perceptions. Consider now his second remark, "The question whether the earth moves or not amounts in reality to no more than this, to wit, whether we have reason to conclude...that if we were placed in... such or such a position and distance, both from the earth and sun, we should perceive the former to move among the choir of the planets."⁸⁸ Not only the physical bodies but also their

movement, i.e., the occurrence of their movement, depends on our perceptions. Berkeley reduces the existence of physical reality to the reality of the self' and its actual and possible perceptions. Of course in Berkeley's philosophy, God plays a major role. In the absence of the human perception Berkeley makes appeal to God's perception. We have quoted from Berkeley by avoiding his God. But we could not avoid the use of 'I', i.e., the owner of perceptions. Berkeley's use of 'idea' for perceptions makes essential the existence of the *owner* of ideas. The invention of sense-datum in place of 'idea' has this superiority that it requires no owner. While criticising Descartes, Russell pointed out that 'I' is superfluous in reporting about the existence of a sense-datum. Saying 'there is a colour-patch' would do where Berkeley would have said; 'I see a colour-patch'. Superiority of 'sense datum' over 'idea' consists in the fact that ideas require the existence of those who have them. But sense-data are neutral. They require neither the physical objects nor the spiritual perceivers. A consistent phenomenalist would reject every thing that lies behind the phenomenon, be it a human self or a material not-self. As Mundle points out "All types of entities other than sense-data are dismissed as 'fiction' or 'logical constructions'". Phenomenalists could, and perhaps should, retain minds to be aware of, and to interpret, sense-data; but usually they have deemed minds to be a theoretical luxury, talk about which is to be analysed, like talk about tables, in terms of talk about sense-data.'⁸⁹ So a phenomenalist rejects the common sense view that distinguishes us from tomatoes and cigarette-cases. We are supposed to have a self-whatever its interpretation—which is lacking in the case of a tomato or a cigarette-case. And when it is said that a tomato or a cigarette-case does not possess a self what is meant is merely our ordinary common sense view. It is not denied that a philosopher may come to discover a self even in a tomato or a cigarette-case. For Leibniz a tomato shared in having a self with a human being. A phenomenist stands on the other pole. For him a human being is not very unlike a tomato. Both lack self. According to Ayer a self is a "logical construct out of sense-experience."⁹⁰ And Ayer explains the nature of sense-experiences in terms of 'sense-contents'. The term 'sense-content' stands for what

is commonly known as 'sense-datum'. This becomes clear from Ayer's remarks on Berkeley's use of the term 'idea'. He writes, "we replace the word 'idea' in this usage by the neutral word 'sense-content' which we shall use to refer to the immediate data not merely of 'outer' but also of 'introspective sensation', and say that what Berkeley discovered was that material things must be definable in terms of sense-contents."⁹¹ So Ayer's analysis of self involves three other terms for explanation, viz, 'self-content', 'sense-experience' and 'logical construction'. Concerning the relationship between the former two terms, if a sense-content is not taken as a part of a sense-experience, it has to be taken as an object of the latter. And to accept the former as an object of the latter is to accept the legitimacy of the act-object analysis of sense-experiences. According to Ayer, such an analysis cannot be legitimate, for it involves the metaphysical assumption of *acts* of experience. Such an assumption could be granted, with suitable formulation, if sense-experiences failed to be explained without it. But sense-experiences can be successfully explained without it, and hence this assumption has to be rejected. Now, if a sense-content is a part of a sense-experience, then the relation of the former to the latter is that which holds between a part and the corresponding whole. This relation cannot be the same as the relation of the former to a logical construction. As Ayer says, "...when we refer to an object as a logical construction out of certain sense-contents, we are not saying ... that the sense-contents are in any way parts of it."⁹² So Ayer means that when certain sense-contents enter as *parts* into the construction of an object, the object is a non-logical construction out of them, whereas when they do not enter as parts into the construction of an object-though in some sense, they are able to construct the object in question-then the object is a logical construction out of them. This implies that sense-contents have two different relations to their objects. Their relation to an experience is different from their relation to a logical construction. Let us describe these relations as 'being the parts of' and 'being the elements of'. Thus sense-contents are *parts* of an experience but *elements* of a logical construction. This is supposed to imply that the notion of 'logical construction' is not applicable either to a sense-content or to a

sense-experience. As Ayer says, "... one can not significantly speak of a sense-experience, which is a whole composed of sense-contents, or of a sense-content itself as if it were a logical construction out of sense-contents."⁹³ A sense-experience, therefore, can be described as a non-logical construction, out of certain sense-contents.

Ayer wishes to remain Humean with a difference. For Hume the human self is as much a fiction as a physical tomato, therefore he reduces both of them into the occurrences of experiences. The only difference is that human self involves in its construction certain experiences, which are not involved in the construction of tomatoes and cigarette-cases. For example, pleasure and pain are not ascribed to tomatoes and cigarette-cases. They are ascribed only to human self. Ayer wishes to give the sense content analysis to both human selves and tomatoes, yet also wishes to distinguish them. If tomatoes and cigarette-cases are the logical constructs out of sense-contents then the human self too should be the logical construction out of sense-contents. Consistency demands it. Like Hume, Ayer considers self as a logical construction out of sense-experiences. And a sense-experience for him is a non-logical construct out of sense-contents. Sense-contents are parts of sense-experiences. One would feel that if self is a logical construction out of sense-experiences, it would mean the same as saying it is a logical construction out of sense-contents. Ayer has introduced a qualitative difference between sense-contents. The sense-contents which are parts of sense-experiences have to be distinguished from these sense-contents which are no such parts. Sense-contents which create the fictions of tomatoes and cigarette-cases are not parts of experiences. If they are parts of experiences then tomatoes and cigarette-cases would become conscious. It is only in the case of a human self that sense-contents are parts of experiences. But in making them such parts the neutrality of sense content is given up. To retain their neutrality, the sense-experiences themselves would become neutral, thereby converting human self into a tomato or a cigarette-case. If a human self is not

like a tomato or a cigarette-case then the neutrality of sense-content has to be given up. They had to become subjective.

Though Ayer does not accept that sense experiences are logical constructions, for the sake of consistency he would very well have accepted that sense experiences are logical constructions out of sense-contents. Logical constructions can be arranged in a hierarchical order-primary logical constructions, secondary logical constructions and so on. Sense-contents may be taken as the elements of a primary logical construction. And by saying that an object is a primary logical construction it is meant that its elements themselves are not logical constructions. Following this convention one can define a sense-content as simple, in the sense that it cannot be analysed further. It can be taken as the basic epistemological unit. And if a logical construction is a complex-if it can be analysed further-then the sense-contents would be excluded from being logical constructions. To be logical constructions sense-contents are required to be complex, which they are not. But none of these assumptions is applicable to the case of a sense-experience, for a sense-experience is complex because it is a whole 'composed of sense-contents'. It is possible to maintain that a self is a higher order logical construction of which the elements i.e. experiences, themselves are logical constructions out of sense-contents. Self can be analyzed in terms of experiences, and experiences themselves can be analysed in terms of sense-contents. The immediate elements of a logical construction may themselves be logical constructions, as is the case of the object denoted by the word 'army'. An army is a logical construction out of this and that soldier, and a soldier is a logical construction out of this and that sense-content. There are several other objects, which are higher-order logical constructions. An army, a nation, a club and a gang are higher-order logical-constructions. So it is not essential that the immediate elements of a logical construction are to be sense-contents. However, it is essential that the ultimate analysis of all logical-constructions must reveal sense-contents as their elements. If we analyse a secondary logical construction, we

arrive at the elements which are primary logical constructions. And if we go further we arrive at the sense-contents which can not be analysed any further.⁹⁴

The relevant question is concerning the qualitative difference between different logical constructions. If the self is a logical construction, the question arises (as expressed in the traditional terminology)- how is the self distinguished from the not-self, i.e. how is a person distinguished from, say, a tomato? In a sense there is no fundamental distinction between the two; the distinction is of secondary importance, for both of them are logical constructions. The distinction of one logical construction from another has been explained by Ayer in terms of sense-contents which are elements of these constructions. One logical construction is distinguished from the other, because at least some of the elements of one logical construction are different from the elements of the other, or, in case the elements are the same, the elements of one logical construction are related differently from those of the other. As Ayer says, "what differentiates one such logical construction from another is the fact that it is constituted by different sense-contents or by sense-contents differently related."⁹⁵ And concerning the nature of sense-contents he says that they are neither mental nor physical. "...The distinction between mind and matter applies only to logical constructions."⁹⁶ Ayer's explanation of the meanings of 'logical construction' and 'sense-contents' implies that the difference between the self and a tomato is as if merely a difference as to the sense-contents involved and the relations between these sense-contents. So a self is not very different from a tomato. If the tomato's *physical occupancy* is a fiction, so is the self's *spiritual occupancy* a fiction.

The difference between Berkeley and the recent phenomenologists is that phenomenology has been given a linguistic turn by our philosophers. A phenomenologist is not interested in the existential questions. His concern is not to show that sense-data exist when a common man says that a material object exists. As Austin points out, that

the phenomenologists “are concerned with logical relations obtaining between two different *languages*, the ‘sense-datum language’ and ‘material object language’ and are not to be taken literally as concerned with the *existence* of anything.”⁹⁷ Phenomenologists of our time claim that a statement about a material object is translatable in terms of statements about sense-data. Such a translation is possible if the statement about a material object *entails*, as we have already pointed out while discussing Austin, sense-data statements. For a singular material object statement one requires many sense-data statements. No definite number of sense-data statements is possible. We have already seen while discussing Ayer that an empirical proposition that is not a basic proposition is only weakly verifiable. And it is weakly verifiable because the process of verification does not terminate; non-termination of the process implies that the sense-data statements which verify a given material object statement do not have a definite number. This means that a material object statement entails an indefinite number of sense-data statements. Then how can a material object statement be equivalent to the sense-data statements? The equivalence presupposes definite numbers. Suppose a material object statement is ‘this is a table’. To translate this statement in terms of sense-data statements one says such thing as ‘this is hard’, ‘this is coloured’...and so on. The expression ‘so on’ signifies that the translation requires indefinite number of sense-data statements. But if someone requires indefinite number of steps to achieve something, then it is a recognition on his part that the goal can not be achieved. If the translation of a material object statement in terms of sense-data statements requires an indefinite number of sense-data statements then it is recognised that no such translation is possible. If a material object statement would genuinely entail sense-data statements then the number of sense-data statements must be definite. So also it is not possible to establish the equivalence of a material object statement with the sense-data statements because of the indefinite character of sense-data statements. This shows that the material object language is precise and the sense-datum language is imprecise. How can a precise language be translated into an imprecise language?

Statements about sense-data which are supposed to be entailed by a material object statement refer to both actual and possible sense-data. Talking about possible sense-data is taking in terms of hypothetical statements, so the translation in question would include both categorical and hypothetical statements. The categorical statements assert the existence of sense-data, whereas the hypothetical statements only entertain their possibility. As Ayer remarks, "the inclusion of possible as well as actual sense-data among the elements of the material things must be taken only to imply a recognition that some of these statements about sense-data will have to be hypothetical."⁹⁸ Consider the material object statement 'this is a table'. This would be translated in terms of such sense-data statements as 'this is brown', 'this is hard' etc. The existence of the table has been described in terms of the occurrence of sense-data. Suppose I make the statement about the existence of an unperceived table, such a statement as 'there is a table next door'. The logical nature of this statement is not at all different from the earlier statement about the table. The expression 'there is' performs the function of 'this is', both are categorical statements and both refer to the existence of a table. The only difference is that one of them asserts the existence of a perceived table and the other asserts the existence of an unperceived table. If 'there is a table next door' has to be translated in terms of sense-data statements, then those statements have to be hypothetical. One would be saying something like this: if someone opens the next door then he would obtain sense-data connected with a table. The difficulty is that a categorical statement can not be equivalent to a hypothetical statement. A hypothetical statement is not meant for an unconditioned assertion of existence. Isaiah Berlin opposed the reduction of a categorical statement about the existence of a physical object in terms of the hypothetical statements about sense-data. As he points out, "Existential propositions expressed categorically-in indicative sentences tend as it were to 'point' towards their 'objects': and demonstratives which appear in existential propositions, like 'this is' 'there is', 'here we have', etc., often function as substitutes for such acts of

pointing to things or persons or processes. The characteristic force of the categorical mode of expression is often exactly this-that it acts in lieu of a gesture, of an 'act of ostension'. But hypotheticals normally do the opposite of this. Hypotheticals, whatever they describe or mean, whatever they entail or convey or evince, in whatever way they are verified, or fail to be verified, do not as a general rule directly assert that something has been, is being, or will be occurring, or existing, or being characterised in some way. This is precisely the force of the conditional mood.⁹⁹ Berlin means to say that reference to something that is occurring now cannot be reduced to something that would possibly occur if certain conditions were satisfied. Thus the difficulty is not only that the number of sense-data statements is indefinite. There is an added difficulty created by the possible sense-data. Corresponding to actual and possible sense-data are categorical and hypothetical statements. A categorical statement about a material object can not be equivalent to hypothetical statements about sense-data. The linguistic turn that phenomenalism took has increased the difficulties in accepting phenomenalism.

8. P.F. STRAWSON'S REFUTATION OF PHENOMENALISM AND SCEPTICISM.

We have shown above that most of the sense-datum philosophers give secondary importance to persons and material bodies. They consider them as some kind of fictions generated by the non-fictitious entities called sense-data. Sense-data have been given primary importance, material objects and persons secondary importance. Strawson succeeds in giving primary importance to those objects, which were given no respect by the sense-datum philosophers. Strawson opposes the sense-data philosophers by focussing his attention on material objects and persons, showing that they are the primary or basic particulars, which have to be identified in order to identify anything else in the world. How can the priority of sense-data over material objects be accepted? Reference to sense-data presupposes reference to material objects. Price introduced

sense-data with the help of a tomato. Similarly Moore uses his right hand and Ayer his cigarette –case. The ‘tomato’, the ‘right hand’ and the ‘cigarette-case’ are the physical object expressions. So they were already known before knowing sense-data. This clearly shows that the existence of sense-data depends on the existence of material bodies, that material bodies are primary particulars and sense-data are the secondary particulars. So the objects that are given secondary importance by the sense-datum philosophers have been given primary importance by Strawson. The objects that are given primary importance by sense-datum philosophers have been given secondary importance by Strawson. There is a clash of two metaphysical systems.

Strawson describe his metaphysics as descriptive metaphysics, of which the function is to make explicit the structural features of human understanding. The kind of metaphysics with which he is involved is the kind of metaphysics that was done by Kant and Aristotle. He distinguishes his kind of metaphysics from the other kind that he calls reversionary metaphysics. Sense-datum philosophy would appear as propounding reversionary metaphysics. One may object that sense-data philosophy is not involved in any metaphysics whatsoever. It is to eliminate metaphysics that Ayer evolved verification principle, and Ayer is a sense-datum philosopher. But phenomenalism, to which sense-data philosophers are committed, itself is a metaphysical system. Reducing everything to what is given in immediate experience is certainly a very attractive metaphysical move. An immediate experience is what is occurring here and now. If a sense-datum reports an immediate experience, then this would lead to momentary phenomenalism. So a revision was made and the possible sense-data were introduced to make phenomenalism more enduring. The metaphysics of phenomenalism comes directly in conflict with Plato, for whom momentary objects have hardly any significance. Strawson constructs his metaphysical system by rejecting both Plato and the phenomenalism. If Plato is committed to permanence, phenomenalism is committed to change. Both extremes are to be rejected. Strawson starts with the four dimensional

spatio-temporal structure, one temporal and three spatial dimensions. Material bodies and persons, who own material bodies, completely fit into this spatio-temporal frame. For a material body accommodates itself in all the three dimensions of space. And since it is found in this or that place, at this or that moment, the dimension of time is also satisfied. This would have created a difficulty if the persons were not owners of bodies.

Just as Russell makes sense-data the objects of acquaintance, Strawson makes material bodies as objects of acquaintance. Of course he does not use the expression acquaintance, he invents his own idiom. He does not say we are acquainted with material bodies. He says that we *identify* material bodies directly. Just as Russell uses demonstratives like 'this' and 'that' for exhibiting his acquaintance with sense-data, Strawson uses these demonstratives for identifying material bodies. However, one's reference to material bodies cannot always be in terms of demonstrative identification. Demonstrative identification is possible only in the presence of the object. But we also refer to objects, which lie outside our experience. As Strawson says, "But now consider the case where demonstrative identification, in the sense I have given to this phrase, is not possible, because the particular to be identified is not within the range of those sensibly present. What linguistic means of identification have we available? it may seem, in the non-demonstrative identification of particulars, we depend ultimately on description in general terms alone."¹⁰⁰ These remarks produce smell of Russell's distinction between knowledge by acquaintance and knowledge by description. Where acquaintance fails, we have only knowledge by description. For Strawson, where demonstrative identification fails, we have to resort to descriptions. And just as Russell connects knowledge by description to knowledge by acquaintance, Strawson maintains, "the situation of non-demonstrative identification may be linked with the situation of demonstrative identification."¹⁰¹ Russell too links descriptive knowledge to knowledge by acquaintance. In this connection we to have to remember that Russell considered 'names' as disguised descriptions. So using a name is as good as using a description.

Strawson too exhibits Russell's influence on his thought when he says, "A name is worthless without the backing of descriptions."¹⁰ The only significant difference between the view of Russell and the view of Strawson is that Russell accepts, sense-data as primary particulars whereas Strawson accepts material bodies as primary particulars. By using demonstratives 'this' and 'that' Russell succeeds in picking out only sense-data. But by using the same demonstratives Strawson succeeds in picking out material bodies. Consider the following analogy: a hunter is in search of a tiger. He observes a striped colour-patch, he aims his gun at that colour-patch, and fires. The tiger is dead. This means that the hunter knows very well that the colour-patch is identical with the skin of the tiger. So firing at the colour-patch would lead to the killing of the tiger. Would the Strawsonian hunter do anything else? Would he be observing the tiger directly in order to aim at it and consequently to kill it. If he wishes to fire after ascertaining whether the striped colour-patch does or does not belong to the tiger then he may not get a chance to kill the tiger. There is every likelihood that the tiger may kill the hunter when the hunter is busy in ascertaining whether the striped colour-patch does or does not belong to the tiger. Russell's hunter is far more intelligent than the Strawsonian hunter is. Even if we ultimately succeed in identifying material bodies, we can not escape the prior identification of colour-patches, noises, smells etc.

Strawson succeeds in eliminating sense-data by introducing the condition of re-identification of a particular which was identified earlier. Unless a particular is re-identified it cannot function as a primary or a basic particular. Re-identification presupposes the continued existence of an object, even if we do not perceive it. Since a sense-datum cannot be re-identified, it cannot be sensed twice, it cannot be considered as a primary particular. Only material objects and persons can satisfy the condition of re-identification. Therefore only they can function as primary or basic particulars in Strawson's ontology. To ensure that sense-data never acquire the honour that is given to the material bodies and persons, Strawson introduces the distinction between

independent identification and dependent identification. If a given particular 'x' depends for its identification on the particular 'y' then 'y' is a primary particular and 'x' is a secondary particular. According to Strawson, sense-data are the particulars of dependent type, hence they can never become primary particulars. As he says, "The dependent type is the class of what might be called 'private particulars'— comprising the perhaps overlapping groups of sensations, mental events and, in one common acceptance of this term, sense-data. The type on which it is dependent is the class of persons."¹⁰³ Strawson has clearly converted sense-data into private particulars i.e., they are particulars which occur to a given person and are restricted to that person. All this follows from the definition of a sense-datum. Strawson is aware of the fact that sense-data are primary particulars according to sense-datum philosophers. He turns the table against the sense-datum philosophers. As he remarks, "On other criteria than the present, private experiences have often been the most favoured candidates for the status of 'basic' particulars; on the present criteria, they are the most obviously inadmissible. The principles of individuation of such experiences essentially turn on the identities of the persons to whose histories they belong. A twinge of toothache or a private impression of red cannot in general be identified in our common language except as the twinge which such-and-such an identified person suffered or is suffering, the impression which such-and-such an identified person had or is having. Identifying references to 'private particulars' depend on identifying references to particulars of another type altogether, namely persons."¹⁰⁴ Strawson is sufficiently clear. Since identification of sense-data depends on the person to whom they appear, the sense-datum philosophers are wrong in considering sense-data as basic particulars. They are particulars of dependent type.

It is through introduction of the concept of re-identification that Strawson has tried to meet Hume's scepticism. For Hume, the objects that occur in one observational stretch are numerically different from the objects that occur in the succeeding

observational stretch. Each stretch of observation would have its own spatial system. Strawson shows that Humean doubt is self-refuting. As Strawson remarks, “ Each new system would be wholly independent of every other. There would be no question of *doubt* about the identity of an item in one system with an item in another. For such a doubt makes sense only if the two systems are not independent, if they are parts, in some way related, of a single system which includes them both.”¹⁰⁵ So Humean doubt makes sense only in a unitary spatial system. But his doubt is aimed at the production of multiple spatial systems. As Strawson argues against Hume that “his doubts are unreal, not simply because they are logically irresolvable doubts, but because they amount to the rejection of the whole conceptual scheme within which alone such doubts make sense.”¹⁰⁶ Thus Strawson succeeds in refuting scepticism.

To sum up: though Russell and Moore were responsible for introducing sense-data for the first time, they did not give up material objects. More attention was paid by Price for trying to see whether sense-data coincide with the surfaces of material objects. It is only at the stage of Ayer that sense-data became quite independent and self sustaining. Material objects were converted into pure fictions. Austin subjected Ayer’s views to an exhaustive criticism. But he had no metaphysical system of his own. He took the help of language analysis. Strawson builds up his own metaphysical system to counter the metaphysics to which sense-datum philosophers were committed. He attempted to show that the Humean doubts are self refuting. For the 20th century philosophers Hume stands as the only sceptic worth considering. So refuting Hume is considered as refuting scepticism. Strawson refutes Hume to enable us to discover external reality.

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CHAPTER V

THE LIMITS OF SCEPTICISM: MOORE AND WITTGENSTEIN AGAINST THE SCEPTIC

Moore attacks the sceptic from the common sense point view, using ordinary language as the medium of expression. The common sense point of view is the point of view of a realist. So he takes up the realistic stand against the idealists of different varieties. Subjective idealism of Berkeley-type is the closest enemy of realism. It is not certain whether Moore can be described as a naïve realist. We should not forget that Moore was responsible for introducing sense-data. A naïve realist would hardly understand the idiom of sense-data. Of course Moore converted sense-data into *real* entities, perhaps more real than even the physical objects.

In his last work *On Certainty* Wittgenstein has drawn the limits of scepticism. But so also he rejects Moore's attack on scepticism. Scepticism may be wrong. But Moore is also not right in attacking scepticism in the fashion in which he has done. The *On Certainty* is devoted to Moore's criticism of scepticism.

This chapter, the last chapter of this dissertation, is exclusively devoted to Moore and Wittgenstein. Moore has no sympathy for the sceptic. Wittgenstein opposes scepticism, though certainly not from the common sense point of view. For understanding Moore's view, three of his essays are important, viz., "A Defence of Common sense"(1923), "Proof of An External World" (1939), and "Certainty" (1959). So is important *The Philosophy of G.E. Moore* edited by Paul Arthur Schilpp (1942). In the case of Wittgenstein, attention has exclusively been paid to *On Certainty* which attacks both Moore and the sceptic.

1. COMMON SENSE BELIEFS

Moore elucidates the common sense view of the world, contrasting it with the philosophical views, in his article "A Defence of Common sense". He begins his article by highlighting the common sense beliefs i.e. the beliefs, which we happen to have prior

to the entry of the epistemological prejudices into our frame of thinking. Consider some of these beliefs as Moore reports about them, “ There exists at present a living human body, which is *my* body. This body was born at a certain time in the past, and has existed continuously ever since.... Ever since it was born,...there have also existed many other things, having shape and size in three dimensions.... I am a human being, and I have, at different times since my body was born, had many different experiences, of each of many kinds; e.g., I have often perceived both my own body and other things which formed part of its environment, including other bodies; I have not only perceived things of this kind, but have also observed facts about them, such as, for instance, the fact which I am now observing that that mantelpiece is at present nearer to my body than that bookcase;...I have thought of imaginary things and persons and incidents, in the reality of which I did not believe; I have had dreams; and I have had feelings of many different kinds”¹. What Moore is doing echoes Cartesian *Meditations*? The only difference is that the purpose of Descartes’ *Meditations* was to question the beliefs which we take for granted. Moore had no such aim. His aim to question the epistemology that goes against common sense beliefs. All the beliefs mentioned above, which are a subset of a very large set of common sense beliefs, are true. Moore claims, like an ordinary man, that he knows with certainty their truth. ‘Knowing with certainty’ means the truth of these beliefs is not doubted by a normal person in his normal frame of mind. As Murphy points out, Moore “appeals to the fact that the statements of this sort actually are understood by all of us and are known to be true, on the level on which their truth would be established if any one were really in doubt as to their factual accuracy.”² But Murphy also accepts concerning a common sense belief that “ only “ a fool or an advanced thinker” would be rash enough to doubt it.”³ Though himself an advanced thinker, Moore came down to the level of a common sense believer. Such a believer would doubt only when there is some factual inaccuracy. Once the factual correction is made the doubt would be removed. The doubts of an advanced thinker are wholly unlike the doubts of a common man. A common man knows that he dreams, that on

occasions he has illusions and hallucinations, but all this does not lead him to contemplate the possibility of considering the whole world as a dream. Only a sceptic can do it. Moore's job is to produce hurdles on the way of a sceptic.

Consider now some further implications of accepting the truth of common sense propositions. According to Moore, "the proposition that my body has existed for many years past, and has, at every moment during that time been either in contact with or not far from the earth, is a proposition which implies both the *reality of material things* ... and also the *reality of space*."⁴ Similarly our common sense view of the world is pluralistic, I am not the only occupant of this world, there are other human beings "who have had human bodies, that were born and lived for some time upon the earth, and who have during the lifetime of those bodies, had many different experiences."⁵ Moore means to say that the other human beings also have experiences not very unlike me. There are philosophers who reject the common sense view of the world. According to them, neither time nor space is real. So also they reject the reality of material objects and question the existence of other *persons*. Moore exposes these philosophers by showing incoherence in their views. Their remarks are quite inconsistent. If time is unreal then there is no temporal relation between two events. In such a situation one cannot say that the event 'A' is temporally prior to the event 'B'. One simply cannot talk about the succession of events. If time is unreal then, according to Moore, "no philosopher has ever existed."⁶ If a philosopher really existed, then time-dimension can not be avoided. We can not avoid saying that he took birth on such and such a date, and ceased to exist from such and such a date. Similarly, if space were unreal, then where would my body exist? My body has three-dimensional extension. So it would occupy three-dimensional space. If space is unreal then where does my three-dimensional body exist? Those philosophers who consider that space and time are unreal their views are incoherent, they lack consistency. So also those who believe that there are no other persons or other minds exhibit incoherence in their thinking. Expression of their views

presupposes the possibility of other persons. As Moore points out, “one way in which they have betrayed this inconsistency is by alluding to the existence of other philosophers. Another way is by alluding to the existence of the human race, and in particular by using “we” in the sense in which I have already constantly used it, in which any philosopher who asserts that “we” do so and so, e.g., that “we sometimes believe propositions that are not true,” is asserting not only that he himself has done the thing in question, but that *very many other human beings, who have had bodies and lived up on the earth*, have done the same.”⁷ It is impossible to isolate oneself from others. The existence of oneself presupposes the existence of others. Again, it is quite absurd to say that material things are not real. If the material things are not real then we do not have material bodies. But the fact that we have three-dimensional bodies shows incoherence in the view that material bodies are unreal.

The section IV of “A Defense of Common sense” is quite interesting. The first two sections are devoted to the elucidation of common sense beliefs or common sense propositions. Moore claimed that he *knew* the truth of those propositions with certainty. All those philosophers who attempted to doubt the truth of those propositions were involved in incoherent thinking. The third section of the paper is very short. Moore does not find any good reason to suppose that all material things were created by God. So also he does not find any good reason to suppose that human beings will continue to exist after the death of their bodies. It is in the section IV that he comes back to those very propositions about which he claimed that he knew their truth with certainty. Now he makes a distinction between knowing the truth of a proposition and knowing its correct analysis. As he remarks, “I am not at all sceptical as to the *truth* of such propositions as “The earth has existed for many years past”; “Many human bodies have each lived for many years upon it”, i.e., propositions which assert the existence of material things.... But I am very sceptical as to what, in certain respects, the correct *analysis* of such propositions is.”⁸ This means, it is one thing to have common sense

propositions and quite another to give *analysis* of those propositions. In analysing a given proposition one transcends common sense. One can say that the concern of philosophy starts where common sense ends. Analysis is the function of philosophy. Philosophers have to analyse the propositions handed over by common sense. Moore finds himself sceptical about the analysis of those propositions of which the truth has already been established by common sense. However, according Moore, there are philosophers who find no difficulty in analysing a proposition. They find difficulty only in establishing its truth. Moore expresses his differences with others concerning the commonsense propositions, who “while holding that there is no doubt as to their *analysis*, seem to have doubted whether any such propositions are *true*. I, on the other hand, while holding that there is no doubt whatever that many such propositions are wholly true, hold also that no philosopher, hitherto, has succeeded in suggesting an analysis of them, as regards certain important points, which comes anywhere near to being certainly true.”⁹ So Moore fails to doubt where other philosophers succeed in doubting. So also Moore fails to be certain where other philosophers are certain. Other philosophers accept the validity of their analysis but reject the truth of propositions, which they analyse. Moore is unsure about his own analysis, and not only about the analysis given by others. The difference in analyses does not mean that there is any uncertainty about the truth of the propositions, which have been analysed. Moore seems to have missed one point on this issue. It is the analysis of a given proposition that has led a philosopher to doubt the truth of that proposition. It is through sense-data analysis of a material object statement that has led a phenomenalist to deny the existence of material objects, thereby denying the truth of a material object statement. Though not a phenomenalist, Moore has himself given the sense-datum analysis of material object statements. He is not sure whether a sense-datum is or is not identical with the surface of a material object. So Moore’s paper “A Defence of Common sense” is devoted, not only to the defence of common sense, it is also in defence of his own analysis of common sense propositions. According to Moore, it is not the business of the

philosophers to establish the truth or falsity of common sense propositions. Their business is only to analyse those propositions.

Moore has clearly introduced two levels for consideration, a lower and a higher level. Epistemic or philosophical level is higher to what may be described as pre-epistemic level. Common sense propositions occur at the pre-epistemic level. At this level there is hardly any difficulty in establishing their truth. When these propositions are brought to the epistemic level, their meaning and truth are analysed. Moore is persuading the epistemologists to remain within their limits. Just as a common man would cross his limit if he starts doing analysis of the propositions that were entertained by him. Similarly, an epistemologist would cross his limit if he starts establishing or refuting the truth of common sense propositions. 'Certainty' for Moore has two different senses, or, one sense with two diverse applications. At the epistemic level 'certainty' is possible only when the analysis is persuasive or convincing. But the question of certainty at the pre-epistemic level is simpler to achieve. A common man would doubt only where there are factual errors. A factual error would be removed by a factual means and as a result certainty would arise. For example, on account of my weak eyesight I may commit factual errors, but those errors are easily removed because my other senses are quite active. They help me in removing my doubt and to achieve certainty. But the epistemologist is not in a position to adopt the simple way of removing doubts, because his doubts are theoretical. Therefore, he has to adopt a persuasive theory. One should not confuse the disagreement in daily life with the disagreement in philosophy. There is no surprise that Moore fails to have any certainty about a given analysis of a proposition. But so far as these propositions are considered at the common sense level he is quite sure about their truth. He is certain about their truth, as the common man would be certain about their truth. Moore is certainly not operating at the epistemic level when he is discussing the question of the truth and meaning of propositions entertained at the pre-epistemic level. So there is not only a

proposition that is entertained at the common sense level, there is also knowledge and certainly that operates at the very common sense level. Therefore Moore is right in saying that the kind of certainty, which he has with regard to the truth of common sense propositions, he lacks that certainty with regard to the analyses of these propositions. The reason is simple: he is now operating on a different level, the level of an epistemologist.

Consider now Moore's analysis of the common sense propositions. Concerning these propositions he thinks how these propositions "are to be analysed depends on the question how propositions of another and simpler type are to be analysed. I know, at present, that I am perceiving a human hand, a pen, a sheet of paper, etc.; and it seems to me that I cannot know how the proposition "Material things exist" is to be analysed, until I know how in certain respects, these simpler propositions are to be analysed."¹⁰ The simpler propositions are concerning sense-data. So, according to Moore, a material object statement somehow involves a statement about sense-datum. The sense-datum is numerically different from the material object that it presents. As he says, "what I am knowing or judging to be true about this sense-datum is not (in general) that it is *itself* a hand, or a dog, or the sun, etc., etc., as the case may be."¹¹ When Moore was at the common sense level he looked at his hand and was in a position to say 'this is my hand'. There was no obstruction between 'his perception of hand' and 'the existence of hand'. But now he has introduced sense-data, which exist between him and his hand. As a result of the sense-datum analysis of perception, he has been led to say "to put my view in terms of the phrase "theory of representative perception", I hold it to be quite certain that I do not *directly* perceive *my hand*."¹² Obviously, what is directly perceived is a sense-datum. The sense-datum is made to represent *my hand*. Of course, all this does not mean that Moore denies the existence of material objects or even denies that they are ever perceived. At the common sense level there is no such distinction as the distinction between direct perception and indirect perception. This distinction is the creation of the

epistemic situation. The real difficulty is that once sense-data are introduced material objects acquire a secondary status. For the reason that material objects occur only in veridical perception. But sense-data continue to exist even when one is dreaming or having hallucination of any other sort. How the introduction of sense-data changes our view about material objects can be observed in the case of Russell. At the initial stage sense-data failed to introduce any change in Russell's views about material objects. He continued believing in both, sense-data as well as material objects. But later Russell started considering material objects as logical fictions. As Susan Stebbing points out, "Bertrand Russell, as is well known, took sense-data to be the 'hardest' of 'hard data' and strove to show that common sense things are logical functions of sense-data."¹³ Of course, Moore did not consider material objects as fictions or functions of any kind.

According to Moore, some philosophers are convinced that beliefs of common sense "are very commonly entertained by mankind: but they are convinced that these things are, in all cases, only *believed*, not known for certain; and some have expressed this by saying that they are matters of Faith, not of knowledge."¹⁴ From this remark two issues emerge for further discussion. Belief in the existence of a material world, the world that contains all kinds of bodies, human and material, depends on *faith*. We cannot have *knowledge* of such a world. The second issue that arises is the issue concerning the distinction between *knowing* with certainty and merely *believing* in something. These issues have been discussed by Moore in detail in two of his other papers, "Proof of an external world" and "Certainty".

2. MOORE'S PROOF OF AN EXTERNAL WORLD

"Proof of an External World" starts with a quotation from Kant. Moore quotes Kant saying, "It still remains a scandal to philosophy.... that the existence of things outside of us... must be accepted merely on *faith*, and that, if anyone thinks good to

doubt their existence, we are unable to counter his doubts by any satisfactory proof.¹⁵ From Kant's remark it becomes clear that there is a necessity for proving the existence of things outside of us. In the absence of such a proof, we have to believe in their existence only on *faith*. The sceptic doubts the existence of things outside of us. How to counter the sceptic? The sceptic can be countered only by providing a proof for the existence of things outside of us. In his paper, "Proof of an External World" Moore has made an attempt to provide such a proof. Need for such a proof was felt by Kant. It is a scandal for philosophy if we continue believing in the existence of the things outside of us merely on faith. We should have *knowledge* of the existence of these things. Such knowledge is possible only when a proof is provided. Of course Moore does not claim that he is the first philosopher to provide a proof for the existence of things outside of us. In the second edition of his *Critique* Kant has himself given such a proof, which, according to Moore, is quite rigorous. Kant's proof was directed towards the 'objective reality of outer intuition,' which according to Moore means the same as "the existence of things (or the things) outside of us."¹⁶ Taking clues from Kant's proof, Moore has provided his own proof. His own proof has emerged in the course of clarifying Kant's proof.

Kant calls 'external things' or 'things out side of us' as the 'things which are *to be met with in space*'. According to Kant, there are also things that are 'presented in space'. But he does not distinguish these things from the things that are to be met with in space. According to Moore, this is objectionable. According to Kant, as Moore points out, "empirical object" "is called *external*, if it is presented (*vorgestellt*) in *space*". He treats, therefore, the phrase "presented in space" as if it were equivalent to "to be met with in space". But it is easy to find examples of "things", of which it can hardly be denied that they are "presented in space," but of which it could, quite naturally, be emphatically denied that they are "to be met with in space."¹⁷ Moore gives the example of an after-image or after-sensation, which is 'presented in space' but is not

the kind of object, which can be met with in space. The after-image that I see is restricted to *me*. Numerically the same after-image cannot be seen by two different persons. But there is no doubt that the after-image that I see is presented in space. According to Moore, "To say that so and so was at a given time "to be met with in space" naturally suggests that there are conditions such that *anyone* who fulfilled them might, conceivably, have "perceived" the "things" in question-might have seen it, if it was a visible object, have felt it, if it was a tangible one, have heard it, if it was a sound, have smelt it, if it was a smell."¹⁸ An after-image does not satisfy these conditions. Not only an after-image, any sense-datum, as defined by the sense-datum philosophers, fails to satisfy these conditions. A colour-patch, a sound, a smell that is restricted to one person alone is not the kind of object that can be met in space. Of course, they are presented in space. Even bodily pains are presented in space. We talk about tooth-ache and leg-ache. A tooth-ache occurs in the spatial position of a tooth. Similarly, a leg-ache occurs in the spatial position of a leg. But, a tooth-ache or a leg-ache felt by one person cannot be felt by any other person. As Moore points out, "I do not reckon as "external things", after-images, double images, and bodily pains, I also should not reckon as "external things," any of the "images" which we often "see with the mind's eye" when we are awake, nor any of those which we see when we are asleep and dreaming."¹⁹ Things that occur in dreams are not unlike those things, which are restricted to one person alone. A tooth-ache that occurs in waking life is subjective and private. So is private one's meeting the Prime Minister in a dream. One's name is not registered in the Prime Minister's office. No such meeting was held in real life.

If you come across a 'tooth-ache' or a 'leg-ache', you have not 'met any thing with in space'. Hence also you have not come across any object that is literally external to your mind. But if you have come across a 'cat' and a 'dog' then you have certainly met two objects with in space. And these objects are external to your mind. Moore has prepared a ground for his proof of an external world. The objects of such a world would

be those which are 'met with in space'. As Moore points out, "If I can prove that there exist now both a sheet of paper and a human hand, I shall have proved that there are now "things outside of us"; if I can prove that there exist now both a shoe and sock, I shall have proved that there are now "things outside of us"... Obviously, then, there are thousands of different things such that, if, at anytime, I can prove any one of them, I shall have proved the existence of things outside of us."²⁰ A sheet of paper, a human hand, a shoe and a sock are qualitatively different kind of objects from a tooth-ache, an after-image, a double image and an image seen with closed eyes. The later class of things cannot be used for producing a proof for the existence of the external world. It is only the former class of things, which provide material for Moore's proof of an external world. Finally, Moore provides his proof in the following words. "I can prove now, for instance, that two human hands exist. How? By holding up my two hands and saying, as I make a certain gesture with the right, "Here is one hand," and adding, as I make a certain gesture with the left, "and here is another". And if, by doing this, I have proved *ipso facto* the existence of external things, you will all see that I can also do it now in numbers of other ways: there is no need to multiply examples."²¹ No such proof is possible if Moore had taken the example of such two objects as a tooth-ache and an after-image. It is only following Kant's definition of external objects that Moore has succeeded in proving the existence of an external world.

One may feel that by raising his two hands Moore has involved himself in a frivolous activity. To those who may think that Moore has given no kind of proof, Moore points out that his proof is 'perfectly rigorous' and it is the best proof possible. A proof has to satisfy three conditions. Making explicit those conditions Moore points out, that his proof was no proof "(1) unless the premiss which I adduced as proof of the conclusion was different from the conclusion I adduced it to prove; (2) unless the premiss which I adduced was something which I *knew* to be the case, and not merely something which I believed but which was by no means certain, or something which,

though in fact true, I did not know to be so; and (3) unless the conclusion did really follow from the premiss.²² His proof satisfied all these conditions. His conclusion 'two human hands exist at this moment' followed from the premiss which is 'Here is one hand and here is another'. The premiss says more than what is said in the conclusion, and he is quite sure about the premiss. Therefore his proof is rigorous.

Moore is aware that the sceptic will not be satisfied with his proof. Granted that Moore's conclusion follows from his premiss, but how has he arrived at his premiss? How has he come to know 'Here is one hand and here is another'. Moore accepts "I am perfectly well aware that, in spite of all that I have said, many philosophers will still feel that I have not given any satisfactory proof of the point in question."²³ One who doubts the existence of the external world would also doubt the existence of Moore's hands. But such a doubter is an epistemologist, whose doubt can never be satisfied. Moore is in a position to satisfy an ordinary doubter. An ordinary doubt is not pointless. It is one that can be satisfied. Imagine a situation in which Moore's proof is questioned by an ordinary doubter. Moore would certainly succeed in satisfying him. As Moore remarks, "If one of you suspected that one of my hands was artificial he might be said to get a proof of my proposition. "Here's one hand, and here's another," by coming up and examining the suspected hand close up, perhaps touching and pressing it, and so establishing that it really was a human hand."²⁴ But the sceptic, the epistemologist, raises doubt, which can never be satisfied. How closely one may scrutinise a human hand, if one is a philosophical sceptic, one would never be satisfied that he is scrutinising a human hand. Moore finds it very difficult to satisfy such a sceptic. In order to prove that he is raising his hands he has to prove that he is not dreaming, that he is awake. Though Moore knows that he is awake, like the philosophers of the past, he fails to prove that he is not dreaming. As he remarks on this issue, "How am I to prove now that "Here's one hand, and here's another"? I do not believe I can do it. In order to do it, I should need to prove for one thing, as Descartes

pointed out, that I am not now dreaming. But how can I prove that I am not? I have, no doubt, conclusive reasons for asserting that I am not now dreaming; I have conclusive evidence that I am awake: but that is a very different thing from being able to prove it. I could not tell you what all my evidence is; and I should require to do this at least, in order to give you a proof.”²⁵ Cartesian dream argument has converted Moore into a helpless man. In order to show that he possesses two hands which he attempted to raise, he is required to prove that he is not dreaming. He knows very well that he is not dreaming. He has conclusive evidence that he is not dreaming, yet he cannot prove all this. But the fact that he cannot prove that he is awake does not mean that he does not know that he is awake. ‘Knowing that one is awake’ does not mean the same thing, as ‘proving that one is awake’. The former may hold without the latter holding. So he knows the premises of his proof without proving those premises. Not that these premises lack evidence, they have evidence, conclusive evidence, yet that evidence will not satisfy the sceptic. Therefore Moore does not produce that evidence. Not only that Moore has evidence that he has hands, even those who look at Moore’s hands would consider them to be genuine hands. But neither Moore nor those who attended his lecture were in a position to prove that they were not dreaming. Therefore Moore considers it a futile activity to prove that he is not dreaming. Moore concludes his lecture by saying “ I can know things, which I cannot prove; and among things which I certainly did know, even if (as I think) I could not prove them, were the premisses of my two proofs.”²⁶

When Wittgenstein heard about Moore’s lecture, according to Wisdom, he reacted: “ Those philosophers who have denied the existence of matter have not wished to deny that under my trousers I wear pants.”²⁷ Moore is sharp enough. He responded to Wittgenstein in the following words. “ If by this Wittgenstein meant that no philosophers who have ever denied the existence of matter have ever wished to deny that pants exists, I think the statement is simply false. Some philosophers, at all events

sometimes, have meant to deny this: they have meant to assert that no such proposition as that pants exist is true; and it was only against *this* assertion that I supposed my proof to be a proof.”²⁸ The expression ‘material thing’ is abstract. Its instances would be pants, shoes, cats, dogs, etc. To deny the existence of material things would be to deny the existence of pants, cats, dogs, etc. This implies that showing the existence of pants, shoes etc, would be showing the existence of material things. Therefore Moore is right in his attack on the sceptic, and Wittgenstein wrong in defending him. Of course, this does not mean that Moore has succeeded in meeting the philosophical sceptic. The philosophical sceptic would doubt Moore’s premisses of proof. He would use dream argument to question Moore’s premisses of the proof. But this argument is pointless. Its pointlessness can be shown only by coming to the common sense level. If there are genuine doubts, they can be satisfied. This issue has already been discussed earlier.

Philosophers prior to Moore restricted knowledge and certainty to a priori statements, to statements that are called analytic or tautologies. They have prohibited the use of knowledge and certainty to empirical propositions. But Moore allows the use of knowledge and certainty to empirical propositions. The propositions ‘This is a hand’, ‘This is a cat’, etc. are empirical. And Moore claims to know their truth with certainty. Moore’s proof of an external world presupposes the application of knowledge and certainty to empirical propositions. Premisses of Moore’s proof are empirical. In order to understand why Moore considers empirical propositions to be certain, one has to come down to the level of common sense. In every day life we make knowledge claims. Since we are not yet philosophers or epistemologists so our doubts are easily removed. Therefore, Malcolm is wrong in commenting on Moore’s knowledge and certainty that “people, listening to Moore, sometimes get the impression that Moore thinks that it is by some sort of *intuition* that he discovers whether the truth of a statement is certain. They get the impression that Moore thinks that certainty is a simple, indefinable quality like yellow, which unaccountable attaches to some statements and not to others.”²⁹

Knowledge is certainly not an indefinable notion for Moore. So also no statement is specially reserved to be known. A proposition that is doubtful in some situation may be known in other situations. Seeing a white patch of colour, on account of my poor eyesight, I question 'is this a cat'? This shows that I am doubting the proposition 'This is a cat'. But when I am playing with the cat, where is the question of doubt? I know with certainty the truth of the proposition 'This is a cat'. So there is no proposition to which the indefinable quality of knowledge is attached. A proposition that is doubtful in one circumstance becomes certain in another circumstance. So the notion of certainty is not an indefinable simple notion like the notion of goodness. Undoubtedly Moore considers 'goodness' as a simple indefinable notion, but not either 'knowledge' or 'certainty'. Moore has discussed this issue more thoroughly in his paper "Certainty".

3. MOORE ON CERTAINTY

The title of the paper "Certainty" itself suggests that Moore has taken up this issue and the allied issue of 'knowledge' for analysis. But certainty and knowledge were also the issues, which he took up in two of his earlier papers viz., "A Defence of Common Sense" and "Proof of an External World". Now he is a full-fledged epistemologist. Earlier he gave the impression that he is a dogmatist. He dogmatically adhered to common sense propositions. He felt no need of proving that he knows with certainty the truth of common sense propositions. Now he feels the necessity of analysing the notions of 'knowledge' and 'certainty'. He wishes to show that he is not wrong in applying these notions to common sense propositions. Since Moore's approach in this paper is different, he has taken up a different set of common sense propositions to have fresh air. Like the earlier set of propositions, the present set also contains only empirical propositions. Consider the propositions which Moore has taken for analysis: "I am at present, as you can all see, in a room and not in the open air; I am standing up, and not either sitting or lying down; I have clothes on, and am not

absolutely naked; I am speaking in a fairly loud voice, and am not either singing or whispering or keeping quite silent; I have in my hand some sheets of paper with writing on them, there are a good many other people in the same room in which I am; and there are windows in that wall and a door in this one.”³⁰

Concerning the seven assertions made above, Moore points out that all of them are contingent propositions. They are contingent because their negations are not self-contradictory. For example, the negation of the proposition ‘I am standing up’ would be ‘It is not the case that I am standing up’. Though false, the latter proposition is not self-contradictory. When the negation of a proposition does not involve a contradiction in terms then the proposition is technically described as ‘contingent’. A contingent proposition is contrasted with a necessary proposition. A necessary proposition is one of which the denial is self-contradictory. Philosophers in the past have not hesitated in ascribing the notion of knowledge and certainty to necessary propositions. But they have not extended the application of these notions to contingent propositions. Moore wishes to show that knowledge and certainty are also ascribed to contingent propositions. The fact that the proposition ‘I am standing up’ is contingent does not mean that I am debarred from knowing the truth of this proposition with certainty. So Moore has undoubtedly taken very difficult task to perform.

Most of the philosophers, if not all, accept the view that a contingent proposition is such that its truth cannot be known with certainty. Since all empirical propositions are contingent, it has been concluded that the notions of ‘knowledge’ and ‘certainty’ cannot be ascribed to them. Moore finds this position difficult to digest. From the fact that a proposition is contingent, only one thing follows that its negation is not self-contradictory. It certainly does not follow that the proposition in question cannot be known with certainty. As Moore argues, “the conjunctive proposition ‘I know that I am at present standing up, and yet the proposition that I am is contingent’ is certainly not

itself self-contradictory, even if it is false. Is it not obvious that if I say 'I know that I am at present standing up, although the proposition I am is contingent', I am certainly not contradicting myself, even if I *am* saying something which is false?"³¹ This means I am permitted to say 'I know that I am at present standing up', even in the condition in which I maintain that my 'present standing up is contingent'.

Suppose the proposition which Moore asserts, is 'I am standing up', its negation would be 'I am not standing up'. If the former proposition is known for certain, then the latter should be false. Moore argues that "if I were to assert now 'it is possible that I am standing up' I should naturally be understood to be asserting that I do not know for certain that I am. And hence, if I do know for certain that I am, my assertion that it is possible that I'm not would be false."³² Moore is cautious enough. He is showing merely the falsity of the proposition 'I am not standing up'. He is not showing that this proposition is self-contradictory. If this proposition were self-contradictory, then the proposition 'I am standing up' would not be contingent, it would be necessary. Moore is trying to show that a contingent proposition can be known with certainty. He would succeed in achieving this end if he simply shows that its negation is false.

The next step is to show that all the assertions he made at the very start of the paper were not only true but also absolutely certain. Concerning this step he says, "Thus if I do know now that I am standing up, it follows that I can say with truth 'It is absolutely certain that I am standing up'. Since, therefore, the fact that this proposition is contingent is compatible with its being true that I know that I am standing up, it follows that it must also be compatible with its being true that it is absolutely certain that I am standing up."³³ The connection between knowledge and certainty is such that if one knows one cannot be uncertain.

The distinction between necessary and contingent truths has led some philosophers to think that 'certainty' has two different senses, the sense in which necessary truths are certain and the sense in which contingent truths are certain. Similarly, 'knowledge' also has two different senses, the sense in which necessary truths are known and the sense in which contingent truths are known. Moore shows awareness of this complication when he remarks "it may be the case that, if I say, 'I know that' or 'It is certain that' 'it is not the case that there are any triangular figures which are not trilateral', or 'I know that' or 'it is certain that it is not the case that there are any human beings who are daughters and yet are not female', I am using 'know that' and 'it is certain that' in a different sense from that in which I use them if I say 'I know that' or 'it is certain that 'I have some clothes on'; and it may be the case that only necessary truths can be known or be certain in the former sense."³⁴ For Moore's position, it hardly matters that necessary truths are certain in one sense and contingent in another. Two different senses of certainty have been invented simply because there is a type-distinction between necessary and contingent truths. Moore has improved over his own position held earlier. Earlier only sense-data statements were free from doubt and uncertainty. Now all kinds of empirical propositions could possibly be certain. Now the proposition 'I have some clothes on' can be as certain as 'This is a red patch of colour'. The new position emerged during his "A Defence of Common Sense" and became matured at the stage of "Certainty".

Concerning all the seven statements which Moore asserted in the beginning of the paper, he says, "Every one of them asserted something which might have been true, no matter what the condition of my mind had been either at that moment or in the past. For instance, that I was then inside a room is something which might have been true, even if at that time I had been asleep and in a dreamless sleep."³⁵ Earlier only sense-data statements were allowed to be true even when one were asleep. My statement 'This is red' would remain true even when I am dreaming, i.e., when I am not awake. Now

even material object statements remain true even when I am sleeping. The reason is simple. These statements are independent of the mind of the person who asserted them. From these assertions nothing can be inferred about the mental state of the subject who makes those assertions, whether he is wide awake or in deep sleep.

The last argument has led Moore to conclude concerning those propositions that, "they were all of them propositions which implied the existence of *an external world*-that is to say, of a world *external to my mind*."³⁶ It is not only statements about the physical objects that are external to ones mind, even the statements about one's body are independent of one's mind. The sense of *external* is so wide that one's own body is external to one's mind. In this context Moore uses the transcendental argument for proving the existence of the external world. External world is the presupposition of the seven assertions that Moore made. If these assertions are true, then the presupposition of the external world cannot be avoided.

Ultimately we have to decide between two alternatives. According to Moore, there is "the alternative that none of us ever knows for certain of the existence of anything external to his own mind, and the alternative that all of us-millions of us-constantly do."³⁷ Moore's own view is in support of the millions of us. All of us believe in the external world. But a few philosophers, the sceptics, reject our view i.e., the view of Moore. Those who reject Moore's view succeed in doing so with the help of the dream argument. Moore accepts that "From the hypothesis that I am dreaming, it would, I think, certainly follow that I don't *know* that I am standing up."³⁸ But Moore tries to encounter the sceptic in a very interesting way. The proposition the 'I am standing up' may be true even while I am dreaming. For even in my dream I may be standing up. Moore argues, "from the hypothesis that I am dreaming, it certainly would not follow that I am *not* standing up; for it is certainly logically possible that a man should be fast asleep and dreaming, while he is standing up and not lying down. It is

therefore logically possible that I should both be standing up and also at the same time dreaming that I am; just as the story, about a well-known Duke of Devonshire, that he once dreamt that he was speaking in the House of Lords and, when he woke up, found that he *was* speaking in the House of Lords, is certainly logically possible.”³⁹ Contrary to ‘standing up’ is ‘lying down’. But if in my dream I continue standing up then that dream would fail to falsify the assertion that I am standing up, made while awake. Rather my dreaming supports the assertion made while I am awake. Moore’s purpose is to weaken the dream argument, and he has certainly succeeded in doing so. What happened in the dream of Duke of Devonshire was confirmed when he woke up. Moore has reversed the order. What happened in the waking life was confirmed by the dream. The sceptic has taken for granted that dreams falsify the truths of waking experience. Moore has succeeded in showing that they do not always do so. Moore is only considering the logical possibility of one’s dreams confirming the statements made while one is awake.

Moore further weakens the dream argument by providing a matching argument against the dream argument. Moore argues, “since, I do know that I’m standing up, it follows that I do know that I’m not dreaming; as my opponent can argue: since you don’t know that you’re not dreaming, it follows that you don’t know that you’re standing up. The one argument is just as good as the other, unless my opponent can give better reasons for asserting that I don’t know that I’m not dreaming, than I can give for asserting that I do know that I am standing up.”⁴⁰

Moore’s final blow to the sceptic is by showing incoherence in his argument. If the sceptic has ever dreamt then he knows what a dream is. Knowing what a dream is, presupposes the distinction between the dream experiences and the waking experiences. Moore shows incoherence in the sceptic’s thought by pointing out, that “All the philosophers I have ever met or heard of certainly did know that dreams have occurred:

we all know that dreams *have* occurred. But can he consistently combine this proposition that he knows that dreams have occurred, with his conclusion that he does not know that he is not dreaming? Can anybody possibly know that dreams have occurred, if, at the time, he does not himself know that he is not dreaming?"⁴¹ Imagine two children visiting a zoo. One of them knows very well what a tiger is. He has seen tigers in the past but the other child has only heard about tigers. It is for the first time that he comes to see a tiger in a zoo. He reacts 'That is perhaps a tiger'. But what would be the reaction of the other child who has already seen tigers, to *this* tiger? He would say 'This is a tiger'. Is the sceptic like the child who came to see a tiger for the first time? Has the sceptic only heard about dreams? Is it that he was so fortunate that he never had dreams? It is because he never had dreams that he is led to say I may possibly be dreaming. But this would mean that the sceptic is not a normal human being. He lacks certain experiences, which the normal human beings have. We need not worry about him. We should only worry about those sceptics who have all kinds of experiences like us.

In his "Defence of Common Sense" Moore tried to draw the limits of philosophy. Its domain is restricted by the domain of common sense. The raw material of philosophy comes from the domain of common sense. Common sense supplies to philosophy propositions, which philosophers then analyse. It is not the function of philosophy to establish the truth or falsity of these propositions. Its only function is to analyse them. In his "Proof of an External World" Moore tries to show that the denial of the external world involves incoherence. External world means the world of material bodies. Denying the existence of matter means denying the existence of such common objects as hands, tomatoes and cigarettes. Once it is shown that hands, tomatoes and cigarettes exist, it is also shown that material bodies exist.

In his paper on "Certainty" Moore has tried to show that the notions of 'certainty' and 'knowledge' are no less applicable to empirical contingent propositions than to a priori necessary propositions. And there is no special class of empirical propositions that could be known with certainty. Any empirical proposition can be known with certainty. He has very successfully shown the incoherence involved in the dream argument. Perhaps no philosopher of the past has succeeded so well against the sceptic. Moore has shown that the sceptic operates only at the epistemological level, the level of philosophy. He does not and cannot touch the domain of common sense.

4. WITTGENSTEIN'S "ON CERTAINTY": WHY CERTAINTY IS NOT SUBJECTIVE?

The *On Certainty* was composed by Wittgenstein during the last year and a half of his life. Two papers of Moore form the basic theme of this work. The papers in question are "A Defence of Common Sense" and "Proof of an External World". According to Anscombe, Wittgenstein considered Moore's "Defence of Common Sense" as his best article. Moore agreed with Wittgenstein's estimate.⁴² Perhaps Moore's article on "Certainty" was the best piece of work against the sceptic. But it was published after Wittgenstein's death. However, Wittgenstein, has provided the strongest argument against the sceptic in his *On Certainty*.

According to Wittgenstein, Moore seems to have converted 'Knowing' into a mental state, different from the mental state of 'believing'. But neither knowing nor believing is a mental state. Wittgenstein remarks, "One can say "He believes it, but it isn't so", but not "He knows it, but it isn't so". Does this stem from the difference between the mental states of belief and of knowledge? No.- One may for example call "mental state" what is expressed by tone of voice in speaking, by gestures etc. It would thus be possible to speak of a mental state of conviction, and that may be the same

whether it is knowledge or false belief. To think that different states must correspond to the words “believe” and “know” would be as if one believed that different people had to correspond to the words, “I” and the name “Ludwig”, because the concepts are different.’⁴³ Wittgenstein wishes to show that the concept of ‘knowledge’ is different from the concept of ‘belief’. But this does not mean that knowing refers to one mental state and believing another. Moore would hardly disagree with Wittgenstein on this issue. Moore too wishes to distinguish believing from knowing. Taking help of Russell Moore points out, “that from the conjunction of the two facts that a man thinks that a given proposition *p* is true, and that *p* is in fact true, it does *not* follow that the man in question *knows* that *p* is true: in order that I may be justified in saying that I know that I am standing up, something more is required than the mere conjunction of the two facts that I both think I am and actually am-as Russell has expressed it, true belief is not identical with knowledge.”⁴⁴ Since Moore equates ‘believing’ with ‘thinking’ it can be said that for Moore believing refers to a mental state. But does knowing also refer to a mental state, numerically different from the mental state of believing? Compare Wittgenstein’s remark with that of Moore. For Wittgenstein said, while distinguishing ‘I know’ from ‘I believe’, “It would be correct to say: “I believe” has subjective truth; but “I know ...” not.”⁴⁵ Moore also considers ‘I believe’ as a subjective truth. Something more is required, according to Moore, for converting a subjective truth into an objective truth. If one has a true belief one does not necessarily have knowledge. Would the problem be solved by inventing another mental state, the state of knowledge? Such a solution is useless, for knowledge in such a situation would remain subjective. A mental state is a mental state, be it a state of belief or that of knowledge. A mental state by definition is subjective. There is no implication that Moore has converted knowledge into a mental state. Of course he considers believing as a mental state. And on this issue Wittgenstein hardly disagrees with Moore.

The statement 'I know..' does not entail a mental state or mental process. It only stands for epistemic context in which 'I' faces the world. When Moore says, 'I know for certain that the earth has existed for a long time', this statement does not mean a mental state of Moore. Rather it expresses the knowledge, which Moore has regarding the world. In this connection Wittgenstein says, that 'knowledge' and 'certainty' belong to two different categories. They are not two mental states like, say, 'surmising' and 'being sure'. According to Wittgenstein, we are interested not in being sure but in knowledge. The certainty of propositions lies in their truth. Wittgenstein says, "My "mental state", the "knowing", gives me no guarantee of what will happen. But it consists in this, that I should not understand where a doubt could get a foothold nor where a further test was possible."⁴⁶ Wittgenstein means to say that if one knows then one cannot doubt. So also once I know then there is no need for further verification. With knowledge the culmination of testing has reached.

Norman Malcolm has recorded a conversation he had with Wittgenstein on the topic of certainty. Malcolm reports Wittgenstein as saying, "There is a tendency to think of knowledge as mental state ... mental states, such as anxiety and pain, have degrees. Certainty also has degree, e.g., "How certain are you?" Since certainty has degrees we are helped to have the idea that knowledge is a mental state. Moore would like to stare at the house that is only twenty feet away and say, with a peculiar intonation, "I know that there is a house". He does this because he wants to have in himself the feeling of knowing. He wants to exhibit knowing for certain to himself. In this way he has the idea that he is replying to sceptic philosopher who claims that every day examples of knowing that there is a dog in the backyard or that the neighbor's house is on fire, are not really or strictly knowledge, are not knowing in the highest degree. It is as if someone said "you don't really feel pain when you are pinched" and Moore then pinched himself in order to feel the pain, and thus prove to himself that the other is wrong. Moore treats the sentence "I know so and so" like the sentence "I have pain".

The criterion that he knows so and so will be that he says that he does."⁴⁷ Moore's own remarks concerning his use of the expression 'I know' have led Wittgenstein to interpret Moore, that for him 'knowing' is not very unlike 'being in Pain'. Moore refuses to produce any evidence in support of his claim. Just as one fails to demonstrate one's having of a pain as one demonstrates as having of a pen or a book, Moore fails to demonstrate his having of knowledge. So having of knowledge is not very unlike having of a pain. However, pain is something that is private and subjective, but knowledge is something that is public and objective. Though I may be the only person knowing something at a given time, but others are not debarred from knowing what I know. This distinguishes knowledge from belief.

There is always the danger of trying to find the meaning of an expression by contemplating on the expression itself and the frame of mind in which one uses it, instead of thinking about the practice or use. That is why one repeats, like Moore, the expression to oneself so often, because it is as if one must see what one is looking for in the expression and in the feelings expressed in it. But this is wrong. The mental process is irrelevant for the meaning of an expression. Its meaning depends on the use. In mathematical knowledge, for example, one has to keep in mind the unimportance of the inner process or of state. Here the interesting thing is, how we use mathematical propositions in our every day life. Thus knowledge is related to practice and not to the mental context. So Wittgenstein says: "- For 'I know' seems to describe a state of affairs which guarantees what is known, guarantees it as a fact..."⁴⁸ The concept 'know', therefore, is not analogous to the concepts 'surmise', 'doubt', etc., in that the statement 'I know ...' cannot be a mistake, that is, there can be an inference from such an utterance to the truth of the assertion.

In the case of 'I believe' one can ask for justification of the belief, but not so in the case of 'I know'. 'I know' is in no need of justification since it excludes all doubts.

'I know' is the signal that there is no scope for doubt. But this does not licence one to use this expression where there is no occasion for it. Moore, according to Wittgenstein, misuses this expression. Wittgenstein says, "The wrong use made by Moore of the proposition "I know ..." lies in his regarding it as an utterance as little subject to doubt as "I am in pain". And since from "I know it is so" there follows "it is so", then the latter can't be doubted either."⁴⁹ Logically speaking 'I know' contrasts with 'I am in pain' because in "I am in pain" there is the need of a suitable occasion for it to be true, that is, when I am really in pain. So this statement is self-justifiably true. 'I know', on the contrary, is without justification and so without use in most of the cognitive contexts.

The concept of belief cannot be understood merely as the expression of a state of mind. Knowledge and belief are essentially directed at truth. Belief, as it were, aims at truth, whereas knowledge purports to have arrived at it. The statement 'I know' relates to the possibility of demonstrating the truth. In the case of knowledge, a person is right in claiming that he knows something only if what he claims to know is, in fact, true and so if he does know then it follows that what he knows is true. Wittgenstein writes, "And in fact, isn't the use of the word "know" as a pre-eminently philosophical word altogether wrong? If "know" has this interest, why not "being certain"? Apparently because it would be too subjective. But isn't "know" *just* as subjective? Isn't one misled simply by the grammatical peculiarity that "p" follows from "I know P"? (OC, Sec. 415). Let us assume that his answer to the above question is not 'yes' in each case since he admits that 'I know p' does not have a subjective truth. Wittgenstein emphasises that a claim of knowledge, unlike a claim of belief, is not independent of the truth of what is being claimed. He says that a claim to knowledge does not have subjective truth. This connects with the remark that the use of 'I know' as a predominantly philosophical word is wrong. Wittgenstein says, "It is as if "I know" did not tolerate a metaphysical emphasis."⁵⁰ That is, the expression 'I know' cannot be used in the way Moore tried to use it, as part of a philosophical argument, in order to counter the

sceptical arguments or the claims of the idealist. However, one can argue that 'I know that it is so' is subjective in the sense it involves a claim about the judging subject in the way in which the assertion 'it is so' does not. As Wittgenstein puts it, "What is the proof that I *know* something? Most certainly not my saying I know it."⁵¹ "And so, when writers enumerate all the things they *know*, that proves nothing whatever. So the possibility of knowledge about physical objects cannot be proved by the protestations of those who believe that they have such knowledge."⁵² Such claims do not dispose scepticism.

5. WITTGENSTEIN AGAINST SCEPTICISM.

According to Wittgenstein, in using 'I know' Moore has left himself open to the criticism of the philosophers who say 'I believe merely strikes as if you know it? For Moore's remarks were directed at the sceptic who denies the existence of things in the world that is external to the mind. Moore is aware that scepticism is wrong. So he claims to know that certain truths are absolutely certain for him. Wittgenstein says, "I should like to say: Moore does not *know* what he asserts he knows, but it stands fast for him, as also for me; regarding it as absolutely solid is part of our *method* of doubt and enquiry."⁵³ Thus, according to him, Moore's statement of knowledge could be appropriate to the removal of a practical doubt but not to the doubts of the idealist or the sceptic. For the sceptic there is a doubt behind a practical doubt. Therefore, Moore's attempt to refute scepticism fails.

The distinction between a practical and philosophical doubt is very similar to the distinction between doubts, which can in principle be settled by the ordinary relevant criteria, and doubts which call those very criteria in question. Wittgenstein makes the following remark on the distinction. "Someone who doubted whether earth had existed for 100 years might have a scientific, or on the other hand a philosophical, doubt."⁵⁴

Doubting the existence of the external world, for example, does not mean doubting the existence of a planet. The first doubt is philosophical and the second is scientific. The scientific doubt can be refuted but not the philosophical one. Philosophical doubts can never be answered. So Wittgenstein points out that it is possible to point out the discovery of the planet to the doubter but such proof is not possible in the case of the existence of the world.⁵⁵ Moore's saying 'I know this is a hand' is not like 'I know this is Saturn'. Moore has not discovered his hand like the scientist who discovered the Saturn. So Moore cannot prove that the external world exists by saying that 'I know this is a hand'.

Moore's insistence that he knows that there is a hand, though it could well be appropriate in certain situations, does nothing to meet those doubts, which the sceptical or idealist arguments put forward. So Moore's use of 'I know' does nothing to meet the difficulties which Moore's adversaries emphasise, and that Moore was misled into thinking that he has refuted scepticism and idealism, by assertions about what he knows to be true.⁵⁶ As Wittgenstein expresses this: "Moore's mistake lies in this – countering the assertion that one cannot know that, by saying "I do know it."⁵⁷

Wittgenstein thinks 'I know' can be used only under certain circumstances, that is, only when there is a need to assert one's knowledge against the background of doubt. Wittgenstein says, "it is not a matter of *Moore's* knowing that there's a hand there, but rather we should not understand him if he were to say, "of course I may be wrong about this." We should ask "what is it like to make such a mistake as that?" – e.g., What's it like to discover that it was a mistake?"⁵⁸ That is to say there is no reason or ground as to why, like Moore, one should say 'I know I have a hand'. One does not have to assert such a simple truth as that one has a hand; one cannot be mistaken about it as such. But we should not understand him if he were to say that he might be wrong in this case. Whether or not one is right in claiming to know that he has a hand depends, according to

Wittgenstein, on whether or not he shows he has not made a mistake. But as Wittgenstein says, in the case where Moore asserts that he knows that he has a hand, we can ask: what would it be like to make a mistake here?

Wittgenstein holds that one can say 'I know' when one has compelling grounds by appeal to which the truth of what one claims to know can be demonstrated. He gave several examples of the correct use of the expression 'I know'. They are all cases of being able to say *how* one knows. From all this we can make two general points: that Wittgenstein sees a claim to knowledge as essentially connected with *evidence* which can be given in support or confirmation of what one knows, and that this claim is something about which it is possible to be mistaken. Thus, Wittgenstein says, knowledge and evidence go together, so that to claim to know something is to be able to show how one knows, that is, to show the evidence for it. Knowledge is not possible where evidences are not available.

Wittgenstein is undermining a long tradition in epistemology, which seeks to establish knowledge on a sure foundation by refuting scepticism. It seeks to justify knowledge by excluding all doubts. Descartes thought that he had found such knowledge when he stated his doctrine of clear and distinct ideas and when he established the indubitable truth: *Cogito ergo sum*. G.E Moore likewise has proposed a number of statements as being immune from doubt so as to constitute the safe items of knowledge. Both these proposals are based on clear refutation of scepticism. Wittgenstein is refuting this epistemological tradition when he denies that 'I know I am in pain' is a correct example of what one can be said to know indubitably and with certainty. If it is used as a case of indubitable knowledge against scepticism, it does not provide an example of something known against which most other claims can be measured and can be seen to fall short. In *Philosophical Investigations II*, Wittgenstein argues that one's knowledge of one's own pain is found out to be not a representative of genuine knowledge. He says, "If you

bring up against me the case of people's saying "But I must know if I am in pain! ... you should consider the occasion and purpose of these phrases, "War is war" is not an example of the law of identity, either."⁵⁹ One of the purposes of the phrase 'I know ...' is to contrast my own relation to my sensations with that of the others. Other people have to use the evidence for what I say in order to claim anything about what I feel. They may be wrong in their knowledge of my being in pain. But I cannot myself be wrong about my own pain. So I do not need evidence for my knowing of my pain. In Moore's example this contrast is forgotten. Moore says, 'I know that I have two hands'. But the question is: what is the evidence I require in knowing that I have two hands? Is it not something, which is prior to all evidence, and therefore itself is not an item of knowledge? Wittgenstein believes that 'I know I have two hands' is not a genuine case of knowledge at all. He writes, "One says "I know" when one is ready to give compelling grounds. "I know" relates to possibility of demonstrating the truth. Whether someone knows something can come to light, assuming that he is convinced of it. But if what he believes is of such a kind that the grounds that he can give are no surer than his assertion, then he cannot say that he knows what he believes."⁶⁰ This point is an essential part of Wittgenstein's overall position. This shows that genuine knowledge is evidence-based. To argue against this view is to say that knowing that something is true is separable from an account of the relevant evidence. Therefore, the case of pseudo-knowledge like "I know that I have two hands" will be possible.

Moore has not suggested that the things which he claims to know play any foundational role in a system of knowledge. He only shows that they are superior evidences for one's knowledge that there is an external world, and that it would be absurd to raise any doubt about that. Wittgenstein accepts that Moore has given examples of things, which, in most circumstances, are indubitable. But he denies that these are the things, which it makes any sense to claim to know.⁶¹ He says that 'I know' is conceived as a grammatical proposition and it properly means that there is no

such thing as doubt in this case, that is, the expression 'I do not know' makes no sense in this case. That is why 'I know' makes no sense either. Wittgenstein is not interested in either confirming or denying that Moore knows whatever he claims to know, he is concerned only with the question whether it makes sense to say one knows. He is concerned with the conditions under which alone one can make genuine knowledge-claim. According to him, there are things, which are not a part of our knowledge-claims, but are there as the grounds of the language games involving knowledge-claims.

6. LIMITS OF SCEPTICISM: WITTGENSTEIN AND MOORE.

Wittgenstein says that his objection against Moore is that Moore has conflated the genuine knowledge-claim like 'I know my friend is dead' with the pseudo-knowledge-claim that 'I know that my friend is a human being'. The latter claim does not take off at all; it is not a move in a language-game. It has no context, no cognitive purpose. Wittgenstein says that each one of Moore's examples could be given a context and provided with circumstances in which they can be imagined. But, as such, as they have no genuine context and so fail in achieving any cognitive purpose. Wittgenstein sarcastically says, "I could imagine Moore being captured by a wild tribe, and their expressing the suspicion that he has come from somewhere between the earth and the moon. Moore tells them that he knows etc. but he can't give them the grounds for his certainty, because they have fantastic ideas of human ability to fly and know nothing about Physics. This would be an occasion for making that statement."⁴² Wittgenstein, thus, says that when one uses 'I know' without context and cognitive purpose, is bound to commit the logical error of making pseudo-move in our cognitive language-game. Wittgenstein is very suggestive in explaining the logical error in the following way: "My difficulty can also be shewn like this: I am sitting talking to a friend. Suddenly I say: "I knew all along that you were so-and-so". Is that really just a superfluous, though true,

remark? I feel as if these words were like “ Good morning” said to someone in the middle of conversation.”⁶³

Wittgenstein thought that Moore was right against the sceptic in claiming that some propositions about the external world could have the same epistemological status as mathematical propositions. . But he thought that Moore was wrong in thinking that these propositions provided a proof of external world: not because these propositions were false, but because the claim to knowledge of them was senseless.⁶⁴ Wittgenstein claimed that both Moore and the sceptics misunderstood the nature of doubt, knowledge and certainty, though in different ways. Wittgenstein rejected the sceptical position not so much because scepticism, i.e. universal doubt, is false, but because it is meaningless. Scepticism is an impossible position because it doubts even that which cannot be doubted. So it become a meaningless exercise of illegitimate doubt.

For Wittgenstein, an expression of doubt makes sense only in the relevant circumstances. Accordingly, the circumstances in which we can have claim to knowledge or certainty are also the circumstances in which doubt is possible. That is to say, doubt is possible where knowledge is possible. Doubt and certainty, belong to the same language-game. Wittgenstein argues that doubts are limited to cognitive languages-games where evidences for certainty are lacking. Doubts in these circumstances are legitimate.⁶⁵

As Wittgenstein has made it clear, ‘certainty’ is presupposed by ‘doubt’. The game of doubting itself presupposes certainty (OC, Sec.115). That is to say, one can doubt if only something else is not doubted⁶⁶. There are truths, which are exempted from doubt. In this sense a mistake is logically excluded in the case of these truths. Descartes thought that he found such a case in his *Cogito*. Wittgenstein, like Descartes and Moore, accepts such indubitable truths, but claims, unlike them, that such truths are

not to be proved or claimed to have been known. They are part of our frame of reference and the bed-rock truths. Wittgenstein writes, "The *truth* of certain empirical propositions belongs to our frame of reference."⁶⁷ Wittgenstein raises the question: can one be mistaken about such propositions? Can one doubt that one exists or that the earth has existed long before one's birth?

All genuine mistakes show that there is an essential connection between mistakes and knowledge. A mistake has ground, and grounds are to be contrasted with the cause of the mistake. The mistaken judgement can be fitted into the overall system of knowledge. Mistakes form the system as much as knowledge does. But if one is mistaken about the system of knowledge and its foundations, one can be declared crazy, since the notion of mistake itself is inapplicable in this case. According to Wittgenstein, doubt needs ground. So he says, "So rational suspicion must have grounds? We might also say: "the reasonable man believes this"⁶⁸ A reasonable man knows under what conditions doubts are possible. Doubts are based on reasoning. But sceptical doubts are generally irrational, since they are concerning the very grounds of knowledge. Wittgenstein, therefore, shows the difference between the case where doubt is reasonable and where doubt is impossible logically. Sceptical doubts are not only unreasonable but also logically impossible.⁶⁹ If someone doubts the existence of material objects, this doubt does not make any difference in practice. In order to express the doubt that p, one must understand what is meant by saying that p. As Wittgenstein puts it, "If you are not certain of any fact, you cannot be certain of the meaning of your words either."⁷⁰ 'I don't know if this is a hand' presupposed that I know what the word 'hand' means. A consistent sceptic should doubt the meaning of the words he uses. Wittgenstein rejects this kind of doubt as meaningless and so as finding no place in language-game. For it is, as Wittgenstein points out, an empirical fact that English or Latin words have the meanings they have. If scepticism is taken thus far, it refutes itself.

Wittgenstein claims that expression of doubt presupposes that the language-game within which it is expressed is not doubted. Besides, in particular, the nature of the language-game itself may exclude a doubt about the things, which have a place in the language-game. If, for example, one asks: What right have I not to doubt existence of my hands?, he is overlooking the fact that a doubt about existence only works against the background of a language-game involving hands. According to Wittgenstein, if we doubt everything then it would not be a genuine doubt; it can at best be a pathological one. Doubt is possible where testing is possible (OC, sec.125) and test presupposes something is not doubted and not tested. (OC, sec.163, 377). Our doubts depend on the fact that some propositions are exempted from doubt, are, as it were, like the hinges on which those turn. (OC, sec.341).

Wittgenstein has listed a number of propositions about which he thinks mistake is impossible and doubt is impossible. For example, 'I have never been on the moon' can not be doubted. Similarly, one cannot doubt that one has two hands or that one has a brain inside the skull. These propositions are very much like Moore-like propositions. Wittgenstein writes, "Imagine a language-game 'When I call you, come in through the door'. In any ordinary case, a doubt whether there really is a door there, will be impossible."⁷¹ He wants to show that a doubt such as this is not possible and so is not the presupposition of any language-game. The proposition that there is a door is to be understood as an example of something that is objectively certain – which is supposed to mean that doubt is logically excluded. Certainty is ascribed to the language-game as such and not to the single proposition about the door. All the propositions about the door point to its existence. Thus, certainty precludes all existential doubts. Wittgenstein argues that objective certainties of human life are not threatened by the philosophical imagining of unheard of occurrences. This argument is against scepticism. Besides, he

argues against those like Moore who provide epistemic proofs of our knowledge of the objective certainty. Certainty is a matter to be shown in practice and not to be proved.⁷²

Both Moore and Wittgenstein regard certainty as a human attitude towards the truth of something. Both understand certainty to be characterised by the impossibility of being mistaken. But whereas Moore believes that there is an epistemic proposition of certainty, Wittgenstein thinks that it can only be shown in our life, that is, in our language-game. Certainty is rooted in life and language and how we see it or believe it. Wittgenstein writes: "My life shews that I know or am certain that there is a chair over there, or a door, and so on. – I tell a friend e.g., "Take that chair over there", "shut the door", etc.etc."⁷³

Wittgenstein argues against the sceptics that sceptical doubt is self-refuting, and so meaningless. Therefore, universal doubt is excluded by our language-game. Descartes recommended universal doubt as a method of arriving at certainty. Wittgenstein has rejected this as something repugnant to the system of our language and knowledge. Wittgenstein says that the possibility of language-game does not depend on everything being doubted that could be doubted. Descartes thinks that he has to doubt everything that can be doubted in order to establish certainty in our knowledge-system. Any claim to knowledge or procedure of testing can then be justified in an ultimate sense by displaying its place in the system of knowledge. Wittgenstein, on the contrary, claims that a language-game such as that of testing and weighing the evidence for or against any claim to knowledge cannot be justified in this ultimate sense. If one tries to doubt everything one cannot get as far as doubting anything. One cannot simply doubt everything. The sceptic cannot intelligibly doubt the things, which he claims to doubt, because thereby he undermines the language-game in which the words he uses have their meaning.⁷⁴ Wittgenstein's notion of language is at the centre of this argument. So scepticism is ruled out by language.

Wittgenstein differs from Moore in his defence of knowledge and language against the sceptic. Unlike Moore, he claims that the justification of knowledge is unwarranted and that proofs are not needed. What counts, as a proof in mathematics or in empirical knowledge is a matter of description of the language-game in mathematics and in ordinary language. Moore's proofs are of not available in refuting scepticism, since the sceptic is unconcerned by the arguments of Moore's. That one has two hands cannot therefore be a matter of proof. The fact is that this is a matter shown in the very language-game in which we talk about hands and other material bodies. So Wittgenstein argues that doubt about one's hands is impossible. As Wittgenstein says earlier in the *Tractates* "Scepticism is not irrefutable, but obviously nonsensical, when it raises doubts where no questions can be asked"⁷⁵ Wittgenstein says that the sceptics' question may be dismissed because it lacks meaning. The meaningfulness of a question is derived from the meaningfulness of the statements, which can be made in answering it. This comes out in Wittgenstein's explanation of just why the sceptics' question must be called meaningless. So he writes "For doubt can exist only where a question exists, a question only where an answer exists, and an answer only where something can be said."⁷⁶ If a question can be framed at all, it is also possible to answer it. If there is no determinate answer to a question, then the concepts do not have a determinate sense. If scepticism raises meaningless question, any refutation of it by arguing against it in the Moorean way is also meaningless. Moore's defence of commonsense and the proof of external world is an exercise in linguistic futility.

7. THE EPISTEMOLOGICAL AND THE GRAMMATICAL MODELS OF CERTAINTY.

G.E. Moore has argued for a kind of certainty with which Wittgenstein did not agree. He has his own model of certainty that can be called the grammatical model of certainty. Moore's view is a little complicated. He operates at two different levels while employing the concepts of 'certainty' and 'knowledge'. These levels have already been distinguished earlier as epistemological and pre-epistemological. Propositions are entertained and their truth or falsity established at the pre-epistemical level. They are merely analysed at the epistemological level. Moore is not so much concerned in meeting the sceptic at the pre-epistemological level. He is not concerned with an ordinary doubter whose doubts can be removed by practical means. He is concerned with the philosophical sceptic who operates at the epistemological level. Philosophical sceptic denies knowledge and certainty. Against philosophical sceptic Moore wishes to show that one can have knowledge and certainty. So Moore's model of certainty can be described as epistemological model. Wittgenstein's model of certainty is unique. He agrees neither with Moore nor with the sceptic. It would be proper to describe Wittgenstein as the holder of the grammatical model; Certainty is inherent in the grammar of language.

Wittgenstein talks of grammar of propositions, and their interconnections in the network of propositions. He believes that propositions, of whatever kind, have a place in the system of propositions. So they can be considered within the grammar of language. Wittgenstein's *On Certainty* is a grammatical reflection on the Moore-type propositions. The Moore-type propositions are such that they can be called grammatical propositions. Grammatical propositions express how the system of language functions, that is they express the rule of the language-games. The grammatical propositions have a place in language like that of the rules,⁷⁷ e.g., 'Every rod has a length', 'Red is a colour', '2 X 2 = 4' etc. From the grammatical point of view, the propositions considered by Moore have a very different role. They do not express subjective

certainty; rather they are universal and necessary. They express the grammatical and the logical certainty.

Wittgenstein considers any utterance as non-sensical if it is not in conformity with the rules of language-game. On this view the utterance of any proposition, empirical or non-empirical, must have a place in the language-game. He goes to the extent of saying that propositions are non-sensical if they are excluded by our language-games. Even those propositions, which are taken for granted or presupposed by our language-games are, taken to be beyond our cognitive claims. It is non-sensical to make a testable knowledge claim when the propositions at issue are indubitable.

According to Wittgenstein, the epistemic model suffers from the lack of a proper understanding of empirical propositions. Empirical propositions are taken as if they are without a foundation and they need one in experience. Experience is taken as the source of the certainty of these propositions.

According to Wittgenstein, empirical propositions are verified through experiences, but their certainty is not derived from experience. He writes, "No, experience is not the ground for our game of judging. Nor is its outstanding success".⁷⁸ One interpretation suggests that Wittgenstein's empirical propositions are contingent propositions.⁷⁹ But Wittgenstein seems to make a distinction between "empirical" and "contingent" proposition.⁸⁰ For him, empirical propositions also belong to 'our frame of reference' (OC, sec. 83) and propositions having the form of empirical propositions can be foundational for our language-games. They therefore cease to be contingent. Wittgenstein writes, "I want to say: propositions of the form of empirical propositions, and not only propositions of logic, form the foundation of all operating with thoughts (with language). -This observation is not of the form "I know ...". "I know ..." states what I know, and that is not of logical interest."⁸¹ Wittgenstein further notes that the

empirical propositions, like Moore-type propositions, can play a logical role in the system of propositions. He writes. "When Moore says he *knows* such and such, he is really enumerating a lot of empirical propositions which we affirm without special testing; propositions, that is, which have a peculiar logical role in the system of our empirical propositions."⁸²

The view that empirical propositions need not be contingent follow from the fact that we cannot conceive of the opposite of such empirical-looking Propositions such as 'There are physical objects' and 'object remains in existence when not perceived' etc. These propositions are in fact, logical propositions, which cannot be contradicted in experience.⁸³

Wittgenstein's distinction between 'empirical' and 'contingent' propositions shows that for him certainty cannot be in the empiricity of the propositions. Rather certainty lies in their grammar, that is, in their role in the system of propositions. So Wittgenstein has given the grammatical propositions a unique status in our language. Grammatical propositions include not only the propositions of logic and mathematics but also those propositions, which are concerning the foundations of our empirical knowledge. Language-games concerning knowledge and belief presuppose a set of propositions which can be called the 'foundation-walls'. Wittgenstein writes, "I have arrived at the rock bottom of my convictions. And one might almost say that these foundation-walls are carried by the whole house."⁸⁴

Wittgenstein finds fault with Moor's epistemic concept of certainty, that is, certainty, as it is available in our knowledge of the world. Epistemic certainty is no doubt important. But that is not at all. Besides, that is not available. For example, according to Wittgenstein, the Moore-type propositions do not at all ensure epistemic certainty. These propositions are taken for granted by everyone. So they are universally

available and are certain by virtue of their logical role, not by being asserted by the competent knower. Assertions of the Moore-type propositions do not add anything to their content. They are either already known or not known at all, irrespective of who the knower is. Wittgenstein remarks, "I do not explicitly learn the propositions that stand fast for me. I can *discover* them subsequently like the axis around which a body rotates. This axis is not fixed in the sense that anything holds it fast, but the movement around it determines its immobility."⁸⁵ These propositions constitute the 'world-picture' which we inherit as a background for our language-games. But the world-picture is not based on reasoning and justification. Wittgenstein says, "But I did not get picture of the world by satisfying myself of its correctness; nor do I have it because I am satisfied of its correctness. No: it is the inherited background against which I distinguish between the truth and false."⁸⁶

Moore's model is vulnerable to scepticism in the sense that there is no reason why the sceptic cannot doubt the so-called epistemic justifications. Justifications depend on more basic justifications. But then they can be doubted. Knowledge is only gained to the extent that matters dubitable in a hypothetical context are not doubted but held fast. However, Moore does not escape from the circle of justifications and proofs. So there is no final resting-place against scepticism. Wittgenstein believes that there is a resting-place. But that is not something which can hold as a proof. It is something more basic, more fundamental than a proof. So Wittgenstein writes, "Giving grounds, however, justifying the evidence, comes to an end; -- but the end is not certain propositions', striking us immediately as true, i.e., it is not a kind of *seeing on our part*; it is our *acting*, which lies at the bottom of the language-game."⁸⁷ What Wittgenstein suggests is that there is a domain of truths, which cannot be doubted, yet it is beyond our epistemic justification. Like Descartes, Wittgenstein is concerned to draw attention to the numberless matters that persons unhesitatingly believe. But Wittgenstein does not ask us to doubt everything that can be doubted. In fact, he says that doubting everything

that can be doubted is not a presupposition of our language-games.⁸⁸ So, "If you tried to doubt everything you would not get as far as doubting anything. The game of doubting itself presupposes certainty."⁸⁹ Descartes, however, believed that certainty must come after doubt and cannot already be presupposed. So he writes, "I have realised that if I wished to have any firm and constant knowledge in the sciences, I would have to undertake, once and for all, to set aside all the opinions, which I had previously accepted among my beliefs and start again from the very beginning."⁹⁰ Thus, for Descartes, certainty is a matter of proof. It is something, which we have to arrive at after painstaking effort. Moore likewise contended that proofs are the sure way to certainty. Both contended that scepticism could be refuted by demonstrating that certainty is possible. Thus the Cartesian model which Moore endorses is a framework of doubt preceding knowledge and certainty. Wittgenstein, on the contrary, believes that certainty precedes doubt. For example, the propositions 'There are physical objects and Objects continue in existence when not perceived' express matters that are never matters for testing nor can they ever be doubted. They belong to the foundation of everything we know.

Besides, there are cases in which a proposition P is not a matter that can be justified and doubted in ordinary context. But it can be a matter for which corroborating evidences can be found. Suppose, I say 'I have two hands' and 'My name is Ananda Sagar'. I can't doubt or seeks to justify the above utterances without jeopardizing my ability to judge at all. To doubt my own name signals the break-down of my ability to use language. Hence, I cannot seriously doubt that I am so and so.

There are cases in which P is a matter that can be justified and doubted although there is no need to do so. Suppose I say that Mr. X told me this and I believe it to be true. In such a case I take that Mr. X is truthful and reliable. I can examine the

contents; grounds are available to make me more certain, but such checking seems otiose.

There are cases in which testing what is questioned and giving justifications are appropriate and necessary moves. Suppose I say, 'There is going to be rain tomorrow'. Here I must support my assertion with justification. This claim can be challenged and so the claimant must be able to produce good grounds for the claim.

The sceptical position refuted by Moore is a familiar and general one. The sceptic says that 'we can't know the existence of physical objects', because we may be in delusion or dreaming. But we can give the grounds for thinking that we are not deluded or not imagining things. Moore claims that one can prove that there are physical objects. The proof is as follows⁹¹:

Here is one hand

Here is another hand.

Therefore, two hands exist.

So Moore claims 'I know that I have two hands'. He believes that this is a sufficient refutation of the sceptic's position that we do not know the existence of physical objects. Wittgenstein claims that Moore commits a mistake in his proof. He says, "Moore's mistake lies in this –countering the assertion that one cannot know that, by saying 'I do know it.'⁹² Further he says, " ...If Moore is attacking those who say that one cannot really know such a thing, he can't do it by assuring them that he knows this and that."⁹³ Moore's premises in the proof are those which he asserts he knows. Based on them is the conclusion, which he also claims to know. What Wittgenstein objects to is that Moore can assert that he knows that two hands exist. Wittgenstein claims that 'I know I have two hands' is as inadmissible the knowledge-claim as 'I know that I am in pain' and 'I know that the earth has existed for many years'. It is not the case that Moore knows these things, though they are undoubtedly true. These propositions are

such that one does not claim to have evidence for their truth, and with regard to them a request for grounds is a sign of misunderstanding. The 'pain' example is the case of self-knowledge regarding one's own pain. In this case, which is a first-person utterance, no evidences or criteria are needed for assessing whether it is a true judgement or not. For Wittgenstein, it is not a descriptive judgement at all; it is an expression or avowal.⁹⁴ The logic of avowal shows that they are without the need for ground or evidence, so one cannot claim to know that one is in pain.

Wittgenstein's strategy thus is to show that it is misleading to say either that we do or can know such matters or we do not and cannot know them. They are neither justified nor unjustified but simply embedded as certainties in our practices i.e., our actions and understanding.⁹⁵ Wittgenstein concludes, "the language-game is... not based on grounds. It is not reasonable or unreasonable. It is there like our life" (OC, sec. 559). The end is an ungrounded way of action (OC, sec. 110). A genuine case of knowing is a matter of having cognitive authority. 'I know...' means, "I have this special qualification or authority."⁹⁶ It is always conceivable that the knower is not so qualified. It, therefore, makes sense to say, 'I know P' only if it also makes sense to say that 'I don't know P', or that I am not specially qualified. But in the cases where Moore claims to know things, the things, which he claims to know, are such that one cannot fail to know them. They are so universally known. Wittgenstein writes, "The truths which Moore says he knows, are such as, roughly speaking, all of us know, if he knows them"(OC, Sec. 100). Thus there is no special warrant for claiming to know these truths. There is no question of not knowing them. That is the reason why claiming to know is meaningless. Wittgenstein puts it as follows: "If 'I know etc.' is conceived as a grammatical proposition, of course the 'I' cannot be important. And it properly means, "There is no such thing as a doubt in this case" or "The expression 'I don't know' makes no sense in this case". And of course it follows from this that "I know" makes no sense either."⁹⁷

Wittgenstein concludes that one slips into using 'I know' mistakenly, since the truths he claims to know are such that we cannot conceive of their contrary. Believing in their contrary is to play a different language-game altogether. That language-game is not ours, however, Wittgenstein says, "The propositions presenting what Moore '*knows*' are all of such a kind that it is difficult to imagine *why* anyone should believe the contrary. E.g. the proposition that Moore has spent his whole life in close proximity to the earth. - Once more I can speak of myself here instead of speaking of Moore. What could induce me to believe the opposite? Either a memory or having been told. —Every thing that I have seen or heard gives me the conviction that no man has ever been far from the earth. Nothing in my picture of the world speaks in favour of the opposite."⁹⁸

The sceptic's argument that we do not have any certainty in knowledge is thus countered by Wittgenstein by dismissing that we can ever prove against the sceptic that we know certain truths in Moore's way. Moore's way leads us back to scepticism.

NOTES AND REFERENCES

- ¹ G.E. Moore, "A Defence of Common Sense", in *Classics of Analytic Philosophy*, ed. R. Ammerman, pp. 48-9.
- ² Arthur E. Murphy, Moore's "Defence of Common Sense", *The Philosophy of G.E. Moore*, ed. by Paul Arthur Schilpp, p. 302.
- ³ *Ibid.*, p. 303
- ⁴ "A Defence of Common sense", p. 52.
- ⁵ *Ibid.*, p. 49.
- ⁶ *Ibid.*, p. 53.
- ⁷ *Ibid.*, pp. 53-4.
- ⁸ *Ibid.*, p. 62.
- ⁹ *Ibid.*, p. 62.
- ¹⁰ *Ibid.*, p. 63.
- ¹¹ *Ibid.*, p. 63.
- ¹² *Ibid.*, p. 64.
- ¹³ L. Susan Stebbing, "Moore's Influence", in *The Philosophy of G.E. Moore*, p. 527
- ¹⁴ "A Defence of Common Sense", p. 55.

- ¹⁵ Quoted by Moore "Proof of An External World", p. 68, from Kant's *Critique of Pure Reason*, p. 34.
- ¹⁶ G.E. Moore, "Proof of An External World", in *Classics of Analytic Philosophy*, p. 69.
- ¹⁷ *Ibid.*, p. 71.
- ¹⁸ *Ibid.*, p. 72.
- ¹⁹ *Ibid.*, p. 75.
- ²⁰ *Ibid.*, p. 81.
- ²¹ *Ibid.*, p. 81.
- ²² *Ibid.*, p. 82.
- ²³ *Ibid.*, p. 83.
- ²⁴ *Ibid.*, p. 84.
- ²⁵ *Ibid.*, p. 84.
- ²⁶ *Ibid.*, p. 84.
- ²⁷ G.E. Moore, "A Reply to my Critics", in *The Philosophy of G.E. Moore*, p. 670.
- ²⁸ *Ibid.*, p. 670.
- ²⁹ Quoted by E. Murphy, "Moore's Defence of Common Sense", in *The Philosophy of G.E. Moore*, p. 308.
- ³⁰ G.E. Moore, "Certainty", in *Descartes: A Collection of Critical Essays*, ed. Doney, Mc Millan, London, 1968, p. 27.
- ³¹ *Ibid.*, p. 32.
- ³² *Ibid.*, p. 33.
- ³³ *Ibid.*, p. 37.
- ³⁴ *Ibid.*, p. 38.
- ³⁵ *Ibid.*, p. 44.
- ³⁶ *Ibid.*, p. 44.
- ³⁷ *Ibid.*, p. 46.
- ³⁸ *Ibid.*, p. 47.
- ³⁹ *Ibid.*, p. 47.
- ⁴⁰ *Ibid.*, p. 49.
- ⁴¹ *Ibid.*, p. 51.
- ⁴² Preface to *On Certainty*.
- ⁴³ Wittgenstein, *On Certainty*, tr. D. Paul and G.E.M. Anscombe, Blackwell, Oxford, 1969, Sec. 42.
- ⁴⁴ "Certainty", p. 48.
- ⁴⁵ OC., Sec. 179.
- ⁴⁶ *Ibid.*, Sec. 356.
- ⁴⁷ Malcolm, N., *Knowledge and Certainty*, Prentice-Hall, 1965, pp. 87-8.
- ⁴⁸ OC, Sec. 12.
- ⁴⁹ *Ibid.*, Sec. 178.
- ⁵⁰ *Ibid.*, Sec. 482.
- ⁵¹ *Ibid.*, Sec. 487.
- ⁵² *Ibid.*, Sec. 488.
- ⁵³ *Ibid.*, Sec. 151.
- ⁵⁴ *Ibid.*, Sec. 259.
- ⁵⁵ Cf. *Ibid.*, Sec. 20.
- ⁵⁶ G.E. Moore, "Refutation of Idealism", in *Mind*, Vol. XII, 1903, pp. 433-53, reprinted in his *Philosophical Studies*.
- ⁵⁷ OC, Sec. 521.
- ⁵⁸ *Ibid.*, Sec. 32.
- ⁵⁹ Wittgenstein, *Philosophical Investigations*, p. 221.
- ⁶⁰ OC, Sec. 243.

- ⁶¹ See for further discussion, Thomas Morawetz, *Wittgenstein and Knowledge*, Humanities Press, Atlantic Highland, N.J. 1978, pp. 88-98.
- ⁶² OC, Sec. 264.
- ⁶³ Ibid., Sec. 464.
- ⁶⁴ Cf., OC, Sec. 10.
- ⁶⁵ Ibid., Sec. 389-92.
- ⁶⁶ Ibid., Sec. 341.
- ⁶⁷ Ibid., Sec. 83.
- ⁶⁸ Ibid., Sec. 323.
- ⁶⁹ Ibid., Sec. 454.
- ⁷⁰ Ibid., Sec. 114.
- ⁷¹ Ibid., Sec. 391.
- ⁷² See *Wittgenstein and Knowledge*, Chap. 1.
- ⁷³ OC, Sec. 7.
- ⁷⁴ Cf. Kenny, *Wittgenstein*, Penguin Books, 1973, Chap. 11.
- ⁷⁵ Wittgenstein, *Tractatus Logico-Philosophicus*, tr. D.F. Pear and B.P. McGuinness, Routledge and Kegan Paul, London, 1961, Sec. 6.51.
- ⁷⁶ Ibid., Sec. 6. 51.
- ⁷⁷ See G.E.Moore, Wittgenstein's Lectures, 1930-33 in *Classics of Analytic Philosophy*, pp.233-84.
- ⁷⁸ OC, Sec. 131.
- ⁷⁹ For more discussion on this, see *Wittgenstein and Knowledge*, p.36.
- ⁸⁰ Cf. Ibid., p. 36.
- ⁸¹ OC, Sec. 401.
- ⁸² Ibid., Sec. 136.
- ⁸³ OC, Sec.35.
- ⁸⁴ Ibid., Sec. 248.
- ⁸⁵ Ibid., Sec. 152.
- ⁸⁶ Ibid., Sec. 94.
- ⁸⁷ Ibid., Sec. 204.
- ⁸⁸ Ibid., Sec. 446.
- ⁸⁹ Ibid., Sec. 115.
- ⁹⁰ Descartes, *Meditation I*, tr. Lawrence Lafleur, Indianapolis: Library of Liberal Arts, 1960, p.75.
- ⁹¹ See Moore "Proof of An External World", pp. 81-2.
- ⁹² OC, Sec. 521.
- ⁹³ Ibid., Sec. 520.
- ⁹⁴ See Wittgenstein, *Philosophical Investigations*, tr.G.E.M. Anscombe, Basil Blackwell, Oxford, 1953. See for a full discussion on ovoids, See.P.M.S. Hacker, *Insight and Illusion*, Clarendon Press, Oxford, 1972.
- ⁹⁵ See *Wittgenstein and Knowledge*, Chap. 1.
- ⁹⁶ Cf. J.L.Austin, "Other Minds", in *Classics of Analytical Philosophy*, pp.353-78.
- ⁹⁷ OC, Sec. 58.
- ⁹⁸ Ibid., Sec. 93.

CONCLUSION

The present thesis is aptly entitled as “ On Certainty: A Study on the Limits of Scepticism”, because it has two goals to achieve, namely, (1) to prove that there is certainty in human knowledge and (2) to prove that scepticism itself has limits beyond which it becomes meaningless. In course of this essay I have tried to establish both the theses. It is the second thesis about the limits of scepticism which proves the first thesis about certainty. Thus in this work I have started with scepticism and ended with certainty.

My argument in this essay has been that only by refuting scepticism, in some sort of a negative dialectic, we can prove certainty. Refuting scepticism is itself a difficult task. Therefore, I have taken the help of the historically established formulations of scepticism for my argument. From the history of western philosophy I have derived the very notion of scepticism as one that refutes the possibility of knowledge. I have taken scepticism in its strongest form though its mild and harmless forms are also available. A deeper view of scepticism reveals that it is a serious philosophical standpoint which refuses to accept anything as a matter of faith, dogma and unexamined belief. It therefore subjects every belief to a logical scrutiny. But, unfortunately, the sceptic finds no resting-place in his philosophical quest for certainty, truth and necessity. Therefore, he ends up in despair and declares that nothing is knowable with certainty. It is the extreme form of scepticism that has disturbed the non-sceptical philosophers throughout the ages. In spite of Pyrrho's sincerity in his philosophical quest, he could not be the model of Greek philosophy which follows Plato rather than Pyrrho. Pyrrho ended up in despair while Plato opened up a way to hope. The philosopher of certainty and truth is thus the standard torchbearer of philosophy.

My effort in this essay is to bring out the philosophy of truth and certainty as against the philosophy of despair and ignorance in an effort to show that history of philosophy is full of examples which show the fruitlessness of the sceptical philosophy itself. The great philosophers of the West from Plato to Wittgenstein have demonstrated that scepticism is ultimately an impossible position. If scepticism is true, then philosophy itself as a rational activity will be impossible.

In my argument against the sceptic I have relied on the historical source because I find in it the genuine insights against the sceptical position. In the great works of Descartes, Spinoza, Leibniz, Kant and Wittgenstein I have found the genuine concern against the sceptical challenge to human knowledge, science and philosophy as such. Out of this concern they have developed great systems of philosophy in which one comes face to face with truth which dazzles in the clear light of reason. Scepticism fades away in the face of the light of truth and reason.

As stated above, the aim of this thesis is to argue for truth and certainty. Truth is the very ground on which our knowledge stands. It is the foundation on which the edifice of knowledge is built. Certainty is the way we grasp this truth. The more we grasp the truth in its totality, the more certain we are. So certainty lies the way we approach truth. Hence, it is probable that there are degrees of certainty and it is also logically possible that some cannot attain a high degree of certainty in their quest for truth. However, it cannot be case that no certainty is possible in our quest for truth. If certainty is not possible, then science is not possible. Philosophy itself requires a measure of certainty in its quest for truth. Therefore, scepticism as a philosophical standpoint which denies certainty cannot be rationally possible.

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CORRECTION

Due to certain technical reasons, page numbers between 162 and 163 are numbered as 162a, 162b, 162c, 162d and 162e. This mistake is deeply regretted.