Chapter-3
Empiristic Tradition: a critical overview

Index

3.1  Introduction:

3.2  Locke's epistemological conviction and its interpretation:
    3.2.1  Locke's criticism of innate ideas:
    3.2.2  Locke's dichotomy of sensation and reflection:

3.3  Berkeley's subjective idealism and its possible criticism:

3.4  Hume's view on space, time and causality and its impact on Kant's philosophizing:
    3.4.1  David Hume, his philosophy and methodology—certain remarks:
    3.4.2  Hume on space, time and infinity: a possible anticipation of Kant:
    3.4.3  Hume's criticism of causality and its criticism:
    3.4.4  Hume's view of self—a critical evaluation:

3.5  Conclusive evaluation:
3.1 Introduction:

Empiricism is a general term which means that it is an epistemological principle where experience is to be taken as a first grade authority. In this general and broad sense this type of empiricism can be seen everywhere in philosophy. Even in ancient Greek philosophy, during the period of pre-Socratic thinkers and in neo-Platonism, certain elements of empiricism can be seen. But in the beginning of the modern western philosophy it is the epistemological school, which consciously limits, the meaning of the term 'experience' solely to the sense experience. It is necessary to give some historical account before our actual examination of empiricist tradition.

In Western Europe when religious reformation was taking place, the role of actual observation was expanded in the realm of theoretical discipline. The famous example of Galileo\(^1\) which is in the contradistinction to classical Aristotelian belief, that all bodies fell on earth with equal velocity, changed the scenario of physical sciences. So was the case with Bruno, Copernicus, Kepler and others. All these discoveries expanded the horizon of the understanding of nature. And so, natural science whose basis lies in experience emerged as a separate discipline. It was natural that this type of paradigm shift has made a fundamental change in the outlook towards the understanding of nature. Bacon made a fundamental distinction between natural sciences and divine sciences and claimed that different types of methodologies were required for the description and explanation of each discipline. Here our present context deals with Bacon's methodology of natural sciences and there Bacon furnishes some fundamental background in the entire empiricist epistemological tradition.

Bacon remarked two important propositions for the description and understanding of the phenomenon of natural sciences. Here the term 'natural science' correspond to all that which is empirical and this encompasses the waste area of human knowledge which is narrated explicitly by Sachiko Kusukawa by the following table.\(^5\)
"Bacon's classification of Knowledge"
From this table it becomes very much clear that according to Bacon, the main aspect of philosophizing is the analysis and classification of knowledge. Bacon advised two fundamental maxims to scientists and philosophers. The first can be summarized in the following imperative sentence, ³ "Don't think but look." And second states the fundamental theme of observational sciences in the form "Nature is a book which will be known to him who will turn her page." These two maxims or imperatives had changed the classical belief of knowledge. There were two traditions in the age of Bacon. First tradition belongs to philosophy according to which apriori reason or intellect is the only source for getting knowledge about the world. The second tradition was theologically mythological tradition which generally states that the knowledge about world is a part of theology and so together with other religious truths; it is to be known through revelation and believed on the account of faith. Naturally, in the age of reformation, the second approach itself was in question. Bacon challenged the first approach of apriori knowledge about the world. And so the method of observation through the device of sense perception became the starting point of empiricist philosophy. In spite of this, Bacon is not classified as an empiricist philosopher like Locke because he did not provide a complete epistemological framework as it was done in the philosophy of John Locke. Therefore with these introductory remarks about Bacon, the empiricistic position of Locke will considered in the next sub section.

3.2 Locke's epistemological conviction and its interpretation:

Locke is generally considered as the father of modern empiricism just like Descartes' role as the father of modern rationalism. With Locke a systematic development of empirisistic epistemology started and it found its ultimate end in Hume. For the establishment of empiricist epistemology, it is necessary to define and explain the term 'experience' and 'knowledge.' Here 'experience' does not mean anything which can be the content of conscious or cognitive awareness. The use of this term in the philosophy of Locke and subsequent empiricist philosopher is exclusively limited to sense experience. So according to empiricism the nonsensational contents of consciousness does not provide any link or contact with external world and so it is impossible that such content can contribute anything to the construction of knowledge in human knower. Locke undertakes two different approaches for his empiricist philosophy. In the first attempt which is done in his 'An
Essay Concerning Human Understanding,' he refutes the principles of innate ideas. In next section Locke's criticism of innate ideas will be undertaken together with its further implication.

3.2.1 Locke's criticism of innate ideas:

Before the establishment and justification of the basic epistemological thesis in its positive sense, Locke wants to criticize the theory of innate ideas. This is important because in rationalistic and theological tradition, there is a common belief that human consciousness has some innate power to know and grasp the reality without any help of senses. This is the fundamental belief which lies in every rationalistic or theological discourse. From Plato to Descartes and within medieval theological philosophy, it is believed that each conscious self is having some inbuilt capacity, right from the time of its creation or birth, that it can grasp or know reality apart from sense-experience. In western philosophical traditions, generally, thinking process is equated with non-sensational cognitive activity and therefore it is believed that human self has some innate ideas which can serve as the basic of all knowledge.

Locke criticized this stand in the second chapter of the above mentioned book with the title ‘no innate principle in the mind' Locke starts his criticism from the second paragraph in the following way.4

"General assent the great argument: There is nothing more commonly taken for granted, than that there are certain principles, both speculative and practical (for they speak of both), universally agreed upon by all mankind; which therefore, they argue, must needs be the constant impressions which the souls of men receive in their first beings, and which they bring into the world with them, as necessarily and really as they do any of their inherent faculties."

Generally in entire rationalist tradition universality is necessarily assigned with the concept of knowledge and so it is assumed that there are certain universal truths which are there in every human mind right from the beginning. Locke effectively says that this belief is unfounded because if there are universal truths then we have to identify which truths are those truths which we can find everywhere. Now human mind and human personality act in two ways:

1) Theoretically
2) Practically
In other words, human mind makes a theoretical structure and determine the practical code of conduct: So Locke divides this general truths in two parts:

1) Speculative
2) Practical

Speculative part contains the universal laws of thought of logic and practical part contains a universally acceptable code of conduct. Locke says that both of these interpretations are false and unwarranted because in classical logic, which was there in the time of Locke, there were three laws of thought.5

1. Law of identity
2. Law of excluded middle
3. Law of non-contradiction

These three laws are supposed to furnish the theoretical content for any theoretical generalization. But it is meaningless to believe that every human being knows these truths from the beginning of his existence. The second part of the example of the universal truths becomes still more disputable because in the realm of practical universality the example which is given is that of universal moral laws. But in the entire past history of the human race, there is not even a single example of a moral law which can or could be accepted by every human being. So it can be said that universal content of human consciousness does not provide any ground for the acceptability of these truths as innate ideas. Locke further stretches his criticism in the next paragraph as follows.6

"Universal consent proves nothing innate. This argument, drawn from universal consent, has this misfortune in it, that if it were true in matter of fact, that there were certain truths wherein all mankind agreed, it would not prove them innate, if there can be any other way shown, how men may come to that universal agreement in the things they do consent in; which I presume may be done."

Locke further examined that there may be certain truth upon which all mankind can be in agree but it does not prove that they are in it. Because co-existence of any idea among all human beings can have many reason or justification. There are many skills and capacities which human beings generally develop in due course of evolution or in the life of each human being. For example every normal human being can walk or can use a particular language. But it does not prove that these capacities are innate. Moreover the process of any idea in mind presupposes a linguistic framework within which that idea can occur, but this in turn amounts to the
presupposition of any given specified natural language as innate language. But this is absurd as we know that though it happens almost universally. These characteristics are developed in the after phase of human life since its beginning or birth.

Now Locke provides some counter examples, which according to him, prove that there are no innate ideas. This is state as follow.\(^7\)

"Not on the mind naturally imprinted, because not known to children, idiots, etc. For, first, it is evident, that all children and idiots have not the least apprehension or thought of them; and the want of that is enough to destroy that universal assent, which must needs be the necessary concomitant of all innate truths: it seeming to me near a contradiction to say, that there are truths imprinted on the soul which it perceives or understands not; imprinting, if it signify anything, being nothing else but the making certain truths to be perceived. No proposition can be said to be in the mind which it never yet knew, which it was never yet conscious of."

In this empirical example, Locke gives a proof of the nonexistence of innate ideas. In children, and particularly in infants, who do not have properly organized thinking capacity cannot have innate ideas. Because it is foolish to say that a child or an infant knows either the law of non-contradiction or the law of excluded middle. When it prefers toy and runs away from cat, it does not mean that he applies the law of identity according to which ‘toy is toy’ and again there is another application of the law of excluded middle according to which a cat can either be a cat or a toy or it cannot be both, cat and toy. These behaviors are to be explained as instinct based behavior. So it is useless to suppose the presence of the universal laws of logic in the mind of on infant. In the same way it can be said that the awareness of universal moral or religious principle is also unjustified. Which moral principle can be found in the mind of children? So as this is a universal fact that every human being was children in past, it proves that no human being had any innate ideas in his childhood. Therefore any claim of the universal presence of innate ideas in human mind is unjustified.

Locke's criticism of innate ideas has profound implications and important conclusions. Historically after Locke, the theory of innate ideas is never reappeared in its original form in modern western philosophy. It is important to note that even Leibnitz accepts the validity of Locke's criticism up to a certain extent. Furthermore when Locke says that it is also not acceptable that human mind do have some ideas but it was not aware of it. In this case, the very essence of mind in the form of thought
becomes questionable. So in the history of modern western philosophy, Locke's criticism of innate ideas provides a land mark in the further development of empiricism.

With reference to the main theme of the present research work it can be said that an examination of Locke's criticism of innate ideas is very much important. Kant himself justifies Locke's criticism of innate ideas by addressing him as 'celebrated Locke'. But what is to be investigated is this that human consciousness has some capacity of constructing and implementing the process of reflecting cognition or ideas or in the words of Kant, human consciousness has a particular type of unity which serves as the basis of the synthesis of that manifold which is provided before it through and by the outer form of intuition, that means, by space. Kant calls this unity as the synthetic unity of apperception. At present it can be said that Lock's criticism of innate ideas open the way for the further development of empiricistic epistemology.

3.2.2 Locke's dichotomy of sensation and reflection:

After criticizing the theory of innate ideas, Locke establishes the positive content of his empiricist epistemology in book-II of his 'An essay concerning Human Understanding' in the first chapter of book-2. "Of ideas in general and their original" Locke establishes his main foundation of empiricist epistemology in the beginning of the chapter. He remarks that idea is the object of thinking. That means that ideas do not have any independent ontological status which can be stated as the basic content of consciousness. Next question is about the sources of these ideas. Here Locke emphatically states his empiricistic conviction that there are only two sources for the origin of ideas. He states this in the following words.

"All ideas come from sensation or reflection, Let us then suppose the mind to be, as we say, white paper, void of all characters, without any ideas; how comes it to be furnished? Whence comes it by that vast store, which the busy and boundless fancy of man has painted on it with an almost endless variety? Whence has it all the materials of reason and knowledge? To this I answer, in one word, from EXPERIENCE; in that all our knowledge is founded, and from that it ultimately derives itself. Our observation, employed either about external sensible objects, or about the internal operations of our minds, perceived and reflected on by ourselves, is that which supplies our understandings with all the materials of thinking. These two
are the fountains of knowledge, from whence all the ideas we have, or can naturally have, do spring."

In this observation Locke puts his very thesis of empiricism that in the beginning the status of mind is that of white paper or in Latin *Tabula Rasa*. All the ideas, however different they may be from each other; they can come to our mind either through sensations or through our power of reflection. This power of reflection is the capacity of our mind, which in the words of Locke, forms different types of ideas through the process of some type of internal operations. The first source of idea is sensation and therefore the term 'sensation' is interpreted and explained by Locke in the following subsequent observation.¹⁰

"The objects of sensation one source of ideas. First, our senses, conversant about particular sensible objects, do convey into the mind several distinct perceptions of things, according to those various ways wherein those objects do affect them; and thus we come by those ideas we have of yellow, white, heat, cold, soft, hard, bitter, sweet, and all those which we call sensible qualities; which when I say the senses convey into the mind, I mean, they from external objects convey into the mind what produces there those perceptions. This great source of most of the ideas we have, depending wholly upon our senses, and derived by them to the understanding, I call SENSATION."

In this observation Locke says that our senses provide some data or raw material to our mind. This raw material which is transferred to our mind takes the form of an idea. Locke remarks that most of our ideas regarding particular objects or properties of those objects are of this type. Locke says that for the formulation of these ideas our senses are 'great source' which provide this raw material through the medium of sense data. This entire process of providing some impact of external objects before mind is called sensation by Locke and the ideas which are simple ideas are declared as depending on these sensations.

But mind does not have only simple ideas. All that which is there in our mind does not simply correspond to external objects whose impact can be considered as the source of those ideas. So, apart from these incoming sensations, there must be another source for the origin of ideas in our mind. Locke calls this second source-reflection and explains that source in the following way.¹¹

"The operations of our minds the other source of them. Secondly, the other fountain, from which experience furnished the understanding with ideas, is the perception of
the operations of our own minds within us, as it is employed about the ideas it has got; which operations, when the soul comes to reflect on and consider, do furnish the understanding with another set of ideas which could not be had from things without: and such are perception, thinking, doubting, believing, reasoning, knowing, willing, and all the different actings of our own minds; which we being conscious of, and observing in ourselves, do from these receive into our understanding as distinct ideas, as we do from bodies affecting our senses. This source of ideas every man has wholly in himself: and though it be not sense, as having nothing to do with external objects, yet it is very like it, and might properly enough be called internal sense. But as I call the other sensation, so I call this REFLECTION, the ideas it affords being such only as the mind gets by reflecting on its own operations within itself. By Reflection, then, in the following part of this discourse, I would be understand to mean that notice which the mind takes of its own operations, and the manner of them by reason whereof there come to be ideas of these operations in the understanding. These two, I say, viz., external material things as the objects of sensation, and the operations of our own minds within as the objects of reflection, are, to me, the only originals from whence all our ideas take their beginnings. The term operations here, I use in a large sense, as comprehending not barely the actions of the mind about its ideas, but some sort of passions arising sometimes from them, such as is the satisfaction or uneasiness arising from any thought."

The understanding and interpretation of the term 'reflection', which is being given here by Locke, provides a firm starting point of empiricist epistemology. There reflection is not to be taken as an inherent capacity of human mind. In other words, there is a fundamental difference between the reflection of mind according to Locke and power of reflection of each monad according to Leibnitz. Here 'reflection is nothing but a power of capacity of mind' which acts only on that which is being provided before it through senses. For the purpose and context of this present research work it is important to note that this power of reflection does not provide that necessity or universality which is the sole basis of knowledge in rationalistic discourse but what is important from an epistemological point of view is the consideration about the nature of this 'reflection'. There are only two types of epistemological operations which are there in human mind. Is there any difference of category between sensations and reflection? Locke does not seem to provide any definite answer to this question but if an affirmative answer is to be given then there is
a deviation from the basic standpoint of empiricism but a negative answer to this question as it has been given by David Hume in the subsequent development of empiricism and there empiricism, derives the conclusion of epistemological discourse in the form of skepticism. But so far as the interpretation of Locke is concerned, it is not being provided that there are some details of minds, independent of sensations which are the sources of reflection. So here the role of reflection is quite different from the role of transcendental apperception or the function of the synthetic unity of apperception in Kant. But it can be said that this dichotomy of sensation and reflection provides a way towards Kantian epistemology.

3.3 Berkeley's subjective idealism and its possible criticism:

The entire empiricist tradition represents a course of gradual development from Locke to Hume. Each philosopher in this sequence provides a remedy of the previous philosophy and presents a philosophical position which is a strictly empirisistic position. It is also a second characteristic of this tradition that the basic empirisistic beliefs are never given up and development is made in a uniform direction. Berkeley's example is an excellent example of this observation.

Berkeley starts his philosophizing with the refutation of certain inconsistent elements in Locke's philosophy. It is a surprising element that in the entire framework of empiricist philosophy, the source of cognition lies outside the subject and yet there is a continuous development of subjectivism in this philosophy. Let us examine why there is an inevitable connection between subjectivism and empiricism?

In empiricist epistemology, where the source of simple ideas may be the external objects which impart their impact on the subject through senses. In the construction of consciously awarded cognition, subject makes imposition from its side. In Locke, this subjective component is limited to the realm of secondary qualities like colour and smell, as they are not actually there but they are the result of the interpretation of subject. But in the philosophy of Berkeley, this component of subjective idealism reaches to its extreme as he refutes the Locke’s distinction between primary and secondary qualities. This position of Berkeley is very much important in the context of present research work because despite the presence of subjectively interpreted mechanism in Kant's philosophy, Kant is conscious that his transcendental idealism must not be equated with the subjective idealism of Berkeley.
Therefore it is necessary to examine this subjective idealistic position of Berkeley and its role in empiricist epistemology.

For the establishment of subjective idealism, and for the remedy of the short comings of the Locke's epistemological foundations, Berkeley makes an effective criticism of the distinction of primary and secondary qualities. In his book of the principles of human knowledge, Berkeley starts his criticism in following way.¹²

"Some there are who make a distinction betwixt primary and secondary qualities. By the former they mean extension, figure, motion, rest, solidity or impenetrability, and number; by the latter they denote all other sensible qualities, as colors, sounds, tastes and so forth. The ideas we have of these they acknowledge not to be the resemblances of anything existing without the mind, or unperceived, but they will have our ideas of the primary qualities to be patterns or images of things which exist without the mind, in a unthinking substance which they call matter. By matter, therefore, we are to understand an inert senseless substance, in which extension, figure, and motion do actually subsist. But it is evident from what we have already shown, that extension, figure, and motion are only ideas existing in the mind, and that in idea can be like nothing but another idea, and that consequently neither they nor their archetypes can exist in an unperceiving substance. Hence, it is plain that the very notion of what is called matter, or corporeal substance, involves a contradiction in it."

The distinction between primary and secondary quality was found in the philosophy of Locke on the concept of material substance. The concept of matter in the form of an unthinking substance is a fundamental concept of materialism. In the philosophy of Locke it was assumed that certain qualities are primary qualities which reside in unknown material substance. Inertia is the fundamental property of matter and this is the sole reason of the application of Newton's first law of motion to material things and objects. But Berkeley says that this is absurd. If matter is completely unknown then we cannot have any ground for the presupposition that this primary qualities whose impact upon sensation can make any epistemological connection with that matter. Berkeley makes an effective criticism of the objectivity of primary qualities in the subsequent description as follow.¹³

"Again, great and small, swift and slow, are allowed to exist nowhere without the mind, being entirely relative, and changing as the frame or position of the organs of sense varies. The extension therefore which exists without the mind is neither great nor small, the motion neither swift nor slow, that is, they are nothing at all. But, say
you, they are extension in general, and motion in general: thus we see how much the
tenet of extended movable substances existing without the mind depends on the
strange doctrine of abstract ideas. And here I cannot but remark how nearly the vague
and indeterminate description of matter or corporeal substance, which the modern
philosophers are run into by their own principles, resembles that antiquated and so
much ridiculed notion of materia prima, to be met with in Aristotle and his followers
without extension solidly cannot be conceived; since therefore it has been shown that
extension exists not in an unthinking substance, the same must also be true of
solidity."

Berkeley here puts some arguments about the relativity of geometrical and
dynamical properties of so-called physical objects. He says that apart from the
observation of mind the concept of great and small and swift and slow are
meaningless. Because without being judged from a cognitively aware mind what can
be the objective standard for the judgment of the validity of this so-called objective
properties. Extension itself is neither great nor small and equally any motion cannot
be classified into fast or slow motion. Berkeley concludes that all these primary
characteristics belong only to mind. Berkeley remarks that the concept of inertia is a
reminiscent of Aristotelian concept of inert matter, whose property is to remain in a
static position and for which down ward motion is the only natural motion. It may be
said at this point that, though unknowingly, Berkeley is anticipating the foundation of
the theory of relativity. It is a known fact of science that there is no preferred state of
rest for any material object and also in the general theory of relativity there are no
preferred inertial frames of reference. Actually an state of motion either accelerating
or circulating is a non inertial frame of reference. Therefore it can be said that
Berkeley has made an effective criticism of the distinction between primary and
secondary qualities, which is relevant not only from a philosophical point of view but
also from a scientific view point. It is observed that in general interpretation quantum
mechanics does not accept this distinction. So with reference to the discourse of our
present research work, Berkeley provides, like Kant, a firm basis for the theory of
contextual explanation.

Berkeley's criticism covers the objective validity of all abstract ideas. He says
that even numbers do not have that type of objective reality as it is generally
supposed. In the same line of criticism Berkeley says that the concept or idea of unity
is also subjective and there are no non compound simple unites which we can observe in the universe.

In this way Berkeley's criticism of primary qualities covers almost all physical characteristics which we can find either on the ground of common sense or remains as existing? According to Berkeley the very meaning of the term existence requires a ramification. Berkeley states the subjectivity of existence in the following way.15

“so long as we attribute a real existence to unthinking things, distinct from their being perceived, it is not only impossible for us to know with evidence the nature of any real unthinking being, but even that it exists. Hence it is that we see philosophers distrust their senses, and doubt of the existence of heaven and earth, of everything they see or feel even of their own bodies. And, after all their labor and struggle of thought, they are forced to own we cannot attain to any self-evident or demonstrative knowledge of the existence of sensible things. But, all this a doubtfulness, which so bewilders and confounds the mind and makes philosophy ridiculous in the eyes of the world, vanishes if we annex a meaning to our words, and not amuse ourselves with the terms ‘absolute,’ ‘existence,’ ‘exist,’ and such like, signifying we know not what. I can as well doubt of my own being as of the being of those things which I actually perceive by sense; it being a manifest contradiction that any sensible object should be immediately perceived by sight or touch and at the same time have no existence in nature, since the very existence of an unthinking being consists in being perceived.”

Berkeley's esse est percipi or 'existence is perception' is the extreme example of the foundation of subjective idealism. But it appears that it is a natural conclusion which can be drawn from any epistemological premises which contain the elements of subjectivity of knowledge in themselves. Epistemologically, the trouble with empiricism is this that it has to rely upon senses and mind in a peculiar way. Senses are generally schema which provides the raw material of knowledge to mind but no cognitive judgment can be passed by the senses. And there cannot be any concept of a cognitive knower which is passing judgment without any interpretative content. Suppose from particular sensation a typical sense data in the form of an X is being presented before mind. Now it is not sufficient for any epistemological discussion that the sole function of mind is its awareness of that sense data. But this interpretative discourse inevitably demands mind to pass a judgment on what is being put before it. And in this process mind has to operate its own epistemological mechanism. This is
the point which becomes very much important when we take this entire discourse in the reference of Kant.

Apart from all that which is considered here, subjective idealism has its own philosophical shortcomings. If we want to derive the ontological conclusion from subjective idealistic premises, and if an answer to the question 'What is there to be given?' Then the answer or derivation which is to be found is solipsism. Bertrand Russell in his book, 'A history of western philosophy' remarks that this solipsism results into the solipsism of moment. This means that if we accept ‘esse est percipi’ in its complete sense then the conclusion which is to be drawn is this that only 'I' exists. This 'I' may be either Berkeley or anyone who is writing or reading these lines. But matter does not stop here. Even this 'I' cannot have any continuous existence which can cover its past or future life. What can be said is this that only the present moment of that 'I' is existing. This is called the solipsism of moment. Russell further remarks that this position, though logically irrefutable, yet contains certain type of absurdity in itself. Russell further observes that. There was a time when life did not appear on this planet, whether this proposition is true or false it cannot be refuted on the ground of pure logic.' Russell's observation is logically consistent, it can be said that if all conscious beings from the universe disappear then rest of the universe remains almost the same with the normal application of the laws of nature. This remark of Moritz Shlick again makes an effective criticism of subjective idealism. In the context of the present research work, it is important to note that Kant is very much aware that his transcendental idealism is to be taken from a completely different philosophical position than Berkeley. The further discussion with reference to Kant will be made in the subsequent description of this research work but at present, it can be said that Berkeley has only drawn that inevitable conclusion which lies in the very foundation of empiricist epistemology.

In the philosophy of Berkeley, the existence of conscious self as conscious substance and the application of the law of causality, even among the realm of percepts, are accepted. Berkeley even accepts the existence of God and grants the existence of all the objects of world as the perception of God. But these conclusions are not consistent with the epistemology which is based on the belief that the sole source of knowledge is sense perception. In the following derivation from Berkeley the question naturally arises that what is the source of the knowledge. This question is very much important for Kant philosophy of any cognitive knowledge apart from the
subjective contents? And in the light of empiricist tradition this becomes the central theme of philosophizing, in the philosophy of David Hume which will be evaluated in the next subsection.

3.4 Hume's view on space, time and causality and its impact on Kant's philosophizing:

Hume, the last important British empiricist philosopher, is an important historical figure in many dimensions. The first thing is this that in his philosophy according to Russell\textsuperscript{17} 'empiricism finds its dead end, it is impossible to go further in that direction'. Second important thing is this that in the philosophy of Hume, there are important philosophical issues and discussions, which we find important apart from the philosophical conviction which is limited to empiricism. So it is necessary to form certain remarks and estimation about historical and methodological background of Hume and its possible impact on the philosophy of Kant.

3.4.1 David Hume, his philosophy and methodology-certain remarks:

Unlike the case of rationalistic tradition where each philosopher started his philosophy with different assumption and arrived at different type of ontological results, in the tradition of empiricism a gradually developing state of philosophizing can be observed. Before considering the basic philosophical position of Hume in the general perview and before undertaking the methodological riddles which are provided by Hume, it is necessary to understand the methodological position of his previous philosopher George Berkeley.

As we have seen in the previous, the ontological position of Berkeley is that of solipsism. The term 'existence' has been limited to the percepts of individual consciousness. Now within this ontological situation; what is the methodological status of the advice of Bacon which is given to philosophers and scientist, it includes the imperative sentence 'Don't think but look'. But for looking towards the external world, there must be an objectively existing external world. Another important point is this that in the terms of general philosophical agreement it is believed that inductive logic is the methodological tool for the philosophy of empiricism just like deductive methodology is to be applied to rationalism. This is so because empiricism finds its data for philosophizing through senses, and senses have some contact with external world. Now more enlistment of the recorded data is not sufficient. One has to make
some interpretative generalizations on the ground of that data. This process of generalization is based on induction. But up to the philosophical position of Berkeley, a question naturally arises that, if there is no matter extending in space and physical object are not out there, then where this induction is to be applied as a methodological device of empiricism? Implicitly, Berkeley accepted the validity of the principle of causality and inductive logic but these principles cannot be applied simply among the perceptions of an individual consciousness. This position has been examined in the philosophy of David Hume who refuted the principle of causality and induction as necessary principles which are being applied to nature. For the first time in the history of western philosophy, with these critical examinations, Hume produced a logical anti- metaphysical position via empiricism. The importance of this position has been recognized by Bertrand Russell in his book 'The history of western philosophy' in these words. 

“Ever since he wrote, his refutation is a favorite past time among metaphysicians; for my part I found none of these refutations very much convincing.”

So Hume's philosophical position is anti-metaphysical and this anti-metaphysical position is basically important for the context of the present research work. It has its contemporary relevance as A.J. Ayer, the famous logical positivist and anti metaphysician, says that Hume's idea regarding the acceptability of metaphysics are in agreement with the logical positivistic anti-metaphysical views in the anthology edited by himself an entitled as 'Logical positivism'. He confirmed is view regarding this about Hume's anti-metaphysical state by quoting the following paragraph of Hume in these words.

“If we run across a library and find any book on traditional metaphysics or theology we will ask two questions to us. Does it contain anything which is based on facts of experience or observation? Or does it contain any abstract ideas which are based on the relation among numbers and quantities? If the answer to these both questions is in negative, then commit it to flames because it can contain nothing but sophistry and illusion.”

About this paragraph of Hume, Ayer remarks that this is an excellent exposition of the anti-metaphysical position of logical positivism. In historical perspective, Ayer is correct because Hume's absolute dichotomy of formal and factual sciences and its limitation of the application of meaningfulness only these two disciplines reminds the extreme reductionalistic position of Rudolf Carnap according
to whom any meaningful factual statement can be reduced to the proposition of physics. For present context Hume's position together with its empiricistic perview is to be taken into consideration with Kant's critique of metaphysics and so it is necessary to examine the position of Hume in greater detail and in wider historical references.

3.4.2  Hume on space, time and infinity: a possible anticipation of Kant:

The problem of infinity and its relation with space and time has remained as an unsolved problem since the beginning of ancient Greek philosophy, the famous argument of Zeno\textsuperscript{20} regarding the impossibility of motion rests upon the conception of infinite divisibility of space. If infinitesimally small units are permitted then motion becomes impossible. In the same way in any entire empiricistic epistemology the question of space and time together with their nature becomes an important question. With reference to Hume it is necessary to remark that any consistent philosophizing operates in a two layers of discourse. First layer is the ultimate ontological conviction which states that only ultimate reality of the concern metaphysical system is to be taken into account. While the second layer discourse contains the discussions and interpretations of those terms which may not be acceptable at the highest level but which are important in the natural disposition of the philosophical system. This we find in the philosophy of Hume in the following way.

As a subsequent philosopher to Berkeley, Hume accepts all the criticism of Berkeley which are directed to the existence of external world. That means that according to Hume Berkeley's criticism of the distinction between primary and secondary qualities as well as of the existence of a material object in the outside world are valid. If this is so then according to Hume, space or extension does not exists in reality independent of the perception of a cognitive knower. But if this position is to be granted then why should Hume bother about the infinity of infinite divisibility of space and time. There are two-fold reasons.

1) In the entire empiricistic tradition the status of space and time has not become that much clear, as it should be in epistemological reference. Naturally like physical objects neither space nor time can be the subject of sensation. So for Hume, and also for Locke and Berkeley, the question naturally arises that what is the source of the idea of space and time. For Locke whether these ideas are simple or compound? Or for Berkeley whether the perception of time is there in any cognitive consciousness
which can impart existence upon it? So, in short, it can be said that the role and background of space and time has not become very much clear in the pre-Hume empiricistic epistemology.

2) The second reason is this that even though any given entity may not be ultimately acceptable in a particular metaphysical system at ultimate level yet it requires some explanation, when normal description of world and its facts are being provided. So Hume takes much care about the idea of space and time and he mentions them in his book a 'Treatise on Human Nature'. The entire part two of that work has the title of the ideas of space and time whose first section deals with the concept 'of the infinite divisibility of our ideas of space and time.' It is necessary, with reference to the present research work, is to deal with the ideas of Hume in detail because they are to be compared with Kant's position about space and time. Hume takes the question in epistemological as well as physical reference. The divisibility of space and time up to infinity creates some mathematical as well as metaphysical riddles. The point is this that whether any given finite extension can be divided up to infinity and if it can be divided then can we have the corresponding ideas of that infinite divisibility in the context of empiricistic epistemology? Hume states his views and indicates the contradiction in the supposed concepts as follows.  

"Everything capable of being infinitely divided contains an infinite number of parts; otherwise the division would be stops short by the indivisible parts, which we should immediately arrive at. If therefore any finite extension be infinitely divisible, it can be no contradiction to suppose, that a finite extension contains an infinite number of parts: And vice versa, if it be a contradiction to suppose, that a finite extension contains an infinite number of parts, no finite extension can be infinitely divisible. But that this latter supposition is absurd, I easily convince myself by the consideration of my clear ideas. I first take the least idea I can form of a part of extension, and being certain that there is nothing more minute than this idea, I conclude, that whatever I discover by its means must be a real quality of extension. I then repeat this idea once, twice, thrice, and C and find the compound idea of extension, arising from its repetition, always to argument, and become double, triple, quadruple, and C till at last it swells up to a considerable bulk, greater or smaller, in proportion as I repeat more or less the same idea. When I stop in the addition of parts, the idea of extension ceases to argument; and were I do carry on the addition in infinitum, I clearly perceive, that the idea of extension must also become infinite. Upon the whole, I conclude, that the
idea of an infinite number of parts in individually the same idea with that of an
infinite extension; that no finite extension is capable of containing an infinite number
of parts; and consequently that no finite extension is infinitely divisible."

This observation and the derivation of contradiction in the concept of infinite
divisibility of space require attention in many directions. First we take the
methodological aspect of this type of argumentation. Here Hume is not directly
stating that as we are not having any direct sense impression corresponding to the
ideas of space and the legetimacy is not warranted in his epistemological position.
Here Hume is attempting to derive a contradiction in the concept of infinite
divisibility of space. This methodology is a methodology of dialectic reasoning which
was there in Plato in past and which has become an important tool in the philosophy
of Kant and Hegel. Moreover this is a peculiar characteristic of the method of F.H.
Bradley which he implements in his famous book 'Appearance and reality'. Hume is
also taking the same methodol
ogyical device for the investigation of the ideas of space
and time. Hume starts with the point that whether any given extension which is finite
can be infinitely divisible or not? Here it is important to note that Hume is not
considering the infinite divisibility of an infinite extension. What Hume says is this
that as an object of our thought only a finite extension can be given. Now can this
finite extension be divided up to infinity. Hume derives contradiction in the following
way.

Let us supposed that we are considering any given finite extension for our
concept of infinite divisibility, for the sake of simplicity here we are considering only
one dimensional extension that is the case of the segment a line. Call the magnitude or
quantum of this line segment 'X'. The magnitude of this 'X' is a positive real number
'a'. Now if this X is infinitly divisible, then as the result of this divisibility, we are
finding the sequence of infinity small intervals I_1, I_2,..... I_n. This supposed
division contains two mathematical possibilities.

1) Either |I|=0 or
2) |I| ≠ 0

Whatever the case may be as per philosophical consideration, the sum total of the
length of these intervals must be 'a' or in other words.

\[ \sum_{i=1}^{\infty} |ln| = a \]
But it is to be investigated that what is the result of our supposed logically possible options which we have stated above If \(|I|=0\) then

\[ \sum_{i=1}^{\infty} |ln| = 0 \]

and if \(|I| \neq 0\), then it must be equal to a positive real number and let it that number be 'c'. In this case

\[ \sum_{i=1}^{\infty} |ln| = \infty \]

but in any case, we are not obtaining the basic equation which we should have, that is:

\[ \sum_{i=1}^{\infty} |l| = a \]

And this is a contradiction in the concept of the infinite divisibility of finite extension which Hume has stated in the above mentioned reference.

The same type of argument with some modifications is being applied to the concept of time. Time so far as it is to be understood, normally has one dimensional existence and, naturally, in the time of Hume this one dimensionality is to be taken as linear. And so the derivation of the same type of contradiction can be derived with same mathematical symbolism as we have seen in the case of space. But here Hume adds an important point regarding the peculiar existence of time. This has been explained by Hume in the following way.23

"All this reasoning takes place with regard to time; along with an additional argument, which it may be proper to take notice of 'Tis a property inseparable from time, and which in a manner constitutes its essence, that each of its parts succeeds another, and that none of them, however contiguous, can ever be co-existent. For the same reason, that the year 1737 cannot concur with the present year 1738. Every moment must be distinct from, and posterior or antecedent to another 'Tis certain then, that time, as it exists, must be compos'd of indivisible moments. For if in time we could never arrive at an end of division, and if each moment, as it succeeds another, were not perfectly single and indivisible, there would be an infinite number of co-existent moments, or parts of time; which I believe will be allow'd to be an apparent contradiction."

The extra addition which is made by Hume, it is very much important. Time alone has this peculiar characteristic that as a unique existence. It lacks co-existence.
Different moments of time are not permitted to have their existence as a simultaneous existence. The flow of time forms a series and this series has to pass. But in the process of passing there must be some smallest unite of time and here the fundamental argument regarding the infinite divisibility of any continuous concept comes in between. The plain question which is being asked by Hume is this 'Whether any infinite division of a given duration results in zero duration or a finite laps, of time. What is to be amounted as present moment? How much time interval is to be assigned to present time? If it is zero then physical existence is to be attributed only of present and if we make it zero then the whole existence of entire time would become nothing. If it is not zero then why it is so that after that given temporal interval the further process of division, which is mathematically possible, stops arbitrarily at that point from a physical point of view. And so the co-existence of time is limited only to the present moment whose magnitude still remains undefined. And so in the concept of time also there is a derivation of contradiction even with greater strength. In this way Hume derives a contradiction in the concept of time and space and if this is to be taken seriously then the question of causality does not remains very much serious. But Hume wanted to refute this principle in subjective as well as objective word he made an effective criticism of the concept of causality.

For Hume the significance and meaningfulness of any idea lies in the correspondence of that idea with sense-impression. Hume wants to apply the same criterion on the principle of causality which is also important with reference to Kant as it had awakened Kant from his dogmatic sleep, will be examined in the next section.

3.4.3 Hume's Criticism of causality and its criticism:

The principle of causality, which is accepted since the time of pre-Socratic thinkers, as a fundamental explanatory principle of the world, has been criticized for the first time by David Hume in western philosophy. This principle has to do something with induction. And induction is the main methodological device which is considered as a supporting tool for empiricist epistemology. Hume wants to investigate, in the factors of universality and necessity of this principle and starts his investigation with the basic conviction that if any idea or concept is significant then it must be related with the corresponding sense impression. In the case of causality, Hume didn't find any such correspondence and so he states that there is nothing like
causal necessity between those events A and B which are supposed as the causally related events. What is important is this that this criticism applies not only to supposed facts but also to the supposed relation between the ideas of cause and effect. Hume describes the origin of this idea and criticizes it in the following words.  

“No one can doubt but causation has the same influence as the other two relations of resemblance and contiguity. Superstitious people are fond of the rellicts of saints and holy men, for the same reason that they seek after types and images, in order to in liven their devotion, and give them a more intimate and strong conception of those exemplary lives, which they desire to imitate. Now 'tis evident, one of the best relicks a devotee could procure, would be the handy work of a saint; and if his cloths and furniture are ever to be considered this light, 'tis because they were once at his disposal, and were mov'd and affected by him; in which respect they are to be consider'd as imperfect effects, and as connected with him by a shorter chain of consequences than any of those, from which we learn the reality of his existence. This phenomenon clearly proves that a present impression with a relation of causation may enliven any idea, and consequently produce belief or assent, according to the precedent definition of it.”

In this observation and criticism, Hume wants to differentiate between the relation of resemblance and relation of necessity. According to Hume and also according to subsequent analytic thinkers the relation of necessity is based on the law of non-contradiction of formal logic. If we say that A can be both p and ~p together. We are not saying anything about the factual content of A and P. In these type of examples a proposition is called necessary it its negation is self contradictory. But any causal relationship does not involve a contradictory proposition when it is to be denied. Let us take the example of the proposition. 'The sun will not rise tomorrow.' This is the negation of the so-called universal proposition that 'sun will rise tomorrow.' As the negation is not a contradiction, the original proposition is not a tautology or a logical truth. So, according to Hume, the causal relationship is nothing but a mental habit which is supposed to be arised due to the process of successive association and this successive association creates the illusion of causality give to the property of resemblance therefore according to Hume causality is nothing which can be said as having any objective characteristic.

Hume's view about causality has created much disputes in metaphysical philosophy. With reference to the present research work, particularly with reference to
Kant, this goes against the fundamental conviction of Kant. As it will be shown latter that there cannot have any necessary causal relationship in the objective world but it may be taken as an inevitable subjective condition for the function of our understanding. There is another important negative result in Hume's philosophy about the existence of a permanent substantial self. A brief outline of that result is given in the next sub-section.

3.4.4  **Hume's View of self a critical evaluation:**

In the development of empiricist epistemology up to the stage of Berkeley, a permanent substantial self was accepted. But Hume applies the same empiricistic methodology for the determination of the existence of self what Hume says is this that in our mental content or within our epistemological capital we always find either this or that idea or one or another sensation. What Hume remarks here is this that the difference between thought and sensation is not of the nature of a categorical difference. In other words thinking process or thoughts is not a completely different type of cognitive entity which requires a non material substance as its ground and so what is called self or soul is nothing but the collection of thoughts or bundle of sensations. Hume states his position in following words.25

"When I enter into myself or this I, I have never found any substantially conscious entity corresponding to 'myself' or this I. I have always found either this or that sensation and so this I is nothing but a word which is used for the collection of thought or sensations."

Hume's observation about the nature of personal identity appears for the first time in the history of western philosophy. This is not in agreement with the basic views of Kant, yet it is difficult to find out what is the basic source of their difference. Even, according to Kant, there is no permanent, substantial and unalterable self, and yet Kant does not take the unity of cognitive consciousness simply as a bundle of thought or a collection of sensations. It is a matter of a problematic situation in this research work and an attempt of its solution will be made in the further development of the work when a critical consideration on Kant's position will be made in the next chapter.

3.5  **Conclusive evaluation:**
If we find a form of conclusive evaluation of the development of empiricist epistemology, then the result is as much disappointing as rationalism. We have seen in the previous chapter that rationalism has been ended in the form of a complete dogmatism. Yet in its further development of German metaphysics Christian Wolff suggested a combination of deductive formalism and objective facts. In this chapter we have examined the methodology and epistemological postulates of empiricism. Empiricism, started from Bacon, with the methodology of induction but due to the presence of the element of subjectivism, the objective validity of induction has lost its meaning in the further development of empiricism. The end of empiricism is surprising, because empiricism starts with the experience of the outer world and ultimately there is no outer world which is to be experienced. In the philosophy of Hume, there are sensations and thoughts but who is thinking? And about what? There is no answer to these questions. In other words, the epistemology is resulted with the conclusion that the only existence is that of knowledge without known and known-object. This situation is described as a dead end by Bertrand Russell as we have mentioned. But here there is a methodological question; if deduction and induction both are failed as methodological devices then which type of methodology is to be used for finding a way out of this skeptical and dogmatic riddles? The method which can be used, and has been used, is transcendental and critical method, which is seen in the philosophy of Kant which we shall study and investigate in the next chapter.
Notes and Reference


3. Generally in the history of western philosophy, the foundations of empiricism are traced back to Bacon. Bacon’s famous imperative ‘Don’t think but look’ is a statement which confirms the empiricist epistemology according to which, the method of factual knowledge is experienced based induction. cf. Peltonen Markku (2005) ibid


5. In classical logic these three propositions are accepted as the laws of thought, they are

   \[ p \Rightarrow p \]
   \[ p \lor \sim p \]
   \[ p \land \sim p \]

   It is assumed that any consistent thinking process is governed by these laws. From a modern point of view, these statement form are simply tautologies which do not have any priority over other tautologies. cf. Copy I. M. And Cohen (2011) ‘Introduction to logic’, P. H. I., New Delhi


   Kant criticises innate ideas on a different ground. In the present context, Kant states his partial agreement with Locke


10. Locke John (1998) ibid P.50

11. Locke John (1998) ibid P.50

14. These types of motions are not the subjects of Newton’s first law, and therefore in
them, neither Galilean nor Lorentz transformations are valid. Here Berkeley is
criticising the Newton’s concept of absolute space. This criticism is valid up to a
theory’, Dover publication, London
15. Berkeley George (1961) op. cit. P.301
London. Here Russell is criticising Berkeley’s position of subjective idealism which is
also criticised by Moore in his famous article ‘The refutation of idealism’
17. Russell Bertrand (1961) ibid
18. Russell Bertrand (1961) ibid
20. Zeno’s arguments against motion are based on the acceptance of the continuity of
space and time. If space and time are non-continuous then Zeno’s arguments do not
contain that much weight.
23. Hume David (1969) op. cit., P.80
24. Hume David (1969) ibid, P.150
25. Hume David (1969) ibid. Here Hume states his bundle theory of self which is justified
Press, Oxford