

LEIBNIZ AND METAPHYSICS

By

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It is certified that the Dissertation on "Leibniz and Metaphysics", submitted by Begum Qurratun Hosna to the North-Eastern Hill University for the award of Doctor of Philosophy, is a **research work** prepared under my supervision. It has not, either wholly or in part, been submitted to any other institution for conferment of a degree.

In habit and character Begum Qurratun Hosna is fit and proper person for the degree of Ph.D.

Dated Shillong,
The 30th sept 1992

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CHAPTER - I

INTRODUCTION

Metaphysics which has a long and glorious history of almost three thousand years has now confronted with serious challenges from many sides. Metaphysics is claimed to be meaningless. In this chaotic situation which prevails in the philosophical circles today, the problem concerning the meaning of metaphysics has assumed a special significance, but this problem seems to be extremely complicated and it tends to defy any easy solution. It is very difficult or rather impossible to arrive at any conclusion concerning the meaning of metaphysics which may gain universal acceptance, but one may raise certain basic questions about metaphysics itself. These questions may be formulated as (1) what is metaphysics ? (2) Why there is metaphysics ? Metaphysics is interested in Being as Being. It seeks to know the nature of everything that is in so far as it is. This can be said to be the basic task of metaphysics or 'first philosophy'. Metaphysics is interested in the things or objects only in so far as they point to the

reality of Being. Being is ultimate reality. The unreal can be negated only on the basis of real or being.

"If one asks why there is not nothing, one attributes being to nothing."¹

Ultimate reality or being is not one being among other beings. It is being itself. It is on a level quantitatively different from that of any being. It constitutes the depth of reality or existence. Metaphysics cannot directly know being in itself. It can know it only through beings, through the world and the individuals. So it has to reflect on the nature of the ~~the~~ world, nature of objects and individual existence. Metaphysics approaches nature not with a view to know its physical structure and to exploit it for practical purposes. It reflects on nature in order to know its ontological structure.

Since the beginning of philosophy, metaphysics has been a problematic, not to say controversial subject. According to some

1. Paul Tillich, Systematic Theology, Vol. I, p. 163.

philosophers, metaphysics has appeared to be the most important part of philosophy and proper solution of metaphysical problems leads to right understanding of all other branches of learning. But according to some other philosophers, it has been an object of ridicule. Whether metaphysics is possible at all is a curious question. Neither one raised the question whether physics is possible or art is possible or religion is possible, nor does one defend them. These disciplines may be problematic but not in the way metaphysics is. Metaphysical problems have gone unsolved but not unanswered, the same questions continue to recur. In order to solve metaphysical problems, the metaphysicians have employed the method of reasoning or argument. Metaphysician produces argument to show that universals do or do not exist, that man has or has not free will, that existence is or is not an attribute and so on. Even those philosophers who claim that metaphysical questions are pseudo questions also produce argument in favour of their view;

Friedrich Waismann has viewed that ,

" In philosophy there are no proofs; there are no theorems, and there are no questions which can be decided, yes or no. In saying that there are no proofs I do not mean to say that there are no arguments. Arguments certainly there are, and first-rate philosophers are recognized by the originality of their arguments only those do not work in the sort of way they do in mathematics or in the sciences".²

One of the curious features of metaphysics is that its disputes have gone unsolved for over two thousand years. It seems quite plain that no metaphysical dispute has been settled, in the way in which at least some disputes in mathematics or in the natural sciences have been settled. What is taught in physics or in mathematics is agreed upon

2. F. Waismann, 'How I see philosophy' Contemporary British Philosophy, 3rd Series, H.D. Lewis, ed., p.447 Cf.

the results of observation and experiment or of calculation and demonstration. But the same is not true of metaphysics where there are no results agreed upon by all competent practitioners in the field.

The word 'metaphysics' has been used in a variety of senses. Therefore, it is very difficult to suggest any clear and precise definition of the term 'metaphysics'. The word 'metaphysics' derives from the Greek word meta-ta-physika, literally, means after the things of nature, an expression used by the Hellenistic and later commentators to refer to Aristotle's untitled group of texts that we still call the Metaphysics. Aristotle himself called the subject of this texts first philosophy, theology or sometimes wisdom. The phrase ta-meta-ta-physika biblia (the books after the books of nature) is not used by Aristotle himself and was apparently introduced by the editors who classified and catalogued his works. Later classical and medieval philosophers took this title to mean that the subject discussed in metaphysics comes 'after the things of nature because they were further removed from sense perception and

~~therefore~~ more difficult to understand. In medieval and modern philosophy metaphysics has also been taken to mean the study of things, transcending nature, that is, existing separately from nature and having more intrinsic reality and value than the things of nature.

The word 'metaphysics' was coined by the librarian who was trying to classify the works of Aristotle. There was a work of Aristotle which was unnamed. The Librarian wanted to classify it. Out of disgust he threw the book and accidentally it fell after the Aristotle's work on physics. Since it fell after physics the Librarian named it metaphysics. Metaphysics literally means a discipline which comes after physics. According to Aristotle, metaphysics is the 'first philosophy'. It studies the basic assumptions and concepts used in different sciences. That is why Aristotle defined metaphysics as the study of being, qua being.

Popularly 'metaphysics' has meant anything abstruse and highly theoretical. The term has also been popularly associated with the spiritual and religions and even the occult. In modern philosophical usage 'metaphysics' refers generally to the field of philosophy dealing with questions about the kinds of things there are and their modes of being. Its subject matter includes the concepts of existence, things, property, event, the distinction between particulars and universals, nature of relations, change, causation, and the nature of mind, matter, space and time. In the eighteenth and nineteenth centuries 'metaphysics' was used broadly to include questions about the reality of external world, the existence of other minds, the possibility of a priori knowledge and nature of sensation, memory, abstraction, and so on. In the present usage these questions are included in the study of epistemology. The problems of metaphysics and epistemology are inextricably interrelated. Therefore, it is not always an easy matter to distinguish them. Metaphysics generally deals with the question of what is ? and epistemology with our knowledge of what is, but in the discussion of one the other is bound to

enter. Not all problems about 'what is' are metaphysical questions. For example 'how many books are there in my table' is a question of what is but it is not a metaphysical question. Metaphysical questions are not sufficiently general. Science deals with the most general questions. It attempts to discover laws and theories for explaining phenomena. Many persons have alleged that all such general questions are scientific ones and when scientific questions have been answered, there is nothing left for the metaphysician to discuss. But according to metaphysicians, this is not the case. Those 'what is' problems that could be resolved by empirical means alone are scientific ones, those that could be solved by mathematical means alone are mathematical ones and the remainder are metaphysical ones. Whether light consists of waves or particles, whether matter and energy are interchangeable are all scientific questions to be solved by empirical evidence. But there are other problems also, for example, what classes or categories, reality is to be divided ^{into} temporal or non-temporal, material or non-material.

is an issue left to metaphysics. It is wider than empirical science which normally treats only of the physical. If metaphysical issues cannot be resolved empirically then the question arises what they are? Metaphysicians hold the view that they are concerned with factual issues but they would then divide factual issues into two kinds, empirical and non-empirical. Metaphysicians would deal with the latter. So they would be issues of fact but facts that cannot be settled by empirical means but only by the systematic exercise of the understanding.

Epistemology enquires into the conditions under which knowledge is possible or it may be said to be an enquiry into the nature, origin, range and conditions of knowledge. Epistemology deals with such questions as - is knowledge of reality possible at all or not? What is the nature of knowledge? What is the origin or source of knowledge? What are the conditions of validity of knowledge? Here one question can be asked what then is the relation

between epistemology and ontology or metaphysics ?

Epistemology is the theory of knowing while metaphysics is the theory of being or reality. Ontology must be preceded by epistemology, since we cannot investigate the ultimate nature of reality that is known unless we already know the origin of knowledge and prove that knowledge is possible. Epistemology can be said to be the fundamental basis and ground work of ontology or metaphysics. Though there are some differences between epistemology and metaphysics yet one thing is clear that they are so intimately related that one cannot stand without the other. A particular theory of knowing leads to a particular theory of being and vice-versa.

Till the eighteenth century philosophy was largely identified with metaphysics. Philosophers were mainly concerned with what is real, what really exists in this world. But in the seventeenth and eighteenth centuries, philosophers shifted their attention to what we can be sure

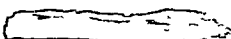
we really know and this question makes a group of science-oriented philosophers namely the logical positivists to doubt on the possibility of knowing anything of metaphysical or extra-sensory nature. Most metaphysical theories try to determine the real nature of things. Different metaphysicians have given different views of metaphysics. According to some metaphysicians, the basic reality of everything is mental, some say that it is material, according to others it consists solely of atoms and empty space. But here the question arises how does the philosophers know this and what sort of evidence he can give ? When we experience any object, the object appears to have spatial and temporal qualities as well as qualities of colour, shape, etc. According to some metaphysicians including Plato and Bradley our experience of these properties is so contradictory that they cannot be real features of things, but only an appearance or semblance of reality. For example, if a grape fruit is first green and then yellow then it is both green and not green. Therefore, according

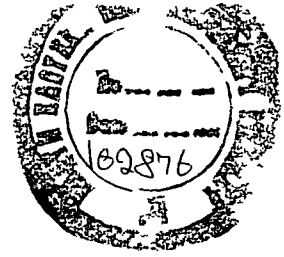
to metaphysician the colour of the grape-fruit must be an illusion which does not really exist in the grape fruit and this can be applied to all perceived qualities of objects. The single most important question in the entire history of metaphysics has been the question of 'substance' or 'the reality of objects'. In our everyday speech we distinguish an object from its properties which an object has. In other words, we distinguish what we say about a things from that thing itself. An object is one in number but it can have many different properties. These properties depend on the physical objects for their existence. If we take away all the objects in the world then we have thereby removed all the blueness, redness and squareness in the world. Therefore, to be is to be an object. On this assumption all western metaphysicians have proceeded from Aristotle to present. In writing about metaphysics it is only decent and it is certainly wise to begin with Aristotle.

Aristotle's book entitled, 'Metaphysics' is one of the earliest probably the best and certainly the most

influential work in metaphysics. According to Aristotle, metaphysics deals with the nature and reality of individual concrete existing things in the perceptible world of space and time, things like trees and houses which Aristotle calls substance. Just as biology deals with the question 'what is it to be a living thing?' and physics with 'what is it to be a physical thing?' likewise, metaphysics deals with the question 'what is it to be?' or in other words, what are the conditions or criteria necessary for a concrete individual object to exist? Historically, the study of being was limited to the study of being of substances.

The theoretical philosopher Aristotle had distinguished two tasks, first to investigate the nature and properties of what exists in the natural or sensible world and second to enquire into the character of 'the substance that is free from movement' or most real of all things, the intelligible reality on which everything in the world of nature was thought to be causally dependent. The first one is known as physica and the second which Aristotle had also

referred to as 'theology' is roughly the subject matter of his *Metaphysica*. If the two works had to be distinguished the *physica* would have to be described as more empirical just because it deals with things that are objects of the senses, what Aristotle himself called 'sensible substance' the matter of the *Metaphysica* 'that which is eternal, free from movement and separately existent' on any account more remote. The enquiries about nature carried out in the *physica* lead on naturally to the more fundamental inquiries about being as such that are taken up in the *metaphysica*. A common set of claims on behalf of metaphysics is that it is an inquiry into what exists and to determine what is truly real. Are dream objects real in the way in which palpable realities such as chairs and trees are? Are numbers real or should they be described as no more than abstractions? Is the height of a man a reality in the same sense in which he is a reality or is it a mere quality that has derivative rather than substantial being and could not exist except as attributes to something else? Many metaphysicians are of 



the opinion that the notion of substance, quality and its relation to other substance are internally related. They are of the opinion that every substance has qualities and stands in relation to other substances but only what is substantial truly exists. Let us take the example of a tree - this tree is tall, deciduous and is precisely 50 yards north of that fence. Here tree stands for substance and it has qualities and stands in relations. Tallness of the tree would not exist unless the tree existed. Now the question can be raised what the tree would be if it were deprived of all qualities and relations? The notion of substance in this type of metaphysics is that it may happen to possess but we must know how to apply it. But when we pick up one concrete thing to give the example of notion of substance it involves certain descriptions that means it cannot be spoken of apart from its qualities or attributes. Without substance we cannot have qualities and without qualities we cannot have substance.

According to Aristotle and medieval philosophers, the most real of all things was truly self contained and could accordingly be looked upon as self caused. Metaphysicians tried to persuade us that the world is really very different from what it appears to be have commonly proceeded. In Plato's theory of ideas he pointed out that in the sensible world things come into being and pass away, they have different properties at different times; for example, of being big or small, which vary with the things to which we relate them. According to this theory, the forms or ideas exist eternally and do not change. Thus the quality of goodness abides independently of its existence in the sensible world, so does the form of a table, no matter what tables actually exist. But according to seventeenth century Rationalist, the question 'what is ultimately real?' is a question about the ultimate stuff of which the universe is made up. The contrast between appearance and reality is peculiar to metaphysics. A cloud appears to us to consist of some white, fleecy substance although in reality it is a

concentration of drops of water. Generally men think that the scientist knows the real constitution of things as opposed to the surface aspects with which ordinary men are familiar. It is generally not sufficient to define metaphysics as knowledge^{of} reality as opposed to appearance because scientist also claims to know reality as opposed to appearance. According to Plato, the ultimate realities that the metaphysician seeks to know are precisely things as they are simple and not variegated, exempt from change, therefore, stable objects knowledge.

Thomas Aquinas divided philosophy into the real and rational. Again he divided real philosophy into speculative or theoretical and practical or moral. Theoretical philosophy includes physics, mathematics and theology while practical philosophy includes ethics, economics and politics. Physics deals with the qualitative relation of things which have sensible matter, mathematics with

quantitative relations of things accompanied by intelligible matter and metaphysics deals with immaterial objects such as the possible and the actual, the one and the many, God and the angels etc. The same science is called from different points of view either metaphysics or first philosophy or theology. The rational faculty or the faculty of understanding which is used in physics starts from sensible observation and moves one thing to another while philosophy or theology employs intellectual method which leads us through logic to a definite and certain conclusion. Rational cognition is concerned with many peripheral and temporal beings while intellectual cognition refers to unique, central and eternal being. Intellectual intuition is most suitable to metaphysics since metaphysics or theology deals with the highest reality and the principles of being. The name 'metaphysics' is closely connected with its intellectual method. According to St. Thomas the subject of metaphysics is common being, though metaphysics also deals with the first cause and independent being. This may be taken as

an ontological aspects of metaphysics. The object of physics is sensible matter, the object of mathematics^{is} intelligible matter. The one is movable while the other is immovable. The object of mathematics is separable from matter only in thought, but in existence it is accompanied by material substance. But the object of metaphysics is separate from matter both in knowledge and in existence. Metaphysics was explained as a function of understanding independent of experience.

In Descartes Philosophy we find some distinctions between (i) metaphysics and theology (ii) Metaphysics and Philosophy (iii) philosophy and physics or the sciences and (iv) methods on the one hand and metaphysics and physics or philosophy on the other hand.

Both theology and metaphysics contain propositions about God and His relation to the world. The propositions of God which have been demonstrated by reason and their

acceptance enjoined by reason belongs to metaphysics and the acceptance of propositions which have been demonstrated by faith and authority belong to theology. Descartes described metaphysics as "containing the principles of knowledge, an explanation of the principal attributes of God, of natures in our minds". According to him, metaphysics and physics are parts of philosophy. Descartes says -

" philosophy is like a tree, whose roots are metaphysics, whose trunk is physics and whose branches, which issue from this trunk are all the other sciences." ³

As with the term 'philosophy' Descartes seems to use the term 'method'. By the term method he means a set of rules, command or recommendations on how to act in certain circumstances with a view to attaining a certain end. Here method is taken in a narrower sense. In its wider sense the term method comprehends a number of statements about certain

3. Cf. letter to the French translator of the principles, which letter serves as a preface to the work, Haldane and Ross, Vol. I, p. 211.

elements and facts which combine to give the universe its ultimate constitution and about certain activities of our minds concerned in the discovery of those elements. The deduction, Descartes incorporates in his method is not that of Aristotle's treatise. He regards the syllogism as useless because it does not help in discovering anything new but helps in stating convincingly what we have already discovered. The logic of deduction that is of practical value is that which he calls the 'method of mathematics'. The study of Aristotle's syllogism inevitably leads to false conclusions. Here a question can be raised why did he appreciate mathematics so much? He gave two reasons first, the certainty of its demonstration and second, the evidence of its reasoning. According to him, mathematics cannot only be applied in the mechanical sciences but also be expanded to interpret nature as a whole. He was less interested in analysis than are modern scientists and more concerned with a synthesis of facts. The two methods which he described as best in discovering new principles are intuition or an immediate intellectual awareness and

deduction which he described as correct inference that means from facts that are known with certainty. Descartes pointed out that this new method must be rigorous and not based on prejudices or wishful thinking. He further pointed out that we must have an adequate appreciation of the limitation of our understanding. Many secrets of nature will be beyond our knowledge. In short, reason must be disciplined, without it no certain progress in philosophy nor science can be made. Descartes method can be summarized in the following manner, first, to avoid all prejudice and precipitation in judgement, to accept nothing as true which cannot be clearly recognized as such; second, to divide up each problem into as many parts as possible; third, to develop an orderly connection of thinking, starting with simple facts and gradually leading to more complex problems; fourth, he pledged himself to make complete enumerations. Let us now see how Descartes understands these four injunctions. According to him, only that which we know to be true is ever to be accepted or asserted.

But it is found that we sometimes assert something to be true but which we later retract or withdraw as false. This is because we may be unwilling to take the trouble of thinking out and stating clearly what exactly is the difficulty and so we silently agree in passing judgement upon what is only 'more or less clear'. Therefore, our judgement cannot be taken as a knowledge but only a mere guess. Our only security plainly lies in refusing on affirming as true whatever is not clearly and distinctly discerned. We must understand clearly 'all' and exactly 'what' we are affirming. Therefore, we must avoid rashness and bias in judgement, never affirming what we do not know to be certainly true or what is even capable of being doubted. Therefore, Descartes is of the opinion that certainty in knowledge belongs to arithmetic and geometry. We come to understand complex truths about properties of figures or numbers through understanding how they are formally derived from a few simple truths, each of which we clearly and completely grasp.

According to Descartes, any problem imperfectly expressed must first of all split up into so many departmental ones as may be necessary to expel vagueness or indeterminateness of meaning from our thought and each of these simpler and clearer problem must be attacked separately.

Descartes' method is a technique and its purpose is to aid the investigator in realizing certain conditions, given certain contexts and occasions, so that he may reach certain results that would be unattainable if those conditions were unfulfilled. He also further pointed out that some judgements besides being clear and distinct must refer to something actually existent and affirms what is cognized with complete certainty and if it is actually existing then it is impossible to deny-or doubt the existence.

The starting point of Descartes' philosophy was his method of doubt. To doubt was not an end in itself, it

was a process of purification of eliminating various falsehoods and of ultimately arriving at an unshakable foundation of truth. Descartes started by challenging almost all of the accepted truths of contemporary philosophy. He challenged the concept of the existence of the world, even the existence of God. He is of the view that perhaps all is a gigantic illusion.

" I shall then suppose, not that God who is supremely good and the fountain of truth which have just been discussed."⁴

In this process of doubting he finally reached a solid foundation that for while we are doubting we are using our thinking process. In fact our doubts imply the reality of our thoughts. Doubting means thinking, this implies a self-consciousness. 'I think, therefore, I exist.' Cogito ergo sum. According to Descartes, this proposition is very

4. Meditations, meditation 1.

important for metaphysics because it does satisfy the three requirements namely (a) it is 'clear and distinct' (b) it does essentially refer to something existing (myself) and (c) we cannot think of it without knowing it to be certainly true. When we become aware that we are thinking beings, this is a primitive act of knowledge derived from no syllogistic inference but by a single act of mental vision that everything that thinks, is or exist, has been learned from the individual's experience, that unless he ~~exists~~ he cannot think. It is an intuitive induction. Intuitive induction is immediate not syllogistic.

The nature of self is to be determined gradually through metaphysics. What I can know by simple inspection is that 'the thing which thinks' is a substance. It is certain that thinking cannot exist without a thing which thinks or generally that any accident or activity cannot be without a substance of which it is the activity. The

existence of self is disclosed through its activity and if we could not be aware of our own activity then we can never be certain of our own existence. How can we pass from knowledge of ourselves to knowledge of other things which constitutes a metaphysical question. According to Descartes, if we are to reach knowledge of objects in the material world, we must introduce beliefs other than that of our own existence. But these beliefs must be certain. These beliefs are not pieces of certain knowledge but merely as hypothesis and the acceptance or rejection of which awaits demonstration. The ideas of material objects, for example, the sun, the stars, material bodies of all sorts are the beliefs in the existence of physical world. If we scrutinize these beliefs, we see that all that is clear and distinct in any of them is that 'thoughts of those ^{things} are' present to my mind. Such ^{are} ideas of things existing independently of them and these ideas convey the real natures of things. Now, whether or not we believe that God exists, we certainly have an idea of one. This idea,

Descartes maintains is clear and definable. Men not only have the 'thought' of a God but further proceed to assert that God exists, that is to assert that this thought is one of an actually existing being, whose nature is faithfully, if not completely, presented in that thought. The problem of justifying the ostensible reference to existence in belief that asserts existence is a general one. 'To have an idea of God' is one thing and 'to believe in God' (which involves the assertion that God exists) is another. The 'thoughts' these two beliefs contain being clear but problem arises when we take into account its actual existence. Whatever exists or 'is' there is some cause or some ground explanatory of it. According to Descartes, when we apprehend that it is impossible for a thing to arise from nothing, the proposition 'ex nihilo nihilo', is not to be taken as an existing thing or as a made of anything but as an eternal truth having its seat in our mind. We know by direct self inspection that we are at this moment apprehending so and so and our

apprehending occurs at this moment, therefore, than exist. But if ever we are to know that God or a material world exists we shall know it not by direct intuition but by some indirect proof. According to Descartes, the idea of God, that it is a clear idea of a possible existent is plain from the fact that we can define what is meant by 'God'⁵. According to Descartes, the idea of God is guaranteed by intuition. It is an innate idea. The determinable properties of being outspread in space and being capable of movement are all that Descartes sees clearly and distinctly to belong essentially and permanently to a material body and therefore, they must be defying character of 'matter'.

5. 'By the name God I mean a substance that is infinite, eternal, immutable, independent, omniscient, omnipotent, by which I myself and everything, else is indeed anything else exists, have been created'
Meditation III Haldane and Ross Vol.I. p. 163.

But how one can know that an external world exists ?

According to Descartes, we have a sensations which we cannot trace to our own nature. They come from the outside world which must be both qualitatively and quantitatively different from our own mind. Descartes' metaphysics therefore, be usually described as a dualism. Descartes proceeds from 'ideas' and attempts to reach knowledge of an existent world as consequence of a knowledge of God.

Philosophers like Descartes, Spinoza and Leibniz, ^{main} - ~~know~~ that ~~knowledge~~ of things as ^{they} really are, is to be explained through the exercise of pure reason not through sense perception. Descartes is a least metaphysician. Since his view of the world to which his reasoning led him could be said to be the product of the study of contemporary physics. Spinoza, on the other hand, though influenced by Descartes constructed a theory which could not be taken to be as scientific theory. By reflecting on the concept of

substance he said that there could be only one substance to which he gave the name 'God' or 'nature'. This popular idea of God, as the transcendent cause of nature is self-contradictory because the attributes of thought and extension which Descartes in his dualism had taken to be respectively characteristics of mind and matter were perfectly the corresponding attributes of God and there is nothing to be as freedom and everything within nature should be determined or fixed by God. According to Kant, the rationalist had been entirely mistaken in supposing that they could discover the nature of things merely by the exercise of reason, because reason was bound to lose itself in contradictions if it goes beyond the limits of possible experience. He further pointed out that the propositions of mathematics as well as certain other propositions like law of universal causation were both apriori and synthetic because they were and could be known to be necessarily true without the support of experience.

We know such propositions to be true because their truth is necessary for the world to become an object of our experience.

The distinction between things as they appear to us and things as they really are does not play an interesting part in Kant's system. He raised the question whether it makes sense to talk of things in themselves, apart from their relation to our manner of conceiving them. How could it be validly determined, by reason alone that the world is so very different from what it appears to us to be ?

We may all agree that metaphysics is an attempt to know reality as against mere appearance or the study of first principles or ultimate truths or again the effort to comprehend the universe not simply by fragments but somehow as a whole. Any such pursuit will encounter a number of objections. To discuss the distinction between appearance

and reality, let us take the example of a table. To the eye it is oblong, brown and shiny, to the touch, it is smooth and hard and when I tap it, it gives out a wooden sound. Anyone else who sees, feels and hears the table will agree with this description. Although, I believe that the table is really of the same colour all over, the parts that reflect the light look much brighter than the other parts and some parts look white because of reflected light. The apparent distribution of colours on the table will change if I move the parts that reflect the light. There is no colour which pre-eminently appears to be the colour of the table or even of any particular part of the table it appears to be different colours from different points of view. This colour is not something which is inherent in the table but something depending upon the table and the spectator and the way light falls on the table. When in ordinary life we talk of the colour of the table we normally refer to the sort of colour which a

normal man have from an ordinary point of view under usual conditions of light. But the other colours which appear under other conditions is to be considered as real. Therefore, we are compelled to deny that the table has any one particular colour. The same thing applies to smoothness and roughness of the table, the shape of the table, the touch of the table. If we look at the table through a microscope we should see roughness and ups and downs and all sorts of differences which we cannot perceive with our naked eyes, Then the question arises which one is the 'real' table ? We will naturally say that what we see through microscope is more real but that in turn would be changed by a still more powerful microscope. Then again the question arises if we cannot trust what we see with a naked eye why should we trust what we see through a microscope ? The same difficulties arise in case of shape also. If our table is 'really' rectangular it will look from almost all points of view as if it had

two acute angles and two obtuse angles. If they are of equal length, they will look as if the nearer sides were longer. All these things are not commonly noticed in looking at the table. The 'real' shape is not what we see it is something inferred from what we see and what we see is constantly changing in shape as we move about the room therefore, the senses seem not to give us the truth about the real table itself but only about the appearance of the table. Again, the table always gives us a sensation of hardness and we feel that it resist pressure. But the sensation we obtain depends upon how hard we press the table and also upon what part of the body we press with. Thus the various sensations due to various pressures or various parts of the body cannot be supposed to reveal directly any definite property of the table. The same applies still more obviously to the sounds which can be elicited by tapping the table.

From the above discussion we can come to the conclusion that the real table if there is one is not the same as what we immediately experience by sight or touch or hearing, it is not immediately known to us but must be an inference from what is immediately known. If this is the case then the questions arise, is there a real table at all ? and if so, what sort of object can it be ? Both Berkeley and Leibniz admit that there is a real table. But Berkeley says it is certain ideas in the mind of God. According to Berkeley, the table must continue to exist even when we shut our eyes or no human being is near it. But this continued existence is due to the fact that God continues to perceive it. The real table which corresponds to physical object, consists of ideas in the mind of God. Thus apart from minds and their ideas there is nothing in the world.

It has appeared that if we take any common object of the sort that is supposed to be known by the senses,

what the senses immediately tell us is not the truth about the object as it is apart from us but only the truth about certain sense-data which so far as we can see depend upon the relations between us and the object. Thus what we directly see and feel is merely 'appearance' which we believe to be a sign of some 'reality' behind. But if the reality is not what appears, have we any means of knowing whether there is any reality at all ? and if so have we any means of finding out what it is like ?

Many metaphysicians are of the view that reality or what is ultimately real cannot be applied to space and time. Temporal and Spatial predicates apply to appearances only. What is real does not endure through time nor is it subject to the conditions of space. According to Plato, forms or ideas are real and whose true location was nowhere. Christian philosophers conceived of God as existing from

everlasting to everlasting and God must exist timelessly and apart from space. According to Kant, through intuition we can know space and time. Things are experienced through space and time. He is of the view that nothing can be real that does not conform to spatial and temporal requirements, and there is nothing real beyond space and time.

In connection with space and time men generally think of all events as happening before, simultaneously with or after the moment that is called 'now' and all spatial positions as relating in some way or other to the point that is called 'here'. Kant's view of space and time differed from that of the English empiricists who had asserted that space and time can be derived only from experience. But Kant gives an opposite view of space and time. According to him, knowledge of space and time is inborn. They are prior to experience rather they makes experience possible. The knowledge of externality or internality that is, when we say some object is inside the house or outside the house and this knowledge of inside,

Outside, here, there, etc. is possible because we already have the knowledge of space, Kant says that no experience of external relations of sensible things could yield the idea of space, because without the consciousness there would be no external experience whatever.

According to Kant, we cannot think space away, although we can quite readily think of space as empty of objects. Space, therefore, is not determined by phenomena, rather all objects are determined by space. We can ask one question, does space have metaphysical validity? Can it be applied to reality as a whole? Kant answered in negative. Space cannot be applied to thing in itself. It is an apriori form of perception which underlines the phenomenal world. According to Kant, space cannot be applied to metaphysical entities. It is the aprior form of perception

not of God. As regard time, Kant says, that it is a necessary idea and without it we cannot perceive phenomena. No phenomena can exist which are not in time. Time is not and independent substance like space, it cannot be applied to thing in itself or to God. Time does not subsist by itself nor does it inhere in things which do subsist by themselves.

Kant says that the proper objects of metaphysics are three ideas that is God, freedom and immortality. He further says that the principle objects of metaphysics are thus thought to lie outside possible experience. Kant considered the final end of metaphysics to be the knowledge of transsensible ideas. He viewed that metaphysics is the science outside and beyond the range of natural sciences. Though the final end of metaphysics is the knowledge of trans-sensible ideas yet the knowledge of sensible things is not excluded from its domain.

Kant says -

"Ontology as a part of metaphysics is a system of all concepts of understanding and principles, in so far as these are given to sense and are concerned with objects that may be experienced. It does not concern itself with trans-sensible objects, which nonetheless, are the final end of metaphysics. Ontology, therefore, belongs to metaphysics merely as a preliminary science of metaphysics proper, as its porch or front garden. It is called transcendental philosophy because it comprises the conditions of all knowledge apriori and its first elements".⁶

Kant is primarily concerned to discover how the truth or falsity of any metaphysical principles whatever can be

6. Fortschritte, W.W. (Cass) VIII, P. 283

made out. He is dealing with the question 'how is metaphysics possible as a science'? That means how metaphysical principles can be verified? Metaphysics is that portion of philosophic enterprise in which men have tried to replace conflicting views about the nature of things in general with genuine knowledge. Each of the sciences has a limited domain. None of the particular sciences nor all of them taken together are in a position to disclose what things are like in general.

According to Kant, the remarkable failure of philosophy is in metaphysics. The question how things are in general no thinkers have been able to establish results which all experts will accept, there is nobody of established knowledge to which a person can be referred.

Philosophers in every age have been free to begin a new. What they find are conflicting sets of doctrines. Kant is of the view that history of metaphysics has been a history of recurrent attempts and the study of the history of metaphysics is a study of a series of glorious failures. Some readers of Kant hold that he identified metaphysics with the knowledge of the immortality of soul, the freedom of will and the existence of God. Others are of the opinion that he rejects just those doctrines and he argues that there is no justification in believing in them or rather there is no justification whatever for metaphysics. Kant does not hold the view that any metaphysical knowledge whatever is impossible he rather holds the view that these are matters of metaphysical speculation upon which no knowledge is obtainable. In asking how is metaphysics possible, Kant is asking more than how metaphysics is possible as science ? This leads to the question how metaphysical judgements can be verified ? Kant divides all judgements into empirical judgements and a priori judgements. By 'a priori'

he means non-empirical. According to Kant, some judgements can be made out to be true or false by observing what they are about and he calls them empirical. Judgements about what occurred in the more remote past or about what will occur in future cannot be tested by observing what they are about. According to Kant, judgements as to what occurred in the past are verified by observing certain things which now obtain and inferring what must have occurred in the past for what now obtains to be such as it is. Similarly, predictions are based on observing certain things which now obtain and inferring from them what will come about at some later date. Yet a universal judgement cannot be verified by either ways.

The rise of logical positivism after the first world war is one of the most significant revolutions in the history of philosophy. Logical positivist denies the very possibility of metaphysics. The metaphysical

propositions such as, 'there is a God', the soul is immortal', etc. cannot be verified empirically, by sense perception and inference from perceived facts, nor is human reason strong enough to discover a priori whether they are true or false. Therefore, according to logical positivist, metaphysician is just wasting his time. According to logical positivist, when we try to state something or make an assertion then, if it is not empirically verifiable then nothing is asserted by it at all, it is neither true nor false but only meaningless. Ayer, the prominent spokesman of logical positivism, objected to metaphysics in general but to the metaphysics of substance in particular because according to him all metaphysical statements were devoid of literal meaning. Ayer holds the view that there are only two classes of meaningful propositions which can be said to be true or false - those which are analytic and a priori statements such as " all bachelors are unmarried", which are true and known necessarily to be true simply from the

meaning of the words used in it and secondly those which are synthetic and a posteriori that is, those factual statements about empirical world whose truth can only ^{be} learned either directly or indirectly from sense experience. From the above it is clear that only apriori and analytic statement whose truth can be determined independently of sense experience and which are true simply by definition are uninformative. Therefore, Ayer is of the opinion that we can have factually uninformative statements of logic and mathematics and at the same time we can have also factually significant statements like those of science and ordinary common sense, which are grounded on sense experience, but we cannot have metaphysical statements which supply information about an extra-sensory reality inaccessible to sense experience. According to Ayer, analytic apriori propositions are tautologies and denial of this proposition involves self-contradiction that is, the proposition 'all bachelors are unmarried' falls under this

category of propositions. But what happens when we apply this test to metaphysical statements. Let us take spinoza's claim that there is one substance. The denial of this statement is not self-contradictory therefore, it is not also tautology. Therefore, metaphysical statements do not fall under the class of analytic apriori statement. On the other hand, the denial of synthetic apriori proposition does not yield a self contradiction and the only way we can tell whether they are true or false is to look and see. Ayer points out that in order to be meaningful it is not necessary that a factual statement be completely or conclusively verifiable or falsifiable but there must be some empirical evidence which could count for or against the claim. For Ayer, it is not necessary to have the means here and now, of verifying a statement before it can be said to be meaningful but it must be possible in principle to verify the statement. Metaphysical statements cannot be factual because they cannot be

verifiable or falsifiable neither in practice nor in principle. They may be said to express some emotional or religious attitude but they are neither true nor false, but are simply nonsense and meaningless. Hume said -

"When we run over libraries, persuaded of these principles, what havoc must we make ? 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 matters of fact and existence ? No. Commit it to flames, for it can contain nothing but sophistry and illusion".⁷

Strawson held the view that metaphysics is of two types :
 one is descriptive metaphysics and other one is revisionist

7. Enquiry Concerning Human Understanding.

metaphysics. According to him, descriptive metaphysics is one which describe the actual structure of our thought about the world and revisionist metaphysics which attempts to provide a better structure. Like Aristotle, Strawson holds the view that there must be substance in order for us to be able to refer to, identify name and talk about particular things. He is of the view that in order to know the world we must be able to identify particular things of the world. Here I want to say something about what is particular and what is universal. Let us take few number of blue things - this shirt, that table, the ocean, the sky, etc. They are different in many ways, but they are all alike in being blue. The blue things are particulars but the property blueness, which they all share is universal. According to Strawson, in order to identify particular things of the world, we must be able to uniquely identify them and we must be able to identify particulars in spatio-temporal system. In analysing the concepts through which we

view the world, the philosopher is analysing such concepts as object, property, space time, causality and their relationships. The analysis of these concepts may be said to be metaphysical but according to Kant and Strawson, the metaphysician is not studying extrasensory objects but he is ~~also~~ simply analysing the concepts which we use in our ordinary sense experience of the world. We perceive the world in terms of objects and properties and the metaphysician ask what is it to be an object or a property. We live in a world of objects, with properties in space and time involved in causal relations. To analyse the concepts of object, property, space, time and causality is therefore, to analyse the world metaphysically. According to Strawson, metaphysics is a conceptual analysis which seeks to describe the actual structure of the world as we experience it.

Leibniz was also a follower of Descartes in the sense that he agreed with the clearness and distinctness of ideas. But while Leibniz agreed that metaphysical assertions are true if clearly and distinctly understood, he interprets this to mean that metaphysical truths are logically necessary and their denial involved self-contradiction. Leibniz understood clarity and distinctness in a logical rather than a psychological sense. For him, the true mark of clear and distinct notion of an object is the means we have of knowing there in many truths by a priori proofs. And we know the truth of a priori proofs by the help of definition or by the resolution of concepts.

To appreciate Leibniz's metaphysical system, we must understand the concept of continuity which plays so large a role in his philosophy. The universe forms a connected whole. It is basically mental. We do not perceive the external world directly, we perceive it only through

the intervention of God. What is real then, according to Leibniz ? Only monads, the spiritual force centres. In his universe there is no absolute rest and no absolute motion, rest and motion are merely phenomenal manifestation. Can force be reduced to spatial and temporal concepts ? Leibniz answered in an unequivocal way. Space depends upon co-existence and time upon succession but have their origin in subjective notions. The universe of Leibniz consists of an infinite number of monads. The universe thus is pluralistic and does not contain merely one substance which includes everything. The monads are indivisible and eternal and the universe is dominated by force which remains constant and indestructible. From this it can be said that energy or force is the keynote to modern thinking.

Monad is generally described in spiritual terms, it is like a self in its essential unity, it has no

material extension and its activity consists in an unending series of impressions and ideas. Leibniz describes these ideas as 'perception'. But it is misleading since they do not depend upon their being anything to 'perceive'. He also further pointed out that monads are pure mental images, not depend upon outside sources for their origin but arising from within the monad itself.

The most difficult point of Leibniz's metaphysics is the notion of substance. His notion of substance has its source in completely different tradition. When he referred to "individual substance" in 'Discourse on Metaphysics' he was using the language of Aristotle and trying like him to make individual substance the only true reality. Later he used the word 'monad'. In the above discussion, I have given a brief account of Leibniz's metaphysics. I will discuss in detail Leibniz's substance and monad in the second and third chapter.

I would like to discuss in brief Jaina metaphysics. The Jaina metaphysics is realistic and relativistic pluralism. Jainism claims that there are innumerable material atoms and innumerable individual souls which are all separately and independently real. And each atom and each soul possesses innumerable aspects of its own. Consciousness is regarded as essence of soul in Jainism. According to it, every soul from the lowest to the highest possesses consciousness and that the degree of consciousness^{ness} may vary. It is the considered position of Jainism that all souls are alike. Here I will not discuss Jainism in detail but in the last chapter I will discuss Leibniz and Jaina view of metaphysics.

I would like to conclude this chapter by emphasizing the utmost importance of metaphysics.

It is no exaggeration to say that we cannot talk about philosophy without talking about metaphysics. In recent time, logical positivists have tried to eliminate

metaphysics from philosophy. They have not succeeded in doing so. They are in a paradoxical situation. They want to get rid of metaphysics but they cannot completely extricate themselves from metaphysics. As Bergmann has pointed out, the logical positivists whether they know it or not, they all are either metaphysical materialist or phenomenologists.

You should have referred to Bradley who holds that one who rejects the possibility of metaphysics is just offering an alternative account of metaphysics — a brother metaphysician.

C H A P T E R - I I

Leibniz and Substance

The concept of substance and attribute are the focus of a group of philosophical problems which have their origin in Greek philosophy and in particular, the philosophy of Aristotle.

To be always means to be something. All existence is individual and has a determinate nature. All the categories and predicates, such as quality, quantity, relation, place etc. presupposes some subject to which these predicates can apply. This subject, to which all the categories apply Aristotle, called substance. To be is to be a particular kind of substance. Aristotle says that we know a thing better than when we know the colour, size or posture it has. According to him, mind separates a thing from all its qualities and focuses upon what a thing really is, that is, upon its essential nature. Aristotle defines substance as that which is not asserted of a subject but of which everything else is asserted. Substance is that we know as basic about something, after which we can say other things about it, and when we try to define anything

we must know the essence before we can say anything about it. For example, when we speak of a large table or a healthy man, here table and man are understood in their essence, that is, what makes them a table or a man, before they are understood as large or healthy. If we can know the ~~essence~~ essence of a thing 'tableness' as separable from these particular qualities, round, small and brown, there must be some universal essence that is found whenever one sees a table. This essence or substance must be independent of its particular qualities and in case of each actual table the qualities are different but essence is same. Here, what Aristotle wants to say is that a thing is more than the sum of its particular qualities. Therefore, according to Aristotle, any specific thing is a combination of qualities on the one hand and a substratum to which the qualities apply on the other. Here, the question arises what makes a substance a substance, is it matter as a substratum or is ^ait form? Although we can make a distinction between matter and form yet in nature we never find matter without form or form without matter. Everything that exists in nature is some concrete individual thing and everything is a unity of matter and form. Therefore, it can be said

that substance is a composite of both matter and form. Plato separates the world of thought from the world of things ascribing true reality to the ideas and forms, which he thought has an existence separate from the things in nature.

Aristotle rejects Plato's explanation that the forms or universal essence exists separately from individual things. Of course, Aristotle did agree that without the theory of universals, there could be no specific knowledge because there would be no way of saying something about all members of a particular class. When we use the words matter and form to describe any specific thing we have in mind the distinction between what something is made of and what it is made into. Aristotle argues that we never find such a thing as matter without form. For example, the sculptor who is about to make a statue of Venus out of marble, he will never find marble without some form, it will always be this marble or that, a square piece or an irregular one but he will always mark with a piece in which form and matter are already combined.

The matter of a body is what it is made of, and so its material, its raw stuff. The matter of a clay vase is the clay of which the vase is made. The form of a body is that which makes a thing a thing what it is and not anything else. The form of a clay vase is that which makes this object a vase and not anything else. Here, the shape of the vase is its form.

Man too is made of matter and form. His matter is the chemical bodies he is made of. His form, on the other hand, is everything through which all these chemical bodies that are the components of man are made into a living being, who feels and thinks. Man's form is thus everything that makes man a living organism.

Since Aristotle is interested in a science of substance, he is primarily interested in the idea of substantiality in general. Aristotle does not want a mere list of substances like trees, tables and so on but he wants a definition or explanation of substance in general. In the study of substantiality, there are different interpretations of substance. The materialists argue that substance is material because the house we plan to

Build does not exist until it has actually materialized. Independent existence of a thing is a relative notion, for example, just as properties of a table are dependent on the individual table so also the table is dependent on the wood from which it is made. The same can be applicable to the permanence of a thing. In the above example wood is more permanent than the table. If we break the table it ceases to be a table but it remains wood. But even the wood is not absolutely permanent for, it can be destroyed by burning. But the basic elements which make up the wood have not changed. Therefore, the material elements out of which the wood and table are composed is ultimately real. Aristotle argues that matter is one of the reasons why a thing is what it is. But according to Aristotle, matter although it is one meaning of substance, it cannot be the whole explanation.

According to some philosophers such as Plato, substance is the abstract idea or form which makes a thing real. How do we identify a table as a table, what tell us that it is a table - is the idea we have of a table. Idea is the only permanent thing, we can destroy

the table but we cannot destroy the idea of a table. Therefore, Plato is of the view that ideas of tablehood, treehood and so on could exist on their own and are the ultimately real things in the universe. But Aristotle criticises this view of Plato. According to him, the objects in this world can be sensed by our sense organs and for us they are more real than the idea of treehood, tablehood and so on. If the ideas are completely independent, self contained and unchanging, then why should anything but these ideas exist ? If they are so stable and permanent things why should this table, tree and other objects come into existence ? Dreaming of a million dollars does not make one a wealthy man. Therefore, according to Aristotle, no one alone can completely explain what makes an individual thing the particular thing it is. Aristotle held the view that substance is a combination of both matter and form. Here, one point can be raised that the matter-form theory can explain why this thing is a table, but it cannot explain why it is this particular table. Can this theory account for the difference between me and others ? My matter that is flesh and bones is the same kind of matter as others and my form that is human

nature is the same as others. Yet, we are not same persons, we are different people. Aristotle tries to answer this problem by saying that what differentiates two persons is not the matter out of which they are directly composed but because of primitive matter with which all human beings are made out of flesh and bones, flesh and bones are themselves made out of still more primitive matter and so on and this primitive matter is different and this is what differentiates us from one another. This pure matter cannot be known or understood. If this is the case, then it is difficult to explain how we know and differentiate individual things and distinguish them from imaginary ones. How we can account for the knowledge of them ? Most traditional philosophers rely on notion of intuition. But by intuition I can only know something as a certain kind of thing as a member of an identifiable class or group, that is, in general, not in particular. What Aristotle wished to say was that substance was always concrete, individual, physical and sensible. According to him, essence is really said to belong to a thing making it the particular thing it is.

Descartes makes a distinction between an absolute substance and secondary substances. According to him, what ever depends for its nature and existence on no other existent is absolute substance and nothing but God has this complete existential independence. Besides God, a plurality of ~~souls~~ and a world of bodies exist and they are called secondary substances. Though each of them exists independently yet their existence depends on the existence of that substance whose existence is absolute. To say that God is unchangeable and eternal, that God does not behave or have a history is to say that the determinable attributes of God are never determined into modes while the history and behaviour of each kind of secondary substances are being continuously manifested by some ^{or} other modes of that determinable attribute.

Descartes is of the view that to be a thinking thing does not itself prove that my body exists because my thinking self is entirely and absolutely distinct from my body and can exist without it. If this is the case, then how can I know that my body and other physical thing exist ? According to Descartes, we receive sense impressions of sight, sound and touch, frequently even against our

will and these lead us to believe that they come from bodies other than our own. He says that there are two kinds of substances in nature and a substance is always known by its attributes and since we know clearly and distinctly two different kinds of attributes, therefore, according to him, there are two different substances. One is spiritual substance, that is, mind and other one is corporeal or material substance, that is body. Descartes defines a substance as "an existent thing which requires nothing ~~but~~ ^{by} itself to exist". Therefore, mind and body are both ~~se~~ independent, and to understand one we need not refer to other. If they are so distinct and separate how can one account for living things? Descartes answer is that living bodies partake of extension therefore, they are part of material world and they operate according to the same mechanical and mathematical laws that govern ^o other things in the material world. Let us take the example of animals. We generally think that animals think because we see them act as humans do on certain occasions and assume that when animals perform human-like acts, their physical movement is caused by their mental powers. But according to Descartes,

the motion and action of animals are not mental but mechanical, since it is nature which acts in them according to the disposition of their organs like the clock which is only composed of wheels and weights. Descartes also pointed out that some of the activities of human body are also mechanical such as respiration, circulation of blood, digestion etc. Therefore, the working of human bodies can be said to be physical. According to him, the movement of human body could not originate in the human mind or soul, the soul could only affect or alter the direction of the motion of the body. The soul does not move the various parts of the body directly but having its principal seats in the brain in the pineal gland comes first of all in contact with the vital spirits and through these the soul interacts with the body. From the above discussions it is clear that Descartes tried to give human body a mechanical explanation and at the same time preserve the possibility of the soul's influence, through the activity of will, upon human behaviour.

Descartes holds the view that each ~~human~~ soul is a pure form without matter, capable of full existence without body. According to him animals and plants are completely devoid of consciousness and they are said to be natural machines. All their physiological and their biolo-

gical characteristics can be and should be fully accounted for mechanically in terms of their structure and the general laws of motion.

On the other hand, a human body is as much a machine as the body of an irrational animal or a plant. All its physiological and biological characteristics are to be accounted for mechanically. In spite of this mechanical process there is a temporary and very mysterious connexion between each living human body and a certain human soul. Certain processes in the human body produce sensations, images and emotions in the soul, and volitions in the human soul produce certain effects in the body. These effects in the soul and body are very limited because there is only one point in a human body at which the soul is said to have some effects, namely a certain part of the brain called the 'pineal gland'.

Descartes' strict dualism made it difficult for him to describe how the mind and body could interact upon each other. He tried to locate the mind in the pineal gland where the technical problem of interaction remains, for if there is interaction there would have to be contact and so

mind would have to be extended. It can be said that human being is a unity where mind is the form and body is the matter and without one there could not be other.

In modern philosophy, the problem of substance takes the form of the question whether there exist both mental and corporeal substances or whether only one of these kinds of substance exists. In other words, the problem can be said to be the problem of soul and body. The question that can be raised about soul and body is the question of what kinds of substances exist in nature. The main types of answer to this question appear under the names of dualism, materialism, spiritualism and the monism theory.

According to dualism, both spiritual and corporeal substances exist, that is, both souls and bodies exist. Bodies are the basis of physical phenomena, bodies move, change temperature, change in shape but bodies do not think, do not feel, do not suffer and do not experience joy. These latter phenomena are known to us from inner experience. This inner experience is called soul which thinks, feels, rejoices, suffers etc.

According to Descartes, God is the only genuine substance^f. He says that it is a mistake to think that mind or a body is first created by God and thereafter continues to exist without any further action on God's part^f. On the other hand, he thinks that unless God actively intervenes at every moment to maintain it, any created thing would at once cease to exist^f. God is the only existent which does not need to be kept in existence from outside itself and therefore, he is the only genuine substance^f.

Spinoza defines substance as "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"¹. Substance, therefore, has the cause of itself within itself, that is it is self-caused^f. The very idea of substance includes its existence because existence belongs to substance^f. According to Spinoza, the ultimate nature of reality is a single substance but this substance has infinite attributes^f. By attributes we can understand the essence of substance. He says that if God is defined as a substance consisting of infinite

1. Ethics Part I, translated by R.H.M. Elwes^f.

attributes, then God would possess infinite essence. Though there are infinite number of attributes, according to Spinoza, we can know only two attributes of substance, namely thought and extension. But Descartes thought these two attributes are two different substances there by leading him to affirm the dualism of mind and body. But according to Spinoza, these are the two attributes of a single substance and this single substance is God, who possesses infinite thought and infinite extension. Being infinite, God contains everything. According to Spinoza, the word God is interchangeable with the word Nature.

But Spinoza does distinguish between two aspects of nature and for this purpose he uses two expressions *natura naturans* and *natura naturata*. God insofar as He is considered to act by the requirements of His own nature is known by *natura naturans*. On the other hand, by *natura naturata* he means, everything which follows from the necessity of the nature of God, or of anyone of God's attributes. According to Spinoza, the world is the modes of God's attributes, therefore, everything in the world acts in accordance with necessity that is, everything is determined. Spinoza gives us a picture of tight universe for in the nature of things

nothing contingent is granted, but all things are determined by the necessity of divine nature for existing and working in a certain way. Even man is not free for he is determined to exist and behave according to God, of whose attributes man is a mode. All the things we experience are nothing else than modifications of the attributes of God or nature. According to Spinoza, everything is intimately connected, the infinite substance of God providing a continuity through all things.

One question can be asked why can there be only one substance, not three as Descartes has suggested? Spinoza is of the view that if there were several substances they would limit each other by encroaching upon each other and this would result in the negation of their independence. Therefore, according to Spinoza, the concept of plural substances is logically contradictory. According to him, God or Nature is the only substance. God is the immanent cause of the universe but not its creator. We cannot say God is good or evil. The universe of Spinoza is beyond good and evil, beyond human desires and predication. Therefore, we cannot speak about absolute moral values, absolute good, absolute beauty or absolute ugliness. The

same can be applicable to God, we cannot attribute to Him any human characteristic. We commit a grave mistake when we try to attribute finite traits to infinite.

Leibniz is not satisfied with the views of Descartes and Spinoza as regards the concept of substance. Descartes says that there are two independent substances, thought and extension. But if this is so, how do these two substances could interact as a mind and body either in man or in God. Spinoza, on the other hand, tried to solve this problem by saying that there is only one substance with two knowable attributes, thought and extension. But to reduce all reality to a single substance is to lose the distinction between the various elements in nature. Spinoza spoke of the world as consisting of many modes, in which the attributes of thought and extension appear.

Leibniz challenged the definition of substance of both Descartes and Spinoza. Both of them assumed that extension refers to a material substance, that is, extended in space and is not divisible into something more primary. Extension means actual shape and size. Leibniz does not agree with the view that extension is an irreducible attribute. The bodies or things we see with our senses

are divisible into smaller parts^e. Therefore, Leibniz says that why can we not assume that all things are compounds or aggregates ? There must be simple substance otherwise there cannot be compound substances because compound is the only collection of simple substances^e. It seems that there is nothing new in this assumption because Democritus and Epicurus had ~~argued~~ centuries before that all things consists of small atoms and these atoms are extended bodies^e. But Leibniz rejected this notion of atom^e. He argued that truly simple substances are monads and monads are the elements of things^e. The monads differ from atoms in the sense that atoms were viewed as extended bodies whereas Leibniz described the monad as being force or energy^e. Therefore, according to him, matter is not primary ingredient of things but that monads with their element of force constitute the essential substance of things^e.

How can we understand the nature of reality ? Leibniz's answer is that we cannot understand it through empirical analysis because it gives us only appearance of things^e. What about human being ? What characterizes every human being ? It is the force, activity and energy^e. According to Leibniz, this energy is not determined by

anything outside, it is autonomous'. Only force remains constant in this universe^b. This force is what according to Leibniz is monad^f. Only monad or spiritual force centre is real^f. According to Leibniz, in this universe there is no absolute rest or absolute motion, rest and motion are only phenomenal manifestations. Extension is only phenomenal aspect of the universe. Space and time do not have absolute reality, they are only relative. Space depends on co-existence and time on succession and both are said to have their origin in subjective notions.

The meaning which Leibniz attached to the word 'substance' was different from that which his predecessors had attached to it and this change of meaning was one of the main sources of his philosophy^f.

The Cartesians have defined substance as that which needs for its existence only God's union. Although they admitted two substances, mind and matter, yet whenever they took God seriously, they deny the substantiality of everything except God. For Spinoza, substance is *causa sui*, that is, the self caused or that which is itself and is conceived through itself. According to Spinoza, extension and thought did not constitute separate substances, but attribute of one substance. Both Descartes and Spinoza

held the view that the notion of substance is not an ultimate simple notion, but a notion dependent upon the purely logical notion of subject and predicate. The attributes of a substance is the predicate of a subject and it is true that without the subject the predicate cannot exist but the subject can exist without them, therefore, the subject becomes that whose existence does not depend upon any other existent.

The distinctive feature of substance is the belief that certain terms are only and essentially subjects. When several predicates can be attributed to a subject and this in turn cannot be attributed to any other subject, then this subject is called an individual substance. For example, when we say 'two is a number' or 'red is a colour' here number and colour etc. can be attributed to others and therefore are not substances. On the other hand, the term 'I' appears incapable of attribution to any other term, 'I' have many predicates but am not in turn a predicate of anything else. Substance then, is that which can only be subject and not predicate, which has many predicates and survive through change. The different attributes of a substance are said to be the predicates of that substance. Therefore, the substance is the same subject at all times and have always the same predicates

because according to Leibniz, predicates are always contained in the subject⁴. From this it can be said that all my states and their connection are contained in the subject which is 'I' i.e. all my states are involved in the notion of me⁴. Since all my predicates have always belonged to me, it follows that my development in time is a mere consequence of my notion and cannot depend upon any other substance⁴.

There is a very simple and uncontroversial common belief that only the real and important features of world are human beings and physical objects such as stones, trees, tables etc. each one of these exist independently of the others in spite of the changes that affect it which never ceases to remain the same thing for as long as it exists⁵. This common sense belief can be said to be the starting point for the philosophers like Aristotle, Descartes and Locke⁶. On the one hand, we have individual entities such as human beings, stones, plants etc. and on the other hand, there are certain properties which change or disappear altogether without the change of individual entities⁴. The notion of individual entities and their attributes may lead to arguments about the existence and nature of individual substance⁷.

Plato says,

- The ultimate reality consists of forms, i.e. certain timeless entities or immutable archetypes of things, which exist 'apart' from the world as we know it and are each of them at once individual and universal" 2

Spinoza who thought that there is just one substance, the all inclusive whole which he called God or nature. Leibniz postulated his monads as constituting true reality.

There are so many questions that can be asked about substance. One of these is 'What things are substances?' to which the traditional answer was, for instance, 'God or minds' or alternatively 'stars', 'stones', 'animals' etc. This answer can be understood by referring to individual things separately or in general collectively i.e. any mind, star, stone or minds, stars, or animals etc. Another question is 'what elements or characteristics in individual things or within a class of things are so essential as to make them substance?' Possible answer to this question are 'mental activity', 'the quantitative and measurable characteristics of

2. Aristotle, Metaphysics, bk.M.Ch. IX. 1086a, 32-4

things', the ultimate constituents of material things and underlying causes responsible for the different and changing properties of a thing. The third type of question is 'what if any is the purpose or function of substance?' Here, the answer is that substance gives a lasting structure, unity and independence of a thing.

The concept substance is meant to indicate that a thing must be distinct from its attributes that is, an underlying entity is required in which attributes can 'inhere' or by which they are supported. While a substance is dependent upon nothing else or its existence, a quality like red or hard cannot exist unless a substance exists to which it belongs i.e. whose property it is. But it is very difficult to conceive of a perfectly isolated substance, one that exists on its own without possessing any determinate attributes. According to some modern philosophers, such as Russell that a thing composed of the properties is said to have and is nothing more than a bundle or cluster of such co-existing or successive qualities as roundness, redness etc.

A substance or thing is that which is permanent in midst of changes, that is, which remains essentially the same throughout all the successive changes of state

which it undergoes in course of time and sustains and holds these changes together, gives them a certain continuity, connection and unity. Therefore, a substance or thing is that fundamental reality which manifests and realizes in and through successive changes commonly called attributes, but remains essentially identical through them all. Permanence and change are complementary aspects of a thing or substance. There can be permanence without change but there cannot be change without permanence. Qualities change but the underlying substance persists. A substance which is regarded as a permanent entity in spite of all changes implies also the notion that it is a centre of effort, energy and activity. But substance we mean the permanent principle of identity in the midst of change and difference. Qualities and activities exist in it.

A substance is said to have an essence and manifestation or power of revelation. A substance is revealed through its qualities. Without qualities it is meaningless essence just as without substance qualities are meaningless. A substance is the inner core or essence of its qualities and qualities are the expressions or manifestations or revelations of a substance. A substance

does not exist behind and beyond the qualities nor is it a mere aggregate of qualities or attributes. Both substance and qualities are real and correlative to each other. In other words, we can say that a substance is expressed in its qualities. Qualities are meaningless apart from substance. They are manifestations of substance. Let us take the following example. A flower is not a mysterious unknowable substance behind its extension, size, shape, softness, colour, smell and beauty. Nor it is an aggregate of these attributes without substance. It is a concrete unity of both substance and qualities. Thinghood or substance and attribute or quality are complete category. One thing we can say about substance is that substance or things have powers and capacities. They have powers of acting on other things. For example, water can moisten or wet the soil and fire can burn.



From the above discussion we can say that a substance is the permanent principle of unity in the midst of changes. Changes are possible only in relation to a permanent substance that does not itself change.

Now, I want to discuss some views regarding the origin of the idea of substance. According to realist, we derive the idea of substance from direct perception, that is, from internal and external. We know

the mental substance or mind or self through internal perception and material substance through external perception.

According to Locke, we cannot perceive a substance in the external world, we perceive only the primary qualities of matter but these qualities cannot be conceived to exist by themselves. Therefore, we are bound to suppose a substratum as their basis, which is unknown and unknowable.

According to Berkeley, there is no material substance. According to him, though in our experience we find certain sensations of touch and sight etc. are always presented together, they are not produced by material substance. The notion of material substance is a contradiction in terms. He holds that mind is the only substance.

According to Hume, there is neither a material substance, nor a mental substance. The notion of substance is only a figment of the imagination. When we experience a cluster of sensations always together, they are grouped and associated in the mind, and this repetition of experience and association produces in us the belief in a substance.

According to Kant, the idea of substance is neither an objective entity, nor merely a cluster of sensation and ideas, but it is an apriori category of understanding, which is involved and presupposed in our experience of change. We cannot understand changes, unless we refer them to permanent substance which itself does not change. Hence, the notion of substance is an apriori category of the understanding, according to which the mind interprets sensations and its ideas.

The world contains many things or substances. These substances undergo changes in the form of events. Change can occur only to things or substances. Things change i.e. they now have one characteristic and now another but events are simply followed by one another. For example, the green leaf changes into a red one but an event such as a thunder-clap is followed by silence or another thunder-clap. Each substance has many different properties or characteristics. Gold has a certain colour, melting point, weight per unit of volume and so on. If it were no longer yellow, it would still be something whether or not we continue to use the word 'gold' to refer to it. Let us suppose another case if we removed all the properties including extension, mass and shape, then it would not only no longer be gold but also it would not be anything. We generally think that gold is one thing and its properties are something else. For the

properties of gold to exist, gold must exist'. From this we can say that substance is prior to its properties. But this is not so. Substances are sum total of their properties. The word 'gold' is simply the name we give to to co-existing collection of properties. We admit that things are logically prior to their properties. Here the question arises, can we show one thing without properties? The answer here is 'no'. Every substance has some properties or other. But this does not mean that things are not distinct from properties. We can not show a shape without size or colour without shape but this does not mean that shape is same as size or colour. They are distinguishable but not separable. Same is the case with substance and properties.

A substance cannot be merely a group of qualities. Suppose we have two identical things of gold, that is, they have the same size, same weight, same colour, and so on. Now what is that which distinguishes these two pieces of gold? From the point of view of quality we cannot distinguish them because they have the same qualities. We can distinguish them by their spacial location that means by pointing out that here is the one and there is the other. From the above discussion we can say that thing or substance is the principle of individuation.

The essential points which Leibniz makes in Discourse de metaphysics is that the predicate of every true

affirmative proposition is contained either explicitly or implicitly in its subject. If the predicate is contained explicitly that means clearly in the subject, then the proposition is 'analytic' but if it is contained implicitly, the proposition is 'synthetic'. If anyone had a complete notion of an individual substance then he could infer from it all the predicates down to the minutest detail and remotest future, which will ever belong to that substance. Let us take the example of Alexander the Great. No man can fully and distinctly understand the notion of any individual substance. Men have to depend on experience or on hearsay &c for their knowledge of many of the facts about individuals. In case of Alexander we can say that God sees in it the reason for every predicate which can ever be truly ascribed to him. That means God has an a priori knowledge whether he would die by wounds or by disease or by old age. But men who died before Alexander's death never knew how he would die, his contemporaries had to wait and see and his successors knew only by their eye witnesses. Leibniz says that in order to know that the same individual who was in Paris last week is in Germany this week, we must depend on reason a priori. This a priori reason is possible only when we connect the successive

and separated events of that individual notion. In this connection Leibniz says -

"In every true proposition, necessary or contingent, universal or singular, the notion of the predicate is contained in some way in the subject. If not, I do not know what truth is" 3

The philosophy of Leibniz can be said to follow from a small number of premises. These premises can be shown as follows :

- a) Every proposition has a subject and a predicate
- b) A subject may have predicates which are qualities existing at various times (Such a subject is called substance).
- c) True propositions not asserting existence at particular times are necessary and analytic but propositions asserting existence at particular times are contingent and synthetic.
- d) Ego is a substance.
- e) Perception yields knowledge of an external world, i.e. of existence other than myself and my states.

3. G.II. 56 Laemker, 337.

I shall discuss the above premises one by one. In the first premise unless actual existence is asserted, the predicate forms part of the notion of the subject. Except in case of God's existence, other existential propositions are synthetic and therefore, there would be no contradiction if the subject which actually do exist did not exist.

When many predicates can be attributed to one and the same subject and the subject cannot be made predicate of any other subject then this subject is called individual substance. Such subject involves a reference to existence and time. In order to say that I am the same person as I was I require not merely some internal experience but also some other reasons and these reasons can only be that I am the same subject and that my past and present attributes all belong to me, that is, one and the same substance. The attributes which consist at different times must be conceived as the attribute of one and the same subject. Notion of mine involves all my states and their connections. When I say that my states are involved in the notion of me, it implies that predicate is in the subject. One question can be raised

here, are all proposition reducible to subject-predicate form? This subject predicate form whether this is universal demands close attention not only in connection with Leibniz but also in connection with the most modern philosophy. Mathematical ideas such as 'there are three men' cannot be reducible to subject predicate form. Such proposition can be regarded as a mere sum of subject predicate propositions, because the number only results from the singleness of the propositions. In some cases relations between subjects e.g. relations of position, of greater and less, of whole and part are irreducible. This can be better understood from Leibniz passage.

^aThe ratio or proportion between two lines L and M may be conceived three several ways; as a ratio of the greater L to the lesser M; as a ratio of the lesser M to the greater L and lastly as something abstracted from both, that is as the ratio between L and M, without considering which is the antecedent or which the consequent; which the subject and which the object In the first way of considering them, L the greater is the subject. in the second M the lesser is the subject of that accident which philosophers call relation or ratio. But which of them will be the subject, in the third way of considering them? It cannot be said that both of them L and M together are the subject of such an accident; for it so, we should have an accident in two subjects, with one leg in one, and the other in the other,

which is contrary to the notion of accidents. Therefore we must say that his relation, in this third way of considering it, is indeed out of the subjects; but being neither a substance, nor an accident in must be a mere ideal thing, the consideration of which is nevertheless useful". 4

AS regards propositions asserting numbers, Leibniz is of the opinion that aggregates to be the only phenomena, they are what he calls 'semi-mental activities'. The unity of number can be asserted by the very fact of their being preceived at one time.

There are certain propositions such as - one cannot be in two different places at the same time, whatever has shape has size, etc. which must be true. We need not even bother to examine whether they are true or not because they are necessarily true that means they would be true in all possible worlds. Again there are certain propositions such as - 'there are six people in this room,' 'some dogs are white' etc. These propositions are called contingent propositions. There is no necessity about them. Their truth is contingent on what the universe happens to be like. Why we call a truth necessary ? Because they are knowable apriori. In other lwords, we can say that necessary truth

4. (D. PP. 266 - 7, g. VII, 401)

and knowable apriori are interchangeable expressions. They are apriori because they necessarily hold true of all cases of today, tomorrow or a million years from now. What makes a statement apriori and necessary is not the structure of the statement itself as with analytic statements but because it is true of all cases of today, tomorrow and to remote future.

Any statement that we do have to test to see whether it holds for future cases is a contingent statement knowable a posteriori. The statements about uniformities of nature first seem to be necessarily true. But it is not so. We can not guarantee that uniformity that held yesterday and today will continue to hold tomorrow and forever after. The test of further experience showed that it did not hold true as it was originally stated. If we have to observe nature further to discover whether the uniformity continues to hold, thus the statement in question is contingent, not necessary.

We can ask one question here, 'Are there synthetic necessary statements?' Here, we can say that there are necessary statements knowable apriori but they are all analytic statements or tautologies, that means denial of any of them would result in a self-contradiction. For example,

'A is A', 'one cannot be here and not here at the same time'
Are there any a priori statements that are also synthetic
necessarily true yet not analytic? This is one of the most
controversial problems in the history of modern philosophy

Most of the synthetic statements we hear and utter are
contingent - 'the desk is brown', 'there are six cars in
the driveway'. Those who declare that there are no synth-
etic a priori truths are called empiricists. According
to them, there cannot be synthetic a priori statement. If
it is synthetic then it cannot be a priori and if it is
a priori then it cannot be synthetic. On the other hand,
those who declare that there are synthetic a priori truths
are called rationalists. They have given some examples of
synthetic a priori statements - '2 plus 2 equals 4', 'every
^{event?} event has a cause', 'parallel lines never meet' etc. But
the empiricist holds the view that none of these propositions
is synthetic a priori proposition. If they are synthetic then
they cannot be a priori and if they are a priori then they
cannot be synthetic. Rationalist holds the view that
we derive certain concepts from experience and after deriving
them we see that they necessarily go together. Through our
sense experience we understand what it is to be coloured
and to be extended, we see that what has the first property
must also have the second. This is simply because of power

of mind which grasps certain necessary truths of reality'. According to Kant, the synthetic apriori truth is possible because of the nature of mind. Here we will discuss the examples given by Kant. Suppose someone is fishing in the sea with nets and interstices of the net are all one inch apart. If this is so then any fish that are less than an inch long will slip through the net. If he knew nothing about the nature of the net then after some time he will come to the conclusion that there are no fish in the sea less than one inch long.

According to Kant, our synthetic a priori knowledge has its source in a similar condition. There is a real world - a noumenal world what has many features that we cannot imagine. Because of structure of mind, we do not know them just as fish, less than one inch long are never caught in the net. We have no knowledge of noumenal world as it exists apart from mind but we can know only what comes to us in the net, nothing of what slips through. As long as fisherman sticks to his net and knows only what the net yields him, it is an a priori truth that he will never catch any fish less than an inch long. Similarly, our mind is

so constituted that every datum it presents to us is always seen through certain forms of the intuition, that is, space and time and forms of understanding, that is, substance and causality. Since everything non-spatial non-temporal will slip through the net, certain fundamental truths about space and time can be known apriori, for example, that time moves in one direction only, that if A precedes B, B precedes C then A precedes C and so on. These hold true only of the world as known by the mind, that is, phenomenal world - not the noumenal world or world as it is in itself.

According to Kant, all the propositions of arithmetic and geometry are synthetic, i.e. not analytic. In all these propositions, no analysis of the subject will reveal the predicate. His stock instance is the proposition $7+5 = 12$. He pointed out that 7 and 5 have to be put together to give 12. The idea of 12 is not contained in them. When we add $7 + 5$ then it must be 12 it cannot be other number. But we will get 12 by adding number also such as $6+6$, $8+4$ etc. 12 does not contain in $7 + 5$ only. Therefore, though the proposition $7 + 5 = 12$ is apriori it cannot be analytic. It is synthetic apriori proposition.

But there are some difficulties, If time is not real but only a form of the intuition that there is 'really' no before and after and the real world contains no events and processes, since these occur in time and same with regards

to space; in the real world nothing can be to the left of anything else, since in the real world no spatial categories apply.

How can we know that there is a real world and that it is unknowable? If the phenomenal world is a function of structure of the human mind, how do we know that the structure of the mind won't change? can we now know this apriori? If not then we do not have synthetic a priori knowledge even of the phenomenal world.

According to Leibniz, when a subject-predicate proposition is true, the predicate is said to be included in the subject that means the concept of predicate is always followed from the concept of subject. This can be applied to propositions whether it is contingently true or necessarily true. Leibniz says -

" My idea of a true proposition is such that every predicate, necessary or contingent, past, present or future, is included in the idea of the subject ... " 5

In asserting that in all true subject-predicate propositions the predicate is included in the subject,

5. 'Identity in Individuals and True proposition' in letters to Hessin Rhienfels, May 1686 Gerhardt Phil II. p.37.

Leibniz certainly did not mean to imply that all subject-predicate propositions were necessary. The predicate in the subject does not mean that all truths are analytic.

Leibniz himself used the expressions 'analytic' and 'synthetic' but in a quite different sense from that of Kant. Leibniz uses the 'analytic' to mean 'practical' and the word 'synthetic' to mean 'theoretical'. According to Leibniz, in case of subject-predicate proposition if the subject is an infinitely complex ^{concept} i.e., the concept of an individual object of which many predicates are true then one would not always automatically know of any given predicate whether it is included in the subject or not. Leibniz says that if the predicate of a proposition expresses the species to which the subject belongs then the proposition is true.

One question can be raised here whether Leibniz's definition of truth for subject predicate proposition is compatible with the distinctions between necessary and contingent truths.

He wrote -

" There is some thing which has perplexed me for a long time, I did not understand how the predicate could be in the subject, without the proposition thereby becoming

necessary But the knowledge of geometrical things are especially that of infinite analysis showed me light, so that I come to understand what it is for concepts to be resolvable in infinity".⁶

According to Leibniz, a contingent truth is true in the actual world, whereas necessary truths are true in all possible worlds. A possible world is a world which God could have created. As He only created the actual world for ours, all other possible worlds exist only as ideas that is to say they are imaginary world. Truths of reason hold in every conceivable or imaginary world and therefore necessary. Necessary truths hold good for all possible world. But why are truths of fact contingent? Leibniz gives an example of a contingent truth, the truth that Caesar crossed the Rubicon. To say that this proposition is true implies that the concept 'crossed the Rubicon' is included in the concept of Caesar. Can the opposite of the proposition 'Caesar did not cross the Rubicon, be possible? What Leibniz meant by saying that the opposite of 'Caesar crossed the Rubicon' is possible, is that there could have been in a different world a person like Caesar in all respect except that of crossing the Rubicon. But he could not be Caesar in this world. So it is not the case that 'Caesar did not cross the Rubicon' could be true. But it is possible for there to be another complex concept which contains almost all the predicates of Caesar, but which contains 'did not cross the Rubicon' instead of 'crossed the Rubicon'. We cannot say that there

are instantiations of the individual concept 'Caesar' in other world which did not cross the Rubicon. The corresponding proposition that is true in other worlds would not be about Caesar but about someone like him.

*The proposition
& Caesar, crossed
the Rubicon,
may appear
to be the in
different senses*

*to a school
boy, to a man
of the street
and to a historian.*

*In fact
photos of her
who speak
of degrees of
truth and
degrees of how
reality. How
would Leibniz
react to their
views?*

What about the propositions like 'Pegasus flies' ?

According to Leibniz, any sentence which has a name that does not denote an individual in this world as subject is false. Leibniz believed that all singular propositions could also be treated as universal propositions. According to Leibniz, the singular proposition ' the apostle St. Peter denies his Master states that who ever was St. Peter the apostle denied his master'.

Leibniz makes a distinction between essential propositions, and existential propositions. According to Leibniz, to say AB is a thing or AB exists, could mean either possible existence i.e. AB exists in some possible world or actual existence i.e. AB exists in this world. An existential proposition is contingent and is possible only in this world. In an essential proposition like that of the trilateral having three angles one is making a claim about trilateral in any possible world. To say that particular affirmative propositions carry existential import is to

say that particular affirmative proposition 'Some A is B' is the same proposition as 'AB exist'. Exist' here means 'it can be conceived', 'it can be understood' and that the existence ascribed is 'possible or actual depending on whether the proposition is essential or existential'.

According to Leibniz, it is the nature of individual substances to have complete individual concepts corresponding to the particular thisness of the individual. But we cannot get at the 'thisness' of things which exist in other possible worlds.

Leibniz says -

"The concept of an individual substance is such that from it a reason can be given for all the predicates of the subject to which this concept can be attributed".⁷

For example, the concept of Alexander the Great is a full individual concept even if we do not know the full details of all that is true of Alexander, since we know whom it is of and hence that every predicate that is true of him is a component of that concept. But the concept of Pegasus (winged horse) is not fully determined in this sense. According to Leibniz, an abstraction that is an idea does not have complete concept.

⁷ Conturat, OF1, p 403.

Conclusion -

In this chapter, I have discussed the concept of substance in great detail. It is a truism to say that this problem originates in Greek philosophy in general and in Aristotle's philosophy in particular. Therefore, I have given a prominent place to Aristotle's concept of substance. It is a well known fact that Aristotle rejects Plato's explanations that the forms exist independent of particulars. He also reacts against the essentialism of Plato. He holds the view that substance is a combination of both matter and form. I have raised an objection against this matter-form theory, that is, though the matter form theory can explain why this thing is a table, it cannot explain why it is this particular table.

While discussing the concept of substance Descartes' view with regard to it cannot be ignored. I have, therefore, discussed the Cartesian notion of substance in some detail. Descartes' view is not free from difficulties, which I have highlighted. Spinoza accepts the Cartesian definition of substance but he comes to a different conclusion. He rejects dualism and advocates monism. He is of the view that monism is a logical outcome of Cartesian definition of substance. Spinoza's position too involves certain difficulties, such as determinism and pantheism.

Leibniz rejects the Cartesian definition of substance. Both Descartes and Spinoza defines substance in terms of independent existence, while Leibniz defines substance in terms of independent action. This view of Leibniz leads to pluralism and monadism. Since Leibniz is the focal point of my dissertation I will be discussing the difficulties of monadism in next chapter.

I have discussed the views of Locke, Berkeley and Hume with regard to notion of substance albeit in a perfunctory way. I have also discussed the view of Kant regarding the category of substance. He is of the view that we cannot understand the change, unless we refer to them to permanent substance which itself does not change. The notion of substance for him, therefore, is an a priori category of understanding according to which mind interpretes sensations and its ideas.

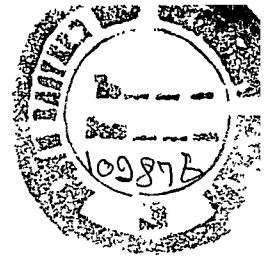
Credit must be given to Leibniz for making a distinction between truths of reason and truths of fact for this distinction is the precursor (prior) of the modern distinction between analytic and synthetic proposition. According to Leibniz, a necessary truth is a proposition true of all possible world and a contingent proposition is true of only the actual world. I have also discussed Leibniz's distinction between essential proposition and existential


proposition. I believe that this distinction would go a long way to understand the distinction between truths of reason and truths of fact. There is no gain saying that Leibniz's logic is limited to a great extent by his subject-predicate logic. He bases this distinction only on logic of subject and predicate, since he was not aware of any other logic such as relational logic etc.

CHAPTER - III

Leibniz and Monad

Leibniz challenges the views of substance of both Descartes and Spinoza. Both are of the opinion that extension implies actual size and shape. For Descartes extension refers to a material substance, that is, extended in space and is not divisible into something more primary. For Spinoza extension is an irreducible material attribute of God or nature. But Leibniz rejected both the views of Descartes and Spinoza. For Leibniz all things are compounds or aggregates because the bodies or things we see with our senses are divisible into smaller parts. Therefore, he is of the opinion that there must be simple substances, since there are compound substances, for the compound is only a collection of aggregatum of simple substances. Some may argue that this view of Leibniz is not an original one. Because, for Democritus and Epicurus have already argued centuries before that all things consist of small atoms. I would like to argue that his view is different from the view of both Democritus and Epicurus and thus his view is an original one for the following reason. Leibniz rejected this notion of atoms because for both Democritus and Epicurus, these atoms are extended bodies, as irreducible



bits of matter, Such matter is considered to be lifeless and would have to get its motion from something outside itself. But according to Leibniz, matter cannot be the primary object of thing or substance. For Leibniz, the only simple substances are monads and those are "the true atoms of nature, the elements of things." The monads differ from atoms in that, atoms were viewed as extended bodies, whereas Leibniz described the monad as being force or energy. Leibniz, therefore, says that matter is not the primary ingredient of things but that monads with their element of force constitute the essential substance of things. For Leibniz, Monad contains life or a dynamic force. But for Democritus, material atoms have to depend upon outside itself in order to move or to become a part of a large cluster. But monad, the simple substance is capable of action. Leibniz says that compound substance is the collection of monads. Monad is a Greek word which signifies unity or that which is one  simple substance, lives, souls, spirits are unities. Consequently all nature is full of life.

The word 'monad' originally was used to denote the unit of arithmetic, the monad, the dyad that means the number two or group of two, the triad that means the group of three etc. Yet even in the ancient philosophy it was sometimes used to mean simply the individual, something which like the atom of Democritus was by definition indivisible. Leibniz means by it living being, using it to denote the individual which is really indivisible as distinguished from a mathematical unit individual or atom, which is only individual by definition and cannot be indicated in any real existent.

For Leibniz, monads cannot be extended in space^{*} because they have no shape and size. Monads are something like force or energy. If we reduce physical particles then we will get energy or that particles are a special form of energy. Therefore, according to Leibniz, monads are logically prior to corporeal forms. Thus for Leibniz, true substances are monads. Each monad is independent of other monads and monads do not have any causal relation to each other. Monads are not only independent and different but they also contain the source or their activity or energy within themselves. Though all monads are different from each other yet there must be some relation between all the monads which make up the universe, some explanation, for

Does not
the idea of
pre-established
harmony
entail
the independence
of monads
for which
Leibniz
has down
so much?

their orderly action. This explanation Leibniz finds in his idea of pre-established harmony. Even though each monad is isolated from the other, their separate purposes form a large-scale harmony. Monads are said to be like clocks. Though there are several clocks, all strike the same hour because there is a harmony or otherwise they keep perfect time.

Leibniz compares all these monads to several different bands of musicians and choirs, playing their parts separately and placed that they do not see or even hear one another nevertheless (they) keep perfectly together, by each following their own notes, in such a way that he who hears them all finds in them a harmony that is wonderful and much more surprising than if there had been any connection between them. This fact of universal harmony of all monads is said to be the result of God's activity, whereby this harmony is pre-established. This perfect harmony of so many substances which have no communication with each other provided a new point to Leibniz that is, the existence of God, because a harmony of many windowless substances can only come from a common cause.

The monadology of Leibniz is an example of spiritual pluralism. According to him, these monads are particular, independent and self-sufficient, ultimate substance. They are partless and indivisible. Each monad has its own individual existence. In Leibniz's monadology God is the soul of innumerable monads in the universe and in every living being there are self-conscious souls governing the innumerable monads. Each monad is independent of other monads. All ideas, according to Leibniz, are innate. Therefore, all our knowledge is self-development. There is no intercommunication between different monads because monads are windowless.

A question arises here that if monads are absolutely independent of each other, how do we experience a common universe? If the monads do not receive any impression from outside how shall we explain the mutual behaviour of different individuals? Each monad, according to Leibniz, is individual and unique. Each has its own perspective which is different from that of others. They are the minute representatives of the universe. In the world of such monads, how is it that there is interaction between the body and mind and among different individuals? Leibniz brings in the law of pre-established harmony to retain the uniqueness of monads. According to this law,

If monads are created by the chief monad, how can they be independent?

The chief monad, the *Monad monadum*, God, establishes a harmony among the monads while creating them. According to Leibniz, in each monad the past, present and future are present in seed form. As the monads develop, so develops their conscious level and along with it their knowledge becomes more and more clear.

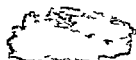
Repetition

For Leibniz, monad is nothing but a simple substance and according to him, there must be simple substances since there are compounds, for a compound is nothing but a collection or aggregation of simple things. If the 'simple things' are like the monads, non-quantitative, can we attach any intelligible meaning to 'compound', which is a mere aggregate of them? Does not an aggregate always imply elements which are quantities, however small? Leibniz is of the opinion that nothing quantitative can ever be absolutely simple, that is, without parts and thus there seems a weakness in his reasoning at this point. According to Leibniz, monads have neither extension nor form nor figure nor divisibility. These monads are the real nature or the elements of things. Ordinary physical atoms have form and extension and though they may not be physically divisible, yet they must be ideally divisible and thus for Leibniz all merely physical atoms are unreal. Since simple substance cannot be formed by the combination of parts, there is no conceivable way in which a simple substance can come into being by natural means. According to Leibniz, a thing is

produced by nature only when it comes into being gradually, that means bit by bit or slowly. But the monads, having no parts, cannot come into being by the adding of part to part. Yet it may be pointed out that every monad has an internal development, which is gradual. Since monad is simple, it can only come into being or come to an end all at once, while that which is compound comes into being or comes to an end by parts. Now the question arises how a monad can be altered in quality or internally changed? Since it is impossible to change the place of anything in it or to conceive in it any internal motion which could be produced, increased or diminished in monads, although all these are possible in case of compound which has parts. According to Leibniz, motion is simply change of position. It is not a positive quality belonging to a moving body, but motion and rest are entirely relative to one another. Again rest is merely an infinitely small degree of motion, nothing in the world is absolutely at rest. Therefore, nobody begins to move from a state of absolute rest, but from a state which is to be conceived as already one^{of} motion, how ever small in amount. Actual motion is not something added

to a body but it is a gradual growth or increment of a motion which is already there. The intrinsic tendency or potentiality of motion is called by Leibniz force. Changes in monad is possible, because it contains within itself the cause of the change, the force or activity which produces the motion. Leibniz says -

"The notion of force is as clear as that of activity and of passivity, for it is that from which activity follows, when nothing prevents it. It is efforts, conatus; and while motion is successive things, which consequently never exist, any more than time, because all its parts never exist together - while, I say, that is so, force or efforts, on the other hand, exists quite completely at every instant and must be something genuine and real. And, as nature has to do rather with the real than with that which does not completely exist except in our mind, it appears (in consequence)



of what I have shown) that it is the same quantity of motion, that is preserved in nature".¹

Why did Leibniz hold that there is a plurality of substances; instead of holding, like Spinoza, that there is only one genuine substance ? According to some philosophers, for example, C.D. Board, Leibniz's main reasons for pluralism are the following reasons.

1) He understands by the term 'substance' a continuant which has occurrents or states, that is, modes, but is not itself an occurrent in or a state of anything. It seems obvious to him that his own mind was a continuant, having various experiences as occurrents in it. He did not doubt that there are other finite minds besides his own and according to him there is no reason why he should be in privilege position of being the only substance actually created.

2) Passing to ostensibly material objects, we have to account for the fact that they appear to be extended

1. (Letters to M. Pelisson (No date, probably 1691)
 Dutens, i. 719; Foucher de Careuil, i, 157)

and endlessly divisible into co-existing parts. Leibniz has no objection to infinity but what he objects to is a compound whose components are themselves compounds and so on without end. His solution is to suppose that any ostensibly extended substance, no matter how small it may appear to be is in fact an aggregate of an infinite number of simple unextended substances. It can be said that Leibniz has given good reason for thinking that there is an infinite number of substances, each of which is simple in the sense that it does not consist of co-existing parts and therefore, is not extended.

The key notions associated with Leibniz's name are monadism, the pre-established harmony, the principle of sufficient reason and the identity of indiscernibles. A true substance, he argued, must be a unitary thing and therefore, not only unextended and indivisible, but also organic. This is why he comes to the conclusion that it must be an immaterial centre of energy, immune from external influences. Leibniz arrived at this conclusion of multitude of individual substances partly as a result of his interest in mathematics and biology, and partly as a result of two mistaken assumptions. The first assumption that all statements can be properly expressed in the subject -

predicate form, which implied that all existential and relational propositions are concerned with predicates or properties. But in fact no existential propositions are reducible to the subject-predicate form, because it would be wrong to regard existence as a predicate or to say that in existential propositions existence is predicated of a subject term. Nor is it true that relations are properties of subjects or that relational propositions can be put into the form 'S is P'. This mistake can be shown by comparing a statement about a common property of two objects with one about a relation between them. For example, the statement that A and B are heavy is grammatically of the same form as the statement that A and B are similar. Though these two statements are grammatically of the same form their logical form is different and thus one cannot be reducible to another. It is possible to say that A is heavier than B or particularly heavy but it is very absurd to say that A is more similar to B than B is to A or that A particularly resembles B. The second erroneous assumption is that the predicate of any true affirmative statement is included in the concept of the subject, so that all true propositions, including factual or contingent ones, become analytic or apriori. The two assumptions in conjunction are said to explain the view of Leibniz that

the concept of an individual substance virtually contains, once and for all, everything that can ever happen to it.

For Leibniz, the unit of substance must be real and indivisible. The reality of unit of substance cannot be quantity because quantity is always divisible. For indivisibility of unit of substance it must be quality. That means unit of substance must be intensive rather than extensive. One question regarding the whole and parts can be raised here, that is, whether whole is prior to parts or parts^{are} prior to whole. According to Spinoza, the parts are self-evidently deduced from the whole, while according to Atomist doctrine, the whole is a secondary construction from the primary parts. In contrast with this view there is the other view of qualitative doctrine, which regards the relation of whole and parts as inseparable. The whole is expressed and symbolized and therefore in some way included in each part. Therefore, the parts are not determined or characterized without reference to the whole and the whole is not a mere vague aggregate of independent parts. In some sense each part must contain the whole within itself, each unit must include an infinite manifold.

We can say that the whole expresses itself through parts. Here one question can arise, what must be the nature of a part which can in some way contain or express the whole within itself ? Now the answer is that the part cannot contain the whole within itself actually and fully because then the distinction between whole and part would vanish. Therefore, the part must contain the whole by means of representation. The relation of whole and parts is not to be conceived as one of greater or less, of things containing and things contained, but rather as a relation of symbolized and symbols, sign and signified. That is to say, the part must be a representation of the whole from some particular point of view, a symbol or expression of the whole in such a way that the whole might be unfolded entirely from within it.

Thus the part must have a certain spontaneity or power of acting from within itself and in virtue of this Leibniz describes the individual substance as essentially a 'force' rather than a quantity. This intensive essence or force in the part or individual substance appears in two

ways namely, perception and appetite. Both of these characteristics must belong to it, for, if it had perception alone, the part would merely represent one aspect of the whole, like an unchanging picture, It is because of this appetite that the part is able to realize the life of the whole.

Monads have properties such as perception, ~~thought~~ consciousness which are spiritual and internal change of these properties which also must be spiritual is called appetite.

Like most other metaphysicians, Leibniz assumed that a substance must be something truly independent, that is, something existing in its own right, without the need of outside support. He sees the problem of substance in the light of the problem of individuation. The only way in which Leibniz thought he could explain both the independence of substances and the truly individual nature of each was to argue (a) that substances must be simple (monads); (b) that they cannot consist of matter or be extended in space; (c) that they are windowless and (d) that there is sufficient reason why every fact or event should be as it is and not otherwise.

Monads, that means simple, for Leibniz, are simple in the strictest possible sense. In order to be truly indivisible they must have neither parts, nor shape, nor extension. This means that monads are neither materially, nor spatially characterized. From the rejection of both matter and extension as the attributes of substance it follows that the basic nature of everything is spiritual. In addition to this view Leibniz, is of the opinion that monads neither came into being nor, perish in the way in which material objects, that is, the compounds of monads come into being or are dissolved. So far as monads are concerned, Leibniz says that they begin by an act of creation and end by annihilation.

From the above argument of plurality of monads and their immaterial nature, Leibniz must now answer two crucial question namely (1) how are monads related to one another ? and (2) what exactly is each monad made of ?


The answer to be first question is that monads being independent substances must be wholly unrelated to one another. By assuming that the nature of monads are immaterial and unextended, Leibniz effectively eliminated the concept of physical interaction between monads. Monads are not provided with anything that could affect them from outside. Leibniz argued that if monads have mental experiences, states of consciousness or sense-perceptions such as seeing a tree, these are in some way self-induced and do not result from anything external to themselves. Since monads have no spatial characteristics, no meaning can be attached to the phrase 'outside a monad'. According to Leibniz, monads are 'windowless'. The relationship between monads must be reducible to attributes or properties of monads.

Leibniz's second question regarding the nature of monad is that, monad must have properties, otherwise they would be nothing and could not even be thought of.

Since it follows from Leibniz's main thesis that a monad's properties are neither physical, nor spatial, it remains for him to indicate in what way it is characterized.

Leibniz's description of monads can be said to be two-fold. First, if monads are to be spiritual substances, their properties must themselves be spiritual. To qualify monads in this way is to say that they have different degrees of consciousness and more or less clear ideas, perceptions or thoughts. Secondly, if monads are to be individual substances, any change in their attributes must be based on some internal principle, which in turn must be spiritual in nature. Leibniz calls this internal principle of action or change from one idea to another as "appetition". The action of internal principle which causes the change, or the passage from one perception to another, may be called appetition. It is true, the desire cannot always completely attain to every perception to which it tends, but it always

attain to something thereof, and arrives at new perceptions.

Leibniz follows Descartes in regarding clearness and distinctness as the marks of perfection in ideas or perceptions but he does not limit or draw a sharp line between ideas which are perfectly clear and distinct and all those which are confused or obscure. All perceptions, according to Leibniz, are more or less perfect representations of objects but they vary in their degrees of distinctness or confusedness. Confusedness is simply a low degree of distinctness that is, the more perfect  any perfection or representation is, the more clear or distinct it is and on the other hand while the less perfect it is, the more it is confused.

Thus the differences among the monads consist entirely in the various degrees of perfection or distinctness with which they perceive or represent the universe. Since each monad seems to contain the whole more or less confusedly within itself therefore, with the help of its appetite it may rise to a more perfect state.

Leibniz has roughly distinguished created monads into three main classes - (1) Unconscious monads; (2) Conscious monads and (3) rational or self-conscious monads. All simple substances or created monads might be called Entelechies, for they have in them a certain perfection or completeness in them. They have a certain self-sufficiency which makes them the sources of their internal activities and so to speak, incorporeal automata. That is to say, not merely machines, such as those made by man, but entirely self-moving machines which contain within themselves the ground or principle of all their states or conditions. Monads in this sense can be said to be automata.

Conscious sensation or feeling, accompanied by the simple forms of memory, clearly marks of certain monads from those which have merely unconscious or confused perfection. To the former class the name 'souls' may be specially applied while for the latter the general name

Entelechies can be applied. Again there are higher monads which have self-consciousness and reason or thought proper, in addition to unconscious and conscious perception and memory, we may call these 'rational souls' or 'spirits'. The class of rational souls or spirits includes men and higher intelligences. The intermediate 'soul' class is that of animals and the class of entelechies are said to include all real beings that have not reached the stage of consciousness. Each of the two higher classes of monads possess, in addition to its own specific qualities, the characteristics of the inferior monads. Thus both animals and men have unconscious as well as conscious perceptions, for example, when they fall into faint or have profound and dreamless sleep, for we experience in ourselves a condition in which we remember nothing and have no distinguishable perception. In this state the soul does not perceptibly, differ from a bare monad, but as we find that this state is not a lasting one and the soul comes out of

it, therefore soul can be said to be something more than a bare Monad or unconscious monad. In such a case that means, in case of dreamless sleep or in case of faint, monads or simple substances are not entirely devoid of perceptions, for monads cannot exist without ~~any~~ perception of some kind. The changes of the monads are entirely from within, so that when the man or animal awakens out of a sleep or trace his conscious perceptions must have unfolded themselves out of immediately preceding perceptions of an unconscious mind. Since every present state of a simple substance is naturally a consequence of its preceding state, it can be said that its present is big with its future.

Since on awaking from an unconscious state, we are conscious of our perceptions, we must have had perceptions immediately before we awake, although we were not at all conscious of them because one perception can in a natural way come only from another perception, as a motion

can in a natural way come only from a motion. Here, I want to say a few lines about the laws of motion. By this laws we mean that the total quantity of motion in the universe is constant, that it is neither increased, nor decreased. But one kind of motion may be transferred into another kind without any increase or loss of quantity and during this transformation no quantity of energy is absolutely lost. For example, suppose a body falling from a height strikes the ground and is at a stand still. The mechanical energy of the falling body disappeared as such, but is transformed into another form of energy, that is, heat. Thus no energy is lost, though one form of energy is changed into another form. Let us come to the point of perception again. In virtue of the principle of sufficient reason, we can say that every perception must have a cause, which can be nothing but another perception and if the antecedent perception did not immediately precede the consequent, there would be a break of continuity in the existence of soul. Motions are themselves perception, but they are confused perceptions, of such a kind that their relations to one another can be stated according to mechanical laws which however are abstract and pre-supposed.

Again, men share with animals both sense-perception and the empirical sequence of memory. Memory provides the soul with a kind of consecutiveness or sequence of perception or what Leibniz calls association of ideas. For example, we see that when animals have a perception of something which strikes them and of which they have formerly had a similar perception, they are led, by means of representation in their memory combined the things with the previous perception and they come to have feelings similar to those they had on the former occasion. For instance, when a stick is shown to a dog, he remembers the pain it had caused to him and howl and run away. And the strength of the mental image which impresses and moves him comes from the number of the preceding perceptions. In so far as the sequence of perceptions are due to the principle of memory alone men act like the lower animals. In our every day life most of our works and beliefs are seem to be of empirical kind. In three fourth of our actions we are nothing but empirics. For instance, when we expect that there will be day light tomorrow, we do so empirically, because it has always so happened until now.

While discussing self-consciousness, it is very important to refer to Descartes, According to Descartes, the rational soul is the mind and its reality comes only from self-consciousness. This means that without self-consciousness there is no mind or soul. Animals have no self-consciousness. Therefore, they have no mind, they are mere machines but animals have sensations and impulses and consequently sensation and impulses are not functions of self-consciousness or acts of soul. But these sensations and impulses are purely physical^{and} mechanical process whether they occur in man or in lower animals. Descartes sharply ~~ly~~ draws the line between consciousness and unconsciousness on the one side, and self-consciousness on the other side and the complete independence of self-consciousness is the root of the cartesian dualism. But one point can be stated here that, mind must not be regarded as identical with self-consciousness alone, for self-consciousness must not be taken as entirely exclusive of mere conscious and unconscious activity of mind and the opposition between mind and body is said to be a difference, not of a kind but of a degree. In the certainty of self-consciousness Descartes involved the certainty of God, the Perfect Being, and from this he proceeds to the certainty of the external world and to the principle that clear and distinct ideas

Does Descartes speak of other processes of mind besides consciousness?

are characteristics of self-consciousness and with the help of this clear and distinct ideas, the reality of subjects can be drawn. For Leibniz, on the other hand, the Ego is not a pure subject, whose essence is immediate self-consciousness.

Leibniz says -

"Not only is it immediately clear to me that I think, but it is quite as clear to me that I have different thoughts; that now I think of A, now of B and so on. These two things I regard as mutually independent of another and as equally original. There are two absolute truths, that is to say, general truths which speak of the actual existence of things: the one is that we think, the other that there is a great variety in our thoughts. From the first it follows that we are, from the second it follows that there is something other than ourselves, that is to say, something other than which thinks, something which is the cause of the variety in what appears to us. Now the one of these

truths is as unquestionable, as independent as the other, and Descartes, having in order of his meditations taken account only of the first of them, has failed to reach the perfection he set before himself".²

Self-consciousness cannot be the ground of existence of an Ego, but a difference in degree of quality between it and other substances. To say ' I think' therefore I am (I exist) is not strickly to prove existence by thought, since to think and to be thinking are the same thing and to say I am thinking is already to say I am. Self-conscious monad is one which has developed its perceptive nature more fully than those of animals and unconscious monads. The knowledge of necessary and eternal truths distinguishes us, that is, self-conscious monads from mere animals and gives reason and sciences, raising us the knowledge of ourselves and of God. The necessary and

2. (Nouveaux Essais, bk. iv. ch. 2 1 (E 341 a; g.v. 348) G.iv.327. Also letters to Foucher 1676 g*oi*. 370).

eternal truths are the first principles of all rational knowledge. They are innate in us. They are in fact the very principles of our nature or universe. Thus the consciousness or knowledge of these truths are knowledge of ourselves and it is at the same time knowledge of God, who is the final reason of all things. This reasoning in us is called the rational soul or mind.

Our reasoning are grounded upon two great principles, that of contradiction and of sufficient reason. Leibniz sometimes distinguishes between the principle of contradiction and that of identity ($A=A$). But ~~he~~ he recognizes that they are ultimately one. The principle of contradiction is in general, a proposition is either true or false that means it cannot be both true and false at the same time. Again, there is sufficient reason, in virtue of which we hold that there can be no fact real or existing, no statement true, unless there be a sufficient reason, why it should be so and not otherwise, although these reasons usually cannot be known by us. Leibniz sometimes calls the sufficient reason the determining reason, meaning the reason which determines the existence of this or that out

of a number of possibilities, each of which involves no self-contradiction. The sufficient reason of a thing is always to be found in its relations to other things. Leibniz does not give us a very clear idea of the relation of the two principles to the two kinds of truths - namely truths of reason and truths of fact. Truths of reasoning are necessary and their opposite is impossible, and truths of fact are contingent and their opposite is possible. Leibniz says -

"Both principles must apply not only to necessary, but also to contingent truths and indeed, that which has no sufficient reason must necessarily be non-existent. For it may in a manner be said that these two principles are included in the definition of the true and the false. Nevertheless when, by analysing a suggested truth, we see that it depends upon truths whose opposite involves a contradiction, we can say that it is absolutely necessary. But when, carrying our analysis as far as we like, we can

never reach such elements of the given truth it must be said to be contingent, and to have its origin in a prevailing reason which inclines without necessitating".³

But on the other hand, at a later date, Leibniz writes to Clérke -

"The principle of contradiction is by itself sufficient for the demonstration of the whole of Arithmetic and Geometry, that is, to say, of all mathematical principles. But in order to pass from Mathematics to Physics, another principle also is needed the principle of sufficient reasons"⁴

Accordingly, the principle of contradiction and the principle of sufficient reason remain side by side in the philosophy of Leibniz, each having its specific function, but neither reducible to the other. There are certain

3. Theodicee entitled Remargnes sun le livre de M King. E. 641 b; g. vi. 414.

4. (II^{me} Ecrit de Leibniz, E 748 a; g. vii, 355)

eternal and necessary truths which are independent of the will of God, existing in His understanding alone, and these are subject to the principle of contradiction but the reality of all individual substances and their changes is dependent on the will as well as understanding of God and they are all subject to the principle of sufficient reason. Each principle expresses a necessity but necessity of different kind. The former is said to be metaphysical necessity, whose opposite is impossible, involving self-contradiction, while the later is a relative, or moral necessity, whose opposite is not impossible but in consistent or opposed in character not with itself but with the system of which it is a part.

The sufficient reason of the existence of the universe cannot be found in the sequence of contingent things, that is to say, of bodies and their representations in souls, because the motion which is at present in matter or in bodies comes from the preceding motion, and that again from another preceding motion, we are no farther forward, how far we go, for the same question always remains. Thus the sufficient reason must be outside of this sequence of contingent things and it must be in a

substance which is the cause of this sequence otherwise we should not yet have a sufficient reason with which we could stop. And this ultimate reason of thing is called God.

In order to discuss principle of individuation adequately, we have to discuss the principle of sufficient reason and this will lead to the formulation of the principle of the identity of indiscernibles.

According to Leibniz, reasoning is based on two types of laws, namely law of contradiction and the law of sufficient reason. The law of contradiction states that a proposition and its opposite cannot both be true. The law of sufficient reason states that, ^o no fact can be real and no proposition can be true unless there is a sufficient reason, why it should be thus and not otherwise, even though in most cases these reasons cannot be known to us^o. In accordance with these two principles of law of contradiction and sufficient reason Leibniz is able to distinguish two kinds of truths, namely 'truths of reason' and 'truths of fact'. According to him, truths of reason is a proposition the opposite or denial of which is impossible and therefore necessarily true. He defines a truth

of fact as a proposition the opposite of which is not contradictory, but possible or logically conceivable and therefore, they are said to be contingently true. Here, we can say that truths of fact and contingent proposition are based on the law of sufficient reason. In order to understand necessary and contingent fact we will have to discuss his two assumptions. He holds (a) that in its basic form every true affirmative statement displays a connection of a subject term with a predicate term and (b) the notion of a substance is that of a subject in a proposition, in which predicates inhere, that means substance becomes definable in terms of the total of its predicate. Therefore, according to Leibniz, all true affirmative proposition, whether contingent or necessary one, can be defined as analytic, that means, their predicate terms are contained in their subject terms. Leibniz's definition of truth in terms of the 'containment' of predicates in the subjects of propositions seems to eliminate the distinction between 'analytic' and 'synthetic' propositions as well as that between necessary and contingent ones. Leibniz's objection to this criticism is that a necessary proposition is one in which the inclusion of the predicate in the subject can be demonstrated in a finite number of steps.


whereas in the case of a contingent proposition an infinite number of steps would be required, which is humanly impossible, though possible for God.

The two leading ideas of Leibniz can be stated as (a) the logical premise that the subject term of a true affirmative proposition must always include its predicate terms. It follows that anyone who understands the notion of the subject term would then also judge that predicate terms belong to it or inhere in it. (b) the metaphysical premise that all true predication has some foundation in the nature of things. On the basis of these two premises Leibniz concludes that the nature of any individual substance contains once and for all everything that can ever happen to it, so that a full definition of it consists in a complete description of all its predicates, past, present and future. Leibniz believes that the possibilities of the future are inherent in the present cannot be ruled out. He wrote that every present condition of the monad is the invariable or natural result of its past state, in this way its present is full of its future. All objects in this universe are linked to one another in definite order.

It is chiefly on the strength of his principle of sufficient reason that he could argue on the one hand, that the nature of an individual substance contains from the beginning everything that can ever happen to it and on the other hand, that the factual connection between substances and their attributes is different from the necessary connections holding in geometry.

Leibniz is of the opinion that monads have no windows, through which anything could come in or go out. But then also monads must have some qualities, otherwise they would not even be existing things. A being without quality is indistinguishable from nothing. Leibniz seems to imply that each monad must have more than one quality. And if simple substances did not differ in quality, there would be absolutely no means of perceiving any change in things.

Since each monad is a part or element of the universe, because each represents it or reflects it as in a mirror from some particular angle, therefore, the whole must be the infinite totality of monads. No two

monads can be exactly the same. The monads differ from one another in quality only. This is the doctrine of Leibniz which is usually called the 'Identity of Indiscernibles'. The difference is only ^{of} quality not of quantity because monad is indivisible so  the question of quantity does not arise. Monads are infinite in number and every monad differs in quality from every other and monad might be considered as a series each member of which differs from the next by an infinitely small degree of quality.

According to Leibniz, each monad must be different from every other. This can be said to be his famous principle of the 'identity of indiscernibles'. There cannot be several things exactly the same, for in that case there would not be several things, but the same thing itself. All things must necessarily differ from one another. Among several individuals of the same species there is necessarily a diversity of degrees of perfection. There is nothing in the universe which does not enjoy a certain singularity. According to Leibniz, qualities can be intrinsic as well as extrinsic. Intrinsic qualities are those which things have in themselves, e.g. figure,

motion etc. that means such as round, square etc. while extrinsic qualities are those which arise from their relations to other things, e.g. their being perceived, desired that means as loved, seen, desired etc. Again, there is a constant change in created substances or created monads, even though there may appear to be no change. What appears to us as absence of change is really a very small degree of change. Everything is continually changing, in every part of this change there is both a permanent and a varying element. That is to say, at any moment everything both is and is not, everything is becoming something else but which is not entirely 'other'. Here I want to present an illustration -

" The state of the soul, as of the atom, is a state of change, a tendency. The atom tends to change its place, the soul to change its thought : each changes of itself in the simplest and most uniform way, that its state allows. Whence comes it, then (I shall be asked), that there is so much simplicity in change of the atom '(which is taken as being always motion in a straight

line at a uniform speed) * and so much variety in the changes of the soul ? The reason is that the atom (as it is supposed to be, for there is no such thing in nature)†, although it has parts,‡ has nothing which causes any variety in its tendency, because it is supposed that these parts do not change their relations; while on the other hand the soul,§ though it is perfectly indivisible, has a composite tendency, that is to say, it contains a multitude of present thoughts, of which each tends to a particular change, according to nature of its content, and which all are present together in the soul, in virtue of the soul's essential relation to all the other things in the world. It is because they do not have this relation that the atoms of Epicurus have no existence in nature.¶ For there is no individual thing, which is not to be regarded as expressing all others; and consequently the soul, in regard to the variety of its modifications,‡ ought to be likened to the universe, which it represents according to its point of view, and even in a way to God, whose infinity it represents finitely; because of its confused and imperfect perfection of the infinite, rather than to a material atom.¶ 5

5. (Cf. Repanse aux Reflexions de Bayle (1702)

(E. 186 b; G. iv. 562)

The principle of identity of indiscernible can be stated that, there is no such thing as two individuals indiscernible from each other. If there are two alleged objects or particulars which are perfectly alike, that is, had all their properties in common, place and date included, then there would in effect no longer be two particulars but only one. That is to say, instead of asserting that, if whatever is true of X is true of Y, then X and Y are one and the same individual object, one might wish to assert that, if X and Y are one and the same individual object, then whatever is true of X is true of Y. However, there is yet another way of formulating the principle. This is to assert that if, and only if, there really are two, i.e. numerically different particulars, then there must be unlike one another, that is, one must possess at least one characteristic which the other does not possess. If there are two individuals they must differ not merely in number or by what should regard as their spatio-temporal characteristics, but also by some kind or degree of qualitative or intrinsic dissimilarity. According to Leibniz, since monads are not spatially qualifiable, position in space in ordinary

sense can not be attributed to them and therefore are meaningless in relation to the nature of ultimate reality. Again, if two objects are to differ in respect of their position in space only, they must, on Leibniz's view, differ with regard to their internal qualities and therefore, be qualitatively discernible as well.

Identity of indiscernibles is a famous principle of Leibniz's. He recognizes two kinds of difference, namely, numerical diversity and qualitative dissimilarity or unlikeness. The principle can be stated as, whenever there is numerical diversity there must be qualitative dissimilarity or put it quite simply, that there cannot be two individuals which are exactly alike in their qualitative predicates. It is very difficult to be sure which of the following alternatives Leibniz means to assert - (a) That the very supposition that there might be two things exactly alike in their qualities is self-contradictory and meaningless (b) That although the supposition is not logically impossible, that means that there can be two things exactly alike, but according to Leibniz, it would be contrary to God's wisdom to create

two such bodies and therefore, we can be certain that the are not two such bodies. As Clarke points out, Leibniz seems now to say one thing and now the other. Some times Leibniz appeals to the empirical fact that, however much alike two things may seem at first sight, we will always find a qualitative differences between them if we look more carefully, use a microscope etc. The agrument would be that every increase in our powers of discrimination disclose qualitative differences in things which seemed exactly alike at the previous stage. Hence, we may conclude that all cases of plurality of apparently exactly similar things are really cases of dissimilarity concealed by our imperfect powers of discrimination. But according to Clarke, Leibniz would not expect to prove a fundamental metaphysical principle by empirical arguments.

From the fact of each monad representing the universe from its individualistic atand point emerges the theory or law of identity of indiscernibles, the basis of the philosophy of Leibniz. Monads differ because they exist at different levels but even at the same level no two monads are identical because they possess their own

specific existence in relation to time. Here, level means level of consciousness or in other words different kinds of monads. No two things in the universe can therefore be said to be identical. If there were no differences between the monads they should have been identical, and therefore, they should have been referred to as one rather than as two. This is what Leibniz calls the law of identity of indiscernibles. It implies that things between which there is no difference is one, and things that are not identical are not one.

It is very important to consider Leibniz's view of causal properties of objects, since Leibniz is often believed to have been a metaphysician who denied causal interaction. His claim in the Discourse of Metaphysics, that each substance is like a world apart, independent of everything but God and his claim that monads have no windows have led some to believe that Leibniz's vision of the world was unscientific- a vision in which nothing causally affects or is affected by anything else. Leibniz's denial of the philosophical doctrine of causal interaction was raised first as a reaction against causal views about the mind-body problem.

According to Leibniz, things do affect each other, but not by further things going out of one and going into another. If 'a' affects 'b' it is not as if there are windows in 'a' and 'b' through which further things 'c' and 'd' go in and out. Leibniz's solution to this problem is the hypothesis of the pre-established harmony i.e. that the nature of 'a' and of 'b', is such that, following the laws of nature, the change in one does correspond to change in the other. According to Leibniz, to say that every change in an object can be explained from its nature and natural laws of the world is not to say that things behave as if they were not connected to other things. According to him, everything is like a mirror which reflects the whole universe. He describes the relation between himself and some other object as thus -

This view is known as parallelism. But the question remains why does a change in one correspond to a change in another? If mirrors are windowless, how can there be any parallel changes taking place between them?

My earlier state of existence contains the ground for the existence of the later. And since, because of the connection of all things, the earlier state in me contains also the earlier state of the other thing, it also contains the ground of the later state of the other things⁶

6. (Initia Rerum Mathematicarum Metaphysics; Gerhardt, Math. VII, p 17; Weiner, p 201)

Leibniz believed that the necessity of such laws of nature resided in the nature of each individual substance. For example, it is in the nature of every piece of iron, that ~~it will be drawn to~~ a magnet. The Constitution which makes the iron stick to the magnet is already in the iron. Therefore, if we know the laws of nature we can deduce what will happen to the piece of iron in the vicinity of the magnet. That is why Leibniz believed in the Principle of Sufficient reason, which he formulates as' all truths - even the most contingent - have an a priori proof, or some reasons why they are truths rather than not. And this is just what is meant when it is commonly said that nothing happens without a cause, or that there is nothing without a reason'.⁷ These laws of nature determine how each individual thing behaves in various situation. Each individual thing is a thing of a certain kind, for example a particular metal of a particular shape. And all these facts determines the nature of the individual, including how it acts or reacts in correspondence with other objects given any actual situation. One of the basic features of the universe

7. (Untitled manuscript, Gerhardt, Phil. VII, p.301)

for Leibniz was -

" the fact that God hascreated the soul or any other unity in such a way that everything arises in it from its own internal nature through a perfect spontaneity relative to itself, and yet with perfect conformity to external things"⁸.

From the belief in the interconnection of multiple substances, we find a conflicting belief held by Leibniz in the logical possibility of there being only God and one created mind. According to some critic, this view leads to a strange inconsistency. For if the set of predicates which makes up the description of an individual concept includes relational predicates, then these predicates would not be true of that individual in a universe in which there were nothing except that individual substance and God. To say of a substance that it perceives, or mirrors or represents, another objects, presupposes that monad stands in a certain connection to other

8. ('Systeme nouveau de la nature et de la communication des substances', Journal des savans, June 1965, Erdmann P 127; Wiener, P 144)

object. Perception, intellectual knowledge, animal feeling are all, Leibniz says, species of expressions or representations. Therefore, to say of a substance that it perceived the universe from its point of view is to say that there is a relation between what can be said of that substance and what can be said of all the other objects in the universe. Thus one would be ascribing a perceptual state to an individual monad falsely if there were nothing else in the universe for the monad to perceive.

According to Leibniz, independence of substance does not lessen the interconnection between the substances. Leibniz asserted against the occasionalists that, although men owe their origin to God, they do not need God's intervention in order to perceive material objects. Our mind is such that with its own power it perceives the world around it. But it can not be said that perceiving is nothing but thinking. If the correspondence or connection with objects external to it were not an essential property of perception, then Leibniz's

theories about perception would become inconsistent.

Leibniz claimed against Locke and Cartesians that 'awareness' was not an essential feature of perceptions. We can have perceptions without being aware of the fact, and yet we can realise that they have left traces in our minds. Sounds that we hear but of which we take no notice when our mind is focused on something else, things we hear while we sleep are examples. Leibniz believes that perceptions of which we are aware are only a subset of perceptions, and he calls the former 'apperceptions'.

The term was introduced by Leibniz to mean self-consciousness as opposed to perception. But if perception were the kind of thing that a mind could have if there were nothing in the universe apart from God and it, then would there be any distinction between perception and apperception? How could we have unconscious perceptions in the world in which there were no

external objects ? What is the difference between unconsciously perceiving one's own desires and merely by having such desires without being aware that one had such desires ? There are many difficulties involved in maintaining Leibniz's theory of unconscious perception in a solipsistic world.

Leibniz's philosophy can be said to be spiritualistic pluralism. Leibniz's spiritualistic pluralism is theistic. It is theistic because monadism believes in God. Therefore it is theistic pluralism. He says " The ultimate reason of things must lie in a necessary substance or God. This Supreme Substance is unique, universal and necessary has nothing outside Himself independent of Himself, and must contain as much reality as is possible -... God alone is primary Unity, original simple substance, from which all monads created and derived are produced, and are born, so to speak, by continual fulgurations of the Divinity".⁹

9. Monadology, pp. 10-11 (E.M.L.)

Monads are spiritual in nature. Monadism denies the existence of matter. But to deny its existence is to deny the facts of experience. Subject and object, mind and matter both are real. Knowledge presupposes the duality of subject and object. Against monadism is a form of pluralism. It cannot explain how self-existent and independent monads came into connection with one another to form this world system. It can be said that atomism believes in blind chance and in the theory of interaction among the atoms. In other words, monadism brings in the conception of God or Monad of monads who pre-adjusted the monads to one another at the time of creation. But it seems to be the same as the theory of interaction. God is a monad. How can He act upon other monads? A monad can never act upon other monads.

Leibniz believes that monads are independent and windowless. Each quality of a particular monad is peculiar to it and is developed from within it. But if

the development, at the same time is the result of pre-established harmony, then how can monad be said to be independent ?

Again God, according to Leibniz, is the supreme monad. But then is He, too, not subject to the principle of pre-established harmony and determined by it? If this is true then God cannot be independent and if this is not so then God cannot be monad. If God is not a monad, then Leibniz's conception of the relation between God and pre-established harmony does not appear to be satisfactory. According to some critics, in actual fact his philosophy cannot provide any acceptable and logically tenable explanation of the relation between these two concepts.

Strawson maintains that we think of the world as containing particular things some of which are independent of ourselves. According to Strawson, in the most familiar uses, historical occurrences, material

objects, people and their shadows are all particulars, where as qualities and properties, numbers are not. The phrase 'identification of particulars' which is the main concern of Strawson can be illustrated in the following way. When two people are talking, one of them who is the speaker, refers to or mentions some particulars or other. The other one, that means, the hearer knows what or which particular the speaker is talking about, but sometimes he does not. According to Strawson, this can be said in a different way, that is, the hearer either is, or is not able to identify the particular referred to by the speaker. Among the kinds of expressions which the speaker use to make references to particulars and which the hearer able to identify are expressions include some proper names, some pronouns, some descriptive phrases beginning with the definite article. Strawson says that when a speaker uses such an expression to refer to a particular, he makes an identifying reference to a particular. In this case, one thing is not clear that the speaker making an identifying reference to a particular, hearer does in fact identify that particular

or not. But when a speaker makes an identifying reference to a particular and his hearer does, on the strength of it, identify the particular referred to, then the speaker not only makes an identifying reference to, but also identifies that particular. So we have a hearer's sense and a speaker's sense of identify. One question can be raised here - what are the tests for hearer's identification? A sufficient, but not necessary condition of the full requirements being satisfied is that the hearer can pick out by sight or hearing or touch or can otherwise sensibly discriminate, the particular being referred to. When the hearer is able directly to locate the particular referred to then it is known as the demonstrative identification of particulars. Demonstrative identification of particular is not always an easy matter. The scene may be not clear, its elements confused. Different sections of the scene may be very like each other. For example, it is easy to mistake in applying such descriptions as 'the twelfth man from the left in the fifteenth row from the top'.¹⁰ But one thing is clear in demonstrative identification namely the

10. Individuals - P.F. Strawson

identity of the range of particulars, of the sector of the universe, within which the identification is to be made. One thing should be noted that where the particular to be identified cannot be directly located, its identification must rest ultimately on description and this is known as the non-demonstrative identification of particulars.

Now, I want to discuss Strawson's view about the monad of Leibniz. According to Strawson, in order to discuss Leibniz's philosophy, we will have to make a distinction between historical Leibniz and possible Leibniz.

According to Strawson, the problem of identification of particular is a theoretical one. It is a theoretical position that the identification of particulars rest ultimately on the use of expressions with some demonstrative or egocentric or taken reflexive that means sign or symbol, force. According to Strawson, in

order to solve the identification problem for the spatio-temporal world, demonstratives must have a spatial as well as a temporal force. No system which does not allow for spatial or temporal entities can be a system which allows for particulars at all, or at least can be understood by us as such. Kant is said to be making the same point in saying that space and time are our only forms of intuition. In other words, identifying thought about particulars necessarily incorporates a demonstrative element.

Leibniz's thesis seems to run counter to this, for the individuals of the system i.e. for monads, a certain form of the doctrine of the identity of indiscernibles is said to hold. According to this doctrine, it is necessarily true that there exists, for every individual, some description in purely universal or general terms, such that only that individual answers to that description. One might think it impossible to specify any type of purely general description which guaranteed uniqueness to any particular it applied to, while thinking it necessary, that there should exist a uniquely applicable general

description for any object. Leibniz thought that, he could specify the type of description in question but not that he could actually give any such description, for only God could do that. A description of this type was what he sometimes called a 'complete notion' of an individual.

The basic individuals of Leibniz's system are not material, they have no spatial parts; they are in fact, consciousness, subjects of perception and apperception. Strawson says that according to possible Leibniz, monads are not minds, but that minds are the nearest and easiest model for monads of all the categories that we employ. For historical Leibniz, only a sub-class of monads are said to be conscious and only a sub-class of states of conscious monads are conscious states and monads being non-spatial entities are non-temporal too. But for Strawson the model for a monad is a mind. All that is real in the Leibnizian system is just the monads and their states. There is no common spatial world for them to mirror, there is just a certain correspondence

between their states of consciousness. There are private spaces, but no public space. Since monads are not spatially related to each other, since there is no common spatial world to which they belong, there is no possibility of there being two positions in such a world from which two different monads might have indistinguishable views. Space is internal to monad.

So one objection to the doctrine that individuation can be secured in a way compatible with the principle of identity of indiscernibles falls to the ground as far as the system of Leibniz is concerned.

According to Strawson, Leibniz's theory of monad can not be said to be an logical one, for it is based on a mere theological assurance. Because, for Leibniz there is no common spatial world for monad. Monad is not in space. Therefore, according to Strawson, it can never be called a genuine ontology of particulars, it can only be an ontology of particulars by courtesy. For the idea of a particular which is in fact non-temporal and non-spatial is scarcely one that we can understand.

Conclusion -

In this third chapter, I have discussed thoroughly Leibniz's doctrine of monads, which is one of Leibniz's central theses. Leibniz is of the view that there must be simple substances since there are compound substances. This means that the notion of substances can not be explicated without the help of notion of simple substance. Some might argue that this view of Leibniz is not original one because of the fact that much before Leibniz, two ancient Greek Philosophers, namely, Democritus and Epicurus had already expressed the same view. I have tried to argue that the position of Leibniz is indeed an original one for the following reasons.

Democritus and Epicurus believes that all things consists of small atoms, and that these atoms are extended bodies and irreducible parts of matter. Moreover, they hold that matter is lifeless without motion and that this being so, matter gets motions not from within itself but from outside itself. It must be emphasized here that in the Leibnizian scheme of things, matter can not be object of thing or substance. Leibniz

asserts that the monads differ from atoms in being not extended and but in being of force or energy.

What is monad ? The word 'monad' originally denotes the unit of arithmetic. 'Monad' was used to refer to the individual in the ancient philosophy which was similar to indivisible atoms of Democritus. Leibniz ~~deveates~~ from all these meaning and gives 'monad' a new meaning. For Leibniz, 'monad' is a living being which is indivisible but distinguishable from mathematical unit or atom. He believes that according to Democritus and ancient philosophers 'monad' is an individual only by definition, not by any real existence. Moreover according to Leibniz monads are logically prior to any corporeal forms. Leibniz describes the monads only in qualitative terms. If the monads are taken to be non-quantitative, is it possible to make the meaning of a compound, which is a mere aggregate of monads, intelligible? But an aggregate ~~is~~ necessarily implies elements which are quantities, however small they may be. This position seems to make the theses of Leibniz a weak one.

Leibniz is of the view that changes in monad is possible, because it contains within itself the cause of change, force of activity which produces the motion.

I have broadly indicated Leibniz's main reasons for advocating pluralism instead of dualism or monism. I am of the view that Leibniz has given valid reasons for holding that there is an infinite number of simple substances. The crucial concepts in Leibniz's philosophy are monadism, the pre-established harmony, the principle of sufficient reasons and identity of indiscernibles. I have made a critical assessments of all these concepts in this chapter. A true substance, Leibniz argues, must be a unitary thing and therefore, not only unextended and indivisible but also organic. This is why he comes to the conclusion that it must be an immaterial centre of energy, immune from all external influences. Leibniz comes to this conclusion on the basis of two reasons namely - (1) his interest in mathematics and biology, (2) his subject-predicate logic. I have indicated the limitations of his subject-predicate logic.

If Leibniz admits infinite number of substances, how could he satisfactorily explain their independence? The introduction of the notion of pre-established harmony will not solve the problem as it curtails the independence of the monads.

Leibniz rejects both matter and extension as the attribute of substance. This means that Leibniz is committed to the view that the basic nature of everything is spiritual. Leibniz points out that the monads come into being in the act of creation and come to an end by means of annihilation.

Leibniz emphasized the plurality of monads and their immaterial nature. Therefore, the onus or responsibility is on Leibniz to answer the following two questions, namely - (1) how are monads related to one another? (2) what exactly is each monad made of? Leibniz answers the former, the following way. A monad being independent substance must be completely unrelated to one another being immaterial and unextended. This is how Leibniz

successfully eliminates any kind of physical interaction between monads. He answers the latter as follows. He says that every monad has an internal principle of action, which he calls "appetition".

Leibniz inherits from Descartes clearness and distinctness as the marks of perfection in ideas and perception. However, he fails to draw a sharp distinction

There can be interaction as well between a material entity, say body and a mental entity, say mind. If monads are really independent, how can they mirror the universe from their respective points of view?

between ideas which are perfectly distinct and clear and those which are not.³ He holds the view that though all perceptions are more or less perfect representation of objects, these representations differ in their clearness and distinctness in degrees only.³

Leibniz sometimes makes a distinction between the principle of contradiction and principle of identity. However, according to him, ultimately these two principles are one and the same.⁴ According to Leibniz, a principle of contradiction and the principle of sufficient reason cannot be reduced to one another.⁵ He is of the view that each principle expresses a necessity but necessity of different kind. The principle of contradiction is said to be a metaphysical necessity, whose opposite is impossible, while the principle of sufficient reason is relative, moral necessity whose opposite is not impossible but inconsistent or opposed in character not with itself but with the system of which it is a part.⁶

According to Leibniz, all affirmative propositions, whether contingent or necessary can be defined as analytic. The critics pointed out that Leibniz is guilty of removing the distinction between analytic and synthetic propositions.⁷

Leibniz answers these critics in the following way -

A necessary proposition is one in which the inclusion of the predicate in the subject can be demonstrated in a finite number of steps, whereas in case of contingent propositions an infinite number is required which is humanly impossible, though possible for God.

Leibniz maintains that individuation of monads is possible, that is, the monads can be identified and re-identified. This amounts to claim that numerical identity is possible in the case of monads. He points out that no two monads can be exactly the same, and that monads differ from one another in quality only. This doctrine is called 'identity of indiscernibles'. However, there is a difficulty here, which, I think, cannot be overcome by Leibniz. The difficulty is this; if the monads differ in quality only, we can have only specific identity but not numerical identity.

Strawson claims that monads cannot be identifyingly referred to and that will lack individuation. In the fourth chapter entitled "Monads" of the part one "Particulars" of his book "Individuals" Strawson discusses this point. It is obvious that Leibniz's theses runs counter to the theses of Strawson. Strawson claims that the theory of monads cannot be a logical one but it can be only theological one. Strawson argues that since there is no common spatial world for monads, Leibniz's system can never be a genuine ontology of particular but only a ontology of particulars by courtesy.

Strawson's position is a highly debatable one. I am of the opinion that Leibniz has successfully established the individuality of monads on the basis of his principles of the law of identity, law of contradiction, the law of sufficient reasons, the law of pre-established harmony and principle of identity of indiscernibles.

C H A P T E - IV

Jiva, Ajiva and Monad

In this chapter entitled 'Jiva, Ajiva and Monad' I would like to connect the pluralism of Jainism with that of Leibniz. But first of all I would like to discuss briefly the Jaina philosophy in general.

The schools or systems of Indian Philosophy are divided into two broad groups, namely, orthodox (āstika) and heterodox (nāstika). To the first group belongs the six chief philosophical systems (popularly known as sad-darśana), namely, Mimamsa, Vedānta, Sankhya, Yoga, Nyaya and Vaiśeṣika. These are regarded as orthodox (astika), not because they believe in God, but because they accepted the authority of Vedas. Under the other group of heterodox systems, the chief three are the schools of materialists like the Carvakas, the Jainas and the Bauddhas. They are called heterodox (nastika) because they do not believe in the authority of Vedas. In modern Indian languages, 'astika' and 'nastika' generally mean 'theist' and 'atheist', respectively. But in

Sanskrit philosophical literature, 'astika' means 'one who believes in the authority of the Vedas', or 'one who believes in life after death'. 'Nastika' means the opposite of these. In the second sense, even the Jaina and Bauddha schools are 'astika' as they believe in life after death. The six orthodox schools are 'astika' and the Ćarvaka is 'nastika' in both the senses.

The word Jainism goes back to Jina, which derived from the Sanskrit root ज्ञि 'to conquer' means 'victor' that is, one that has successfully subdued his passions and obtained mastery over himself.

The Jainas believe that their's is the oldest religion, the ideas and practices of their were developed in the hands of twenty four Tirthankaras. According to Jaina belief, it was Rsabhadēva, the first Tirthankara, who taught men seventy-two arts and women sixty four, and also initiated them into the Jain way of life. His example was followed by other Tirthankaras. In the hands of the last two Tirthankaras, Parsva and Mahavira, the traditional knowledge derived from their spiritual ancestors assumes new form and colour. None of them claimed to be the founder of any system. They were great reformers who modified the essentials of the existing religion evidently to meet the demand of their ages. Jaina tradition

places Vardhamana's birth in 599 B.C. but more probably it was in 549 or 540 B.C. He came from Vaisali near Patna in Bihar. After 12 years of meditation, he attained omniscience and the assurance of release. He died in ~~that~~ that has to become the ideal saintly manner, by self starvation. Vardhamana's followers at an early stage split into two sects, the Svetumbaras (literally white clad) and the Digambaras (Sky clad). The difference lies not in doctrine, but in ceremonial practice and in fact that the Digambara monks believe in nudism as a sign of their interdependence from worldly customs and attachments. The Jaina canon, which is quite extensive is supposed to be based on the teachings of Vardhamana. Nevertheless the remarkable agreement between the two sects of doctrine indicates the antiquity of the essential teachings.

' Reality' as the key concept in metaphysics includes in it a general philosophy of life and a definite view of the universe. Because the metaphysical aspects of any philosophical system reflects the world view of life. According to Jainism, a proper understanding of reality consists in understanding consciousness and matter because they both exist. Jainism identifies reality with existence. According to Jainism, reality is existence and existence is real. Both the conscious and non-conscious aspects of Reality that means

Jiva and Ajiva, they both exist, points to the fact that the individual soul, matter, space, time and principles of motion and rest found in the universe are all real. According to Jainism, the universe has neither any beginning nor any end. The entire universe is composed of substances of different kinds and these substances are broadly classified into two groups - extended (astikaya) and non-extended(anastikaya). Every substance of the former kind exists (asti) like a body (kaya) possessing extension. There is only one substance, namely time (kala) which is devoid of extension and hence falls into ~~an~~ Anastikaya group.

Astikāya substances are again divided into two kinds- living (jiva) and non-living (Ajiva), Jiva is of two kinds, emancipated or mukta jiva and fettered or bind that is baddha jiva. The baddha jiva again is of two kinds - moving and non-moving. The moving jivas are again classified into five sensed e.g. men. four sensed e.g. bees, three sensed e.g. ants etc. In the same way Ajiva is divided into four categories namely akasa (space), dharma (conditions of movement), adharma (conditions of rest) and pudgala (matter).

The motion of Jiva in general corresponds to that of atman or purusa of the other school of Indian thought. But etymologically the concept 'jiva' means 'what lives or is animate' - the concept seems to have been arrived at first by observing the characteristics of life and not through metaphysical principle underlying individual existence. Thus the word in the original sense stood for the vital principle rather than for the soul. Later on, however, the question of consciousness was emphasised and jivas were theoretically arranged according to the degrees of consciousness. The perfect souls that had overcome all karmas were placed on the top of the series and at the bottom were placed imperfect souls inhabiting the bodies of earth, water, fire, air or vegetable. But this classification was actually biological, done from a purely empirical point of view on the basis of the sense organs. The number of Jivas are infinite, all being alike and eternal. In their empirical form they are classified in various ways such as those that have one sense,

two senses and so forth. But with the development of the idealistic bias, the Jain conception of Jiva also underwent a significant change and the biological and material considerations were gradually thrown aside and the concept of Jiva came to be looked upon as different from body and its existence was sought to be proved in that of consciousness itself. Jiva was supposed to know things, perform activities, enjoy pleasure, suffer pain, illumine itself and other objects. It can also be said that the existence, function and behaviour

of jivas were conceived in accordance with those of a human being. The jiva is capable of expansion and contraction according to the dimensions of the physical body with which it is associated for the time being. It can be said to become coextensive with the body. Though the jiva has no form, it acquires, just like a lamp which remaining the same, illumines the whole of the space enclosed in a small or a big room in which it happens to be placed, the size and form of the body where in it lives. Therefore, jiva though formless is said to

If jiva were identical with consciousness, it could have neither expansion nor contraction. Such attributes of expansion, contraction etc. belong to material bodies and not to consciousness which is formless.

occupy space or possess extension, its non-spatial character thus being affected by its association with mater. Jiva suffers and enjoys the fruits of its deeds and then in consequence of its Karma it has acquired, goes through the succession of rebirths and finally obtains liberation through the destruction of its Karma.

It is very difficult to understand how a soul can possess both consciousness and extension - qualities are diametrically opposed, according to Descartes. Extension, Descartes thinks, is the exclusive quality of material substances and consciousness is the exclusive quality of the soul. But the soul, as proved by Descartes, is essentially 'a thinking being' and 'thought' seems to have no connection with space and matter. But the Jains conceive the soul primarily as a living being or jiva. Consciousness is found in every part of a living body and if consciousness be the character of the soul the soul should be admitted to be present in every part of the body and therefore, to occupy

space. It should be noted that soul's occupying space simply means its presence in the different parts of space and not filling space like a material body. A material body fills a part of space in such a way that while it is there, no other matter can occupy it. But a soul's presence in a particular space does not prevent another soul's presence there. Two souls may be present at the same place, the Jains point out, just as two lights can illumine the same area.

The metaphor
does not help.
Souls and lights
are entirely
different entities.

The soul or jiva is an eternal spiritual substance. It is immaterial and different from body or sense organs. But it is co-extensive with the body it occupies. Cognition, feeling and co-nation are its or in other words it can be said that it is the knower, enjoyer and active agent. Consciousness is not the accidental quality of the soul, but it is the essence of the soul. Soul is the enjoyer of its actions in the form of pleasure and pain. It is active and free. It can freely do right actions or wrong actions and according to Jaina philosophy, the soul freely enters into

bondage and freely liberates itself from bondage. The soul which is possessor of consciousness also said to possessed of the five sense organs, strength, duration of life, inspiration and expiration or death or end. The five sense organs and body are the accidental qualities of soul, but consciousness is not the accidental quality of soul. The soul manifest itself through consciousness. According to Jaina philosophy, in the state of bondage the soul or Jiva is the agent of its own action and the enjoyer of its fruits. Because of its ignorance it has the bondage to Karma matter and roams about in the world of birth and death. But the soul is said to liberate itself from bondage by adopting the path of right faith, right knowledge and right conduct. The destiny of each jiva is entirely self-determined. Knowledge is not the adventitious quality that means happening be chance or accidental quality but it is an intrinsic quality of self or soul or jiva. Infinite knowledge, infinite perception, infinite bliss and infinite power for right action are innate in the soul. These are not well known or not clearly known because of Karma matter in the state of bondage, but the soul realizes omniscience, eternal bliss and infinite power when soul becomes completely free from

Karma matter. Though the soul is a spiritual substance and thought to be unextended, yet it is considered to be an extensive substance because it illumines the whole body with its consciousness. For example, just as a piece of red ruby placed in a cup of milk gives its brightness to the milk, so the soul residing in a body imparts or gives its consciousness to the whole body. Though it appears to be identical with the body when it functions in it yet it is distinct from body. Perception and knowledge are said to be essential characteristics of soul.

This account comes into conflict with the earlier account where it is stated that jiva is co-extensive with body (vide, p. 167) 5th line from below

According to Jaina philosophy, the jivas are either embodied or disembodied. The embodied souls are either moving or non-moving. Earth, water, fire and air are endowed with souls. Earth souls, water souls, fire souls and air souls have one sense organ namely touch. Plants also are endowed with souls. They have the sense of touch only. Though the non-moving souls have no mental modes, yet they are not unconscious. They are sub-conscious like a foetus in an egg, or an embryo in a womb or a man in a senseless stage. They have dormate consciousness that means they are not active but they are in a sleeping stage. Some ensouled organism for example, seasnail, conch shell, pearl and



earth worm have two senses and they are touch and taste. They are moving souls. Again the louse, the ant, the scorpion and other insects have three senses namely touch, taste and smell. The mosquito, the fly, the bee, the black bee, the moth and the like have four senses namely touch, taste, smell and sight. Higher animals living on land and in water and birds have five senses and they are touch, taste, smell, sight and hearing. Some souls have a mind or reason. Human souls have the power of reasoning, they can distinguish between right and wrong. They are rational.

Jaina philosophers have discussed the nine attributes of soul or jiva. It can be mentioned as follows :-

1. It is a conscious entity. Here the self is conceived as distinct from matter.
2. It is full of knowledge and understanding.
3. It is an intangible entity that means it is not perceived by touch.
4. It is the agent of action.
5. It is co-extensive with body which is animated by it, that means soul gives life to the body.
6. It is the enjoyer of the fruit of its actions.
7. It passes through births and deaths.

How can it
then be eternal?
(Vide, p. 166
2 line from below)

8. It gets liberations.
9. It has a natural potentiality of upward motion.

According to Jaina thinkers, the differences in various schools of thought regarding the problem of self are not ethically so important. Some thinkers are of the opinion that there is a clear distinction between empirical self and transcendental self. From empirical point of view, the self is the agent of actions and it undergoes such experiences like pain and pleasure. From transcendental point of view, self is pure, free from material object. Jainism takes into consideration both the views of self. It is not possible to classify transcendental self into any categories, while empirical self is classified into many categories from different points of view. From the point of view of intellect or manas or mind, the Jivas are of two types- having a mind and having no mind. The Jivas of former type are possessed of a faculty of distinguishing between right and wrong, e.g. men. 
 All Jivas having one to four senses as also some of the five sensed Jivas are included in the latter category that is category having no mind.

From the point of view of biology - the jivas are of two types (a) mobile and (b) immobile. Earth-bodied, water-bodied, fire-bodied and air-bodied are said to include in the immobile group. All these immobile jivas have only one sense of touch. Explicitely these jivas do not show any sign of life, but since they have the tendency to grow and decay, they are supposed to be possessed of life. The Jaina doctrine of non-violence is not only applicable to men and animals but also to these mute that means to these speechless immobile jivas also.

The mobile souls have two to five senses. The one sensed souls or ekendriya jivas have four prannas or vitalities or principles of life namely, touch, power of body age and respiration. The two sensed souls have six pranas. In addition to above four they have the sense of taste and power of speech. The three sensed souls have one more principle that is of small. The four sensed souls add to the above seven, have sense of sight. The five sensed souls have one more in addition to above eight, the sense of hearing,

where as the rational five sensed souls have one more prana, the power of mind. From empirical point of view, all souls very in degrees of pranas.

Ajiva is classified into rupa (those with form, as pudgala or matter) and arupa (those without form, as dhama or motion, adharma or rest, Kala or time and akasa or space). These five categories constitute the world or loka and beyond is the immeasurable infinite called aloka. Now I want to discuss the five categories in a very brief way.

Matter, in Jain philosophy is called pudgala, which etymologically means ' that which is liable to integration and disintegration'. Material substances can combine together to form larger and larger wholes and can also break up into smaller and smaller parts. The smallest parts of matter which cannot be further divided are called atoms (anu). Two or more such atoms may combine together to form compounds

and our bodies and the objects of nature are such compounds of material atoms. Mind (manas), speech and breath are also products of matter. Matter is said to possess colour, smell, taste and form and is perceptible to touch. It is characterised by five colours (black, green or blue, red, white and yellow), two smells (pleasing and displeasing), five flavours (pungent, bitter, astringent, sour, sweet), five shapes (circular, globular, triangular, square, oblong) and eight touches (light, heavy, hot, cold, rough, smooth, wet and dry).

Source of such opinion?

The Jains were probably the earliest thinkers in India to formulate the atomic theory. This theory was formulated in ancient Greece by Democritus and others. The Sanskrit equivalent of the term atom is anu. The Jain doctrine of atomism may be summarised as follows -

The matter of pudgala has certain inalienable features, but in spite of this, the transmutation of the elements like earth, water, fire and air is quite possible. Each of these elements has a structure and they are divisible into atoms. The atoms are all of the same kind, but they can give rise to infinite variety of

things, matter produced by the combination or compounds of atoms are called Skandha to which category all perceivable objects belong. our bodies and objects of nature are such compound of material atoms. Mind, speech and breath are also products of matter and hence constituted by the atoms. 1

It is stated that the atom is eternal as is the substance of which it is the ultimate particle. There are two grade of atoms, smooth and rough. One smooth atom can not combine with another of the same grade but it can be combined with a rough one. But in case of rough atom, they can combine with each other belonging to the same grade. The number of atoms are infinite. There are eight kinds of combination through which the substances are shaped. The qualities of touch, smell, taste or colour which characterise a material substance are possessed by the atoms.

The matter or material world is not a 'figment of imagination', but is real, really independent of perceiving mind. The realistic aspect of any philosophical system is

its conception of matter. This realistic aspect can be stated as whether the world really exists or not. Here one question can be raised 'does the world outside us that is, outside our perceiving mind exist or not ? If the answer is yes, then it indicates a realistic view and if the answer is no, then it indicates an idealistic conception. The basic definition of pudgala which stands for matter in Jainism is, 'that which can be experienced by five sense organs'. Knowledge derived by sense organs is of the outside world. The five sense organs make awareness of the different aspects of the world possible for example, the visual organ conveys information about the colour and shape of the objects constituting the external world. It is in the light of this that the term 'experienced by the sense organs' should be understood. Since experience established contact with the outside world and matter is the object of experience reveals the nature to the perceiver, the Jaina definition of matter makes the realistic position clear. Another definition of matter is arrived at from the etymology of the compound word pudgala. The term 'pud' refers to the process of combination and 'gala' stands for dissociation. In determining the ultimate constituents of

matter, the method of division is helpful. When any object is divided, the parts obtained by division can be further divided but the process or division itself cannot be indefinitely continued because in the process a position is reached when no further division is possible. This is truly the ultimate constituent of matter referred to by the term *anu* or *paramanu* or atom in Jaina philosophy. This atom is not produced by the combination of smaller constituents. The atoms are produced only by division of matter, not by the process of union or combination. The process of combination of the atoms gives rise to the molecules and combination of molecules is responsible for the different types of objects or matter. The difference between atom and molecule is that the former are not further divisible and are only capable of combining to produce the latter. The molecules possess five characteristics namely touch, taste, smell, sound and colour. Because of these characteristics we perceive the various qualities. The atoms themselves are not qualitatively different.

Space gives room for extension. Soul, matter, dharma and adharma all exist in space. Substances which are

extended can have extension only in some place and that is called akasa or space. Though, to be extended is the very nature of some substances and no substance which lacks that nature can be made extended by space, yet it is also true that, to be extended, a substance requires space, as a necessary condition.

Substances are those that occupy or pervade and space is that which is occupied or pervaded. Space is not the same as extension, but it is the locus of extension. The Jaina distinguishes two kinds of space, the space containing the world where souls and other substances live (lokakasa) and empty space beyond such world (alokakasa).

Time is the necessary condition of duration, change, motion, newness and oldness of substances. Without time a thing cannot endure or continue to exist. Modification or change of states also cannot be conceived without time. A mango can be green and ripe only successively i.e. at different moments of time and without the supposition of time distinctions we cannot understand how a thing can

possess such incompatible characters. Like wise, movement which implies the assumption of successive states by an object can be conceived only with the supposition of time. Lastly, the distinction between the old and the new, the earlier and the later cannot be explained without time. Time is one indivisible substance. One and the same time is present everywhere in the world. Jaina thinkers sometimes distinguishes between real time and empirical time. Continuity or duration is the mark of real time, where as changes of all kinds are marks of empirical time. This empirical time is divided into moments, hours etc. and is limited by beginning and an end. But real time is eternal.

Dharma and Adharma produce all possible conditions of movability and its opposite. The Jaina argues that just as the movement of a fish in the river, though initiated by the fish itself, would not be possible without the medium of water, which is, therefore, a necessary condition, similarly the movement of a soul or a material thing requires some auxiliary condition, without which its motion would not

be possible. Such a condition is the substance called dharma. Dharma can only favour or help the motion of moving objects, it cannot make a non-moving object move, just as water can not make a fish move but it helps the motion of a fish. Adharma, on the other hand, is the substance that helps the restful state of immobility of objects, just as the shade of a tree helps a traveller to rest or the earth supports things that rest on it. It cannot arrest the movement of any moving object. Dharma and adharma, though thus opposed, are also similar because both are eternal and formless.

Matter, motion, rest, space and time are called non-soul or ajiva. Matter is either an atom or an aggregate of atoms.

Now I want to discuss the view of substance given by Leibniz. For Leibniz all things or substances are compounds or aggregates, because the bodies or things or substances we see without senses are divisible into smaller parts. Therefore, he is of the opinion that there must be simple substances, since there are compound substances for, the

compound is only a collection or aggregatum of simple substances. One may argue that this view of Leibniz is not an original one, because centuries before Democritus and Epicurus have argued that all things consist of small atoms. Leibniz rejected this view because the atoms of Leibniz are not extended bodies. For Leibniz the only simple substances are monads and these are the true atoms of things. Monads differ from atoms because atoms were viewed as extended bodies, where as Leibniz described the monad as being force or energy. Therefore, according to Leibniz, matter is not the primary ingredient of things but that monads with their elements of force constitute the essential nature of things

The substance of Leibniz contains life or a dynamic force with it. But for Jainism, atoms have to depend upon outside itself in order to move or become a part of a large cluster. But monad or simple substance is capable of action. For Leibniz, monad cannot be extended in space because they have no shape and size. Monads are something like force or energy. If we reduce physical particles then

we will get energy or that particles are a special form of energy. Therefore, according to Leibniz, monads are logically prior to corporeal forms. Each monad is independent of other monads and monads do not have any causal relation of each other. Monads are not only independent and different but they also contain the source of their activity or energy within themselves.

Though all monads are different from each other yet there must be some relation between all the monads which make up the universe, some explanation, for their orderly action. This explanation is known as pre-established harmony. According to Leibniz, monads have neither extension nor figure nor divisibility. These monads are real nature or elements of things. Ordinary physical atoms have form and extension and though they may not be physically divisible, yet they must be ideally divisible and thus for Leibniz all nearly physical atoms are unreal.

The Jains metaphysics is called Anekantavads or the doctrine of the manyness of reality or Jainism may be

said to be spiritual pluralism. According to Jainism, there are infinite material atoms and infinite individual souls which are all separately and individually real. Again each atom and each soul said to have possessed innumerable aspects of its own. Like Jainism, the monadology of Leibniz is an example of spiritual pluralism. Like soul, monads are also spiritual in nature. According to Leibniz, these monads are particular, independent and self-sufficient, ultimate substance. They are partless and indivisible. Each monad has its own individual existence. In Jaina philosophy all things consists of small atoms, and that these atoms are extended bodies and irreducible parts of matter. However, they hold that matter is lifeless without motion and that this being so, matter gets motions not from withing itself but from outside itself. It can be noted here that in Leibnizian philosophy matter cannot be ^{an} object of thing or substance. Leibniz asserts that the monads differ from atoms in being not extended and but in being of force or energy.

The souls or jivas of Jainism are divided into two types that means, into those who are liberated or Mukta and those who are bound or baddha. The bound souls or Baddha Jivas are again divided into mobile and immobile. The

immobile souls or Jivas live in the atoms of each, water, fire, air and in the vegetable kingdom and have only one sense that of touch. The noble souls are again classified as those who have two senses e.g. worms, three senses e.g. ants, four senses e.g. bees and five senses e.g. higher animals and men. Every soul or Jiva from the lowest to the highest possesses consciousness because consciousness is regarded as the essence of soul. ~~_____~~ ~~_____~~ ~~_____~~ ~~_____~~. According to Jainism, the degrees of consciousness may vary because of the obstacles of Karmas. It appears to us that lowest souls which inhabit material atoms are lifeless and unconscious but in fact life and consciousness are present in them in a dormant form. The soul or Jiva is like a light. Just as the light fills the space where it is burning and at the same time many lights may remain in the same place without coming into conflicts with one another so also the soul fills the space and many souls may remain together without any conflict. The soul or jiva is formless but it takes the form of the body which it illuminates.

It should be noted that in jivas of Jainism there is a varying degree of consciousness, like wise in monads also there is a varying degrees of consciousness. Leibniz has roughly distinguished created monads into three main classes - '1) Unconscious monads (2) Conscious monads and (3) Rational or self-Conscious monads. All simple substances

or created monads might be called Entelechies* for they have in them a certain perfection or completeness in them. They have a certain self-sufficiency which makes them the sources of their internal activities and so to speak, incorporeal automata. That is to say, not merely machines, such as those made by man, but entirely self moving machines which contain within themselves the ground or principle of all their states or conditions. Conscious sensation or feeling, accompanied by the simple forms of memory clearly marks of certain monads from those which have merely unconscious or confused perfection. Again there are higher monads which have self consciousness and reason or thought proper, in addition to unconscious and conscious perception and memory, we may call these 'rational souls' or 'spirits' includes men and higher intelligencies. The intermediate soul class is that of animals and the class of Entelechies

* Entelechy in Aristotle's philosophy and scholasticism purposefulness as a driving force, end in itself or the active principle that converts possibility into reality. The concept entelechy was used by Leibniz in his monadology. It is also connected with the idealistic interpretation of biological phenomena.


are said to include all real beings that have not reached the stage of consciousness. Each of the two higher classes of monads possess in addition to its own specific qualities, the characteristics of the inferior monads. Thus both animals and men have unconscious as well as conscious perceptions.

Conclusion

In this chapter, I have made an attempt to draw a parallel between pluralism of Jainism and that of Leibniz. In order to do this I have discussed briefly the fundamental principles of these two shorts of pluralism.

Pluralism of Jainism may be termed as spiritual. The same may be applied to Leibniz's pluralism. The Jaina metaphysics is called Anekantavada or the doctrine of manyness of reality. Leibniz also believes in the manyness of reality. But there is a marked difference between these two shorts of pluralism. Jainism believes in the existence of infinite number of material atoms and infinite number of individual souls. While Leibniz believes only in the existence of infinite number of individual monads, which

are considered to be spiritual in nature. Both Jainism and Leibnizism hold that the atoms are particular independent and self sufficient ultimate substances. According to Jainism, proper understanding of reality consists in understanding of consciousness and matter because they both exists. It identifies reality with existence. It believes in the two way entailment between reality and existence, that is, reality entails existence and existence entails reality. On the other hand, according to Leibniz, the reality consists of self-active monads. This view of reality is based on Leibniz's view of substance. He defines substance in terms of independent action thus he differs from Descartes and Spinoza. As has been already pointed out Leibniz considered all monads to be spiritual. This makes that he does not admit the non-conscious aspect of reality. Jainism on the other hand, believes in the existence of conscious and non-conscious aspects of reality, that is existence of jiva and ajiva. According to Jainism, the entire universe is composed of substances of different kinds and these substances are broadly classified into two groups, namely, extended (astikaya) and non-extended (anastikaya). It holds that every substance of the former kind, that is, astikaya

exists like a body (kaya) possessing extension. It points out that there is only one substance, namely time (kala) which is bereft of extension and thus falls under the category of anastikaya. Leibniz holds quite a contrary view. According to him, all substances are non-extended because they are only in time. According to Jainism, a jiva possesses both consciousness and extension. Now the question arised as to how jiva possess these two contradictory qualities. It is universally accepted that if a thing is conscious it cannot be extended and if a thing is extended then it cannot be conscious. It seems that Jainism infringes the law of contradiction or the law of non-contradiction. However, Jainism does not infringe or violate the law of contradiction or the law of non-contradiction. When Jainism talks about jiva being extended it uses the term extension in a  specialized sense which is as follows. Souls occupy a space or having extension simply means its presence in the different parts of space and not filling space like a material body. A material body

shame!

fills a part of space in such a way that while it is there no other matter can occupy it. This means that the body has the quality of impenetrable, but a soul's presence, on the other hand in a particular space does not prevent another soul's presence there. Two souls may be present at the same place just as two lights can illumine the same area. In this connection another points of dissimilarity between the pluralism of Jainism and Leibniz may be pointed out. Jainism holds that jivas are either embodied or disembodied when Leibniz holds that all the spiritual monads are disembodied. Jainism advocates the varying degrees of consciousness as follows. The souls or jivas of Jainism are divided into two types, namely, those who are liberated or mukta and those who are bound or baddha. The bound souls are again divided into mobile and immobile. The immobile souls or jivas live in atom of earth, water, fire, air and vegetable kingdom and have only one sense and that of touch. The mobile souls are again classified as those who have two senses, those who have

threesenses, those who have four senses and those who have five senses. Leibniz also classified the created monads into three main classes namely, unconscious monads, conscious monads and rational or self-conscious monads.

Jainism does not believe in the existence of God, that is, Jiva of jivas while Leibniz believes in the existence of God or Monad of monads.

In passing I would like to say that it is interesting to note that Jainism makes a distinction between empirical self and transcendental self which reminds one of Kant's distinction between these two selves. According to Jainism, from empirical point of view, the self is the agent of actions and it undergoes such experiences like pain and pleasure. From transcendental point of view, self is pure, free from material object. Jainism takes into consideration both the views of self. It is not possible to classify the transcendental self into

any categories, while empirical self is classified into many categories from different points of view. From the point of view of intellect or mind, the jivas are of two types - having a mind and having no mind. From the point of view of biology, the jivas are also of two types - mobile and immobile.

Kant seems to maintain a similar position.

According to Kant, the empirical self is an appearance or a phenomenon. It is an object of experience therefore, the categories of understanding can be applied to empirical self. Kant maintains, on the other hand the transcendental self as a thing in itself or noumenon. It is not an object of experience. Therefore, the categories of understanding cannot be applied to transcendental self.

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