

Chapter one

The origin of metaphysics: Aristotle

The history of metaphysics in western philosophy began with the speculations by the *Ionian cosmologists* in the 6th century B.C about the origin of physical universe, the matter or stuff from which it is made and that laws or uniformities everywhere present in nature. Aristotle is indirectly the source of the term “metaphysics”; he is also the source of a systematic list of metaphysical issues and a technical language in which these issues are stated. The word “metaphysics” is derived from the Greek “*metataphysika*” (literally means “after the things of nature”) an expression used by Hellenistic and later commentators to refer to Aristotle’s united group of texts that we still call the *Metaphysics*. Aristotle himself called the subject of this text First Philosophy or sometimes wisdom. Later classical and medieval philosopher took the title ‘metaphysics’ to mean that the subjects discussed in the ‘Metaphysics’ came to “after the things of nature”. In medieval and modern philosophy ‘metaphysics’ has also been taken to mean the study of things transcending nature. In modern philosophical usage “metaphysics” refers generally to the field of philosophy dealing with

the questions about the kinds of things there are and their modes of being. Its subject matter includes the concept of existence, thing, property, event, the distinction between particulars and universals and so on. Ancient and Medieval philosophers described metaphysics as the study of —beingas such” or —the first cause of things.” Metaphysics‘ is about things that do not change.

For Aristotle, there is no difference between philosophy and metaphysics‘. Metaphysics‘ for him was —First Philosophy.” His —First Philosophy” is the study of causes and principles of being qua being. According to Aristotle, —Philosophy is the search for the most fundamental causes and principles of the most general aspects of the world”ⁱ. These causes and principles are clearly the subject matter of what he calls first philosophy‘. His use of the term philosophy‘ is too broad and it includes any domain of pure science, say for example, physics, mathematics, Logic etc. Aristotle’s First Philosophy becomes imperative as no science can verify itself. No science can contain a justification of its own principles. This is so because these principles which were the —basic truths” of that science cannot be demonstrated within the realm of that science. They have to be either assumed or have to be established demonstratively on the basis of another science. This is to say that any attempt to —prove” the basic truths

of a science within its own realm results in vicious circle and to prove them on the basis of another science results in infinite regress. Hence the final theory is impossible. This is to say that the impossibility of the final theory led Aristotle to —First Philosophy.”

In his book *Metaphysics* Aristotle tells that ‘metaphysics’ is —a science of being just qua being, which will be different from all other departmental sciences, which deal with some limited part of being. The study of being qua being turns out to be the same thing as the study of the primary causes and principles, which has previously been said to be the task of philosophy, because the primary causes and principles are the causes and principles of being, being qua.”ⁱⁱ Aristotle’s description of ‘the study of being qua being’ is easily misunderstood, for it seems to suggest that there is a single subject matter—being qua being—that is under investigation. But Aristotle’s description does not involve two things—(1) a study and (2) a subject matter (being qua being)—for he did not think that there is any such subject matter as ‘being qua being’. Rather, his description involves three things: (1) a study, (2) a subject matter (being), and (3) a manner in which the subject matter is studied (qua being). The term ‘qua’ means roughly ‘in so far as’ or ‘under the aspect’. A study of x qua y is a study of x that concerns itself solely with the y aspect of x. So Aristotle’s study does not concern

some recondite subject matter known as being qua being'. Rather it is a study of being, or of things that can be said to be—that studies them in a particular way: as beings, in so far as they are beings. Of course, First Philosophy is not only the field of inquiry to study beings. Natural science and Mathematics are also study beings, but in different ways, under different aspects. The natural scientist studies them as things that are subject to the laws of nature, as things that move and undergo change. That is, natural scientist studies things qua movable and the mathematician studies things qua countable and measurable. The metaphysician on the other hand, studies them in a more general and abstract way—qua beings. So, First Philosophy' studies the causes and principles of beings qua beings.

Although the term metaphysics' must be said to be found in Aristotle first but the spirit of metaphysics' found in early philosophers too. The pre-Socratic philosophers are also investigating a cause. They began by looking for the ultimate material cause of the world, with various elements or combinations of elements. The fundamental thought of that period was, under the multiplicity of the world there must be a single ultimate principle. The problem of all the philosophers from Thales to Anaxagoras was what is the nature of that first principle from which all things have issued? Their systems are all attempts to answer this question, and may be classified

according to their different replies. Thus Thales asserted that the ultimate reality is water, Anaximenes air, Democritus atoms and so on.

The earliest Greek philosophers belong to what in after times came to be known as the Ionic school. The name was derived because the three chief representatives of this school, Thales, Anaximander, and Anaximenes were all men of Ionia, the coast of Asia Minor. The earliest philosophical speculations were attempts to explain the origin and structure of the physical world. Thales of Miletus is generally accounted the founder and father of all philosophy, Anaximander and Anaximenes developed his materialist account of the origins of the universe. These thinkers held in common, first that there must be some entity from which all other things come into being, and second that this entity is some kind of material. They differed on the nature of the material. Thales named water as the original material from which everything else is produced. Thales also claimed that, the earth is a float-disc which floats upon water. For him water is the one primal kind of existence and everything in the universe is merely a modification of water. He represents water as the first principle. Aristotle conjectures that observation may have led Thales to the conclusion that (1) the nutriment of everything is moist and that even heat is generated from moisture upon which it depends for its existence; and (2) that the seeds of

everything have a moist character, and water is the first principle in the character of moist things. The phenomenon of evaporation suggests that water may become air, while the phenomenon of freezing might suggest that, if the process were carried further, water could become earth. The importance of this early Greek philosopher lies in the fact that he raised the question, what is the ultimate nature of the world? Another pre-Socratic philosopher Anaximander agrees with Thales that the ultimate principle of things is material, but he also differed from Thales in that he held that the origin of all things is not water but the *apeion* (*apeion* is usually rendered “indefinite”, “infinite” or “unlimited”). The *apeion* is deathless, imperishable, everlasting and ageless. Pre-Socratic philosopher Anaximenes proposed that air is the origin of all things. Other things are formed air through the process of condensation and rarefaction. The earth itself was formed through the condensation of air; the earth is flat and floats on the air —like a leaf.” The Ionian philosopher actually tried to explain the origin of all things out of some material element: but they were not materialists in the sense of deliberately denying a distinction between matter and spirit.

Subsequent pre-Socratics were concerned with other attempts to understand nature and the possibility of change within it. Ancient philosophers like

Parmenides, Heraclitus were also aware about the question that regarding the ultimate thing of the universe is. The reflection of Parmenides takes its rise from observation of the transitoriness and changeableness of things. The world, as we know it, is a world of change and mutation. All things arise and pass away. Nothing is permanent. The thought of Parmenides becomes the effort to find the eternal amid the shifting, the abiding and everlasting amid the change and mutation of things. And there arises in this way the antithesis between Being and not-being. The absolutely real is the Being. Non-being is unreal. He identifies not-being with becoming, the world of shifting and changing things, the world which is known to us by senses. As Thales designated water the ultimate thing of the universe, likewise, for Parmenides the first principle of things is Being. Another ancient-Greek philosopher Heraclitus who was contemporary with Parmenides, thought that only Becoming is; and Being, permanence etc. are nothing but illusion. All things are perpetually changing, passing over into new forms and new shapes. Our next discussion will be start with the philosophy of Anaxagoras. The first period of Greek philosophy closes with this great philosopher. His doctrine of the world-forming intelligence introduced a new principle into philosophy, the principle of the antithesis between corporeal matter and incorporeal mind, and therefore, by implication, the antithesis between nature and man. And if the first period of philosophy has for its problem the origin of the world, and the

explanation of the being and becoming of nature, the second period of philosophy opens, in the Sophists, with the problem of the position of man in the universe. Sophists were exclusively humanistic in nature. The Sophists have been described as teachers of virtue. For the Greeks, virtue meant the capacity of a person successfully to perform his function in the State. Thus the virtue of a physician is to cure the sick; the virtue of a mechanic is to understand machinery. The Sophists undertook to train men to virtue in this sense, to make them successful citizens and members of the State. They questioned many things of the present Greek society. By questioning the absolute foundations of traditional institutions, beliefs and ways of life, Sophists tended to foster a relativistic attitude. Against this relativism Socrates and Plato reacted, endeavoring to establish the sure foundation of true knowledge and ethical judgments. The ancient Greek thinkers actually try to generalize about the common factors that underlie the changing appearance of physical things. This search for world-stuff dominates the first century of the development of philosophy and this course of philosophical speculation is changed by Socrates of Athens and his pupil Plato.

The Socratic teaching is essentially ethical in character. It was Sophists who had introduced into Greek philosophy the problem of man and of the duties

of man and to these problems Socrates also gave his primary attention. He brushes aside all questions as to the origin of the world, or the nature of the ultimate reality, of which we have heard so much in the philosophies of the earlier thinker. Our knowledge of the teaching of Socrates is derived mainly from two sources, Plato and Xenophon. Plato the pupil of Socrates portrays a great sketch of Socrates and his philosophical teachings through his dialogues. In the dialogue *The Republic-V* we can see that —...Socrates defines what he means by philosopher, a lover of wisdom. True knowledge is concerned not with the physical world of the senses but with the qualities, the realities that are inherent in the everyday world—with Beauty, not with beautiful sounds and colors. The changing world of the senses is the object of opinion, but the unchanging world of realities is the object of true knowledge or wisdom, and it is this wisdom that true philosophers love”ⁱⁱⁱ. Socrates considers all such knowledge comparatively worthless as against ethical knowledge, the knowledge of man. The ethical teaching of Socrates was founded upon a theory of knowledge and this knowledge founded upon reason. Socrates thought that all knowledge is knowledge through concepts. But the question is, _what is knowledge?’ Whenever we are directly conscious of the presence of any particular thing like—a man, a tree, a star such consciousness is called perception. When we shut our eyes that time we are able to frame a mental picture of such an object, that consciousness is called an image or representation. These mental images are always ideas

of particular individual objects. But besides these ideas of individual objects, whether through sense-perception or imagination, we have also general ideas, that is to say, not ideas of any particular thing, but ideas of whole classes of things. If I say —Socrates is mortal”, I am thinking of the individual Socrates. But if one says —Man is mortal”, he is thinking about the class of men, not of any particular man. Such an idea is called a general idea or a concept. Every class name like- tree, man represents concept.

In placing all knowledge in concepts, Socrates makes reason the most important organ of knowledge. This is a direct opposition to the principle of the Sophists, who placed all knowledge in sense-perception. In *Phaedo*, Socrates argues that the reality cannot grasp through sense organ. He believed that there is a division between the body and the soul. As we can see in the dialogue *Phaedo*, that;

—“Is anything more than the separation of the soul from the body?” said Socrates. —Death is, that the body separates from the soul, and remains by itself apart from the soul, and the soul, separated from the body, exists by itself apart from the body.”^{iv}

For Socrates, body played no part in attainment of knowledge. To Socrates, knowledge is something that never changes, but concrete and eternal. So, he thinks that we will never learn the reality and truth of anything if we continue to rely on our sense organ. Of things that are changeable and imperfect, there can never be knowledge. Knowledge can only be found in our souls and with the Forms. As objects of knowledge, the Forms cannot be known through sense organ because they can only interact with things that are less than perfect. The Forms are eternally perfect and are known only through the soul.

Without alteration, Plato adopts the Socratic doctrine that all knowledge is knowledge through concepts. He also accepts that knowledge is founded on reason and knowledge belongs to what is real. Here in this regard a dialogue between Socrates and Glaucon can be mentioned to highlight the nature of knowledge as maintained by both Socrates and Plato. The Dialogue goes in the following way:

—“...knowledge belongs to what is, and ignorance of necessity to what is not. For this thing between something must be sought between ignorance and acquired knowledge, if there really is such a thing between?”

—“Certainly.”

—Do we say there is such a thing as opinion?”

—Of course.”

—Is it the same power as knowledge or different?”

—Different.”

... —Then knowledge naturally belongs to that which is, to know in what way it is?...”^v

Though Plato follows the teachings of Socrates, he yet builds upon this teaching a new and wholly un-Socratic metaphysic of his own. The concept had been for Socrates merely a rule of thought. Definitions, like guide-rails, keep thought upon the straight path; we compare and act with the definition of virtue in order to ascertain whether it is virtuous. But what was for Socrates merely regulative of thought, Plato now transforms into a metaphysical substance. His theory of Idea is the theory of the objectivity of concepts. The concept is not merely an idea in the mind, but something which has a reality of its own outside, and independent of the mind—this is the essence of the Philosophy of Plato. Plato built the metaphysical system from which Socrates was distracted by his more directly ethical concern. Plato combined a Heraclitean distrust of the world of the senses with a Parmenidean faith in the capacities of pure reason and the Socratic

conviction that whatever is right. The result was the Theory of Forms. The Theory of Forms is a theory that can be extracted from the masterpieces of Plato's middle period, especially the great dialogues the *Meno*, the *Phaedo*, the *Republic*, and the *Theatetus*.

Now the question is how Plato arrived at this doctrine. It is founded upon the view that truth means correspondence of one's ideas with the facts of existence. If one person sees a lake of water, and if there really is such a lake, then his/her idea is true. But if there is no lake, then his/her idea is false, it is a hallucination. According to this view, truth means that the thought in one's mind is a copy of something outside of one's mind. Falsehood consists in having an idea which is not a copy of anything which really exists. And when a person says that a thought in his/her mind is knowledge, he must therefore mean that this thought is a copy of something that exists. But we have already seen that knowledge is the knowledge through concepts. And if a concept is true knowledge, it can only be true in virtue of the fact that it corresponds to an objective reality. There must, therefore, be general ideas or concepts, outside of mind.

Now if knowledge through concepts is true, our experiences through sensation must be false. Our senses make us aware of many individual horses. Our intellect gives us the concept of the horse in general. If the

latter is the sole truth, the former must be false. And this can only mean that the objects of sensation have no true reality. This and that particular horse have no true being. Reality belongs only to the idea of the horse in general. Let us consider this theory from a different direction. Suppose, someone asks the question, —~~what~~ is beauty?” To answer this question one can point to a rose, and say —~~her~~ is beauty” and one can say the same of a woman’s face. But the question is —~~what~~ is beauty?” not —what things are beautiful?” When someone asks the question —what is beauty”, he did not ask for many things, but for one thing, namely beauty. If by the word beauty we mean beauty is a rose than it cannot be moonlight, because a rose and moonlight are extremely different things. By beauty we mean, not many things, but one because we use only one word for it. Through this question someone wants to know what this one beauty is which is distinct from all beautiful objects. It can be said that there is no such thing as beauty apart from beautiful objects. In reality there are many beauties, each of them situated in a beautiful object and we use only one word that is beauty to indicate all of them. Though all the beautiful things are different but we use one word beauty to describe all of them. Because we think that they are similar to each other. How do we know that they are similar? Our eyes cannot inform us about this similarity because it involves comparison, and comparison is an act of the mind, not of the senses. Therefore, we must have an idea of beauty in our mind, with which we compare the various

beautiful objects and recognize them as beautiful objects. So that there is at any rate an idea of one beauty in one's mind. Either this idea corresponds to something outside of the mind or it does not. If the idea does not correspond to something outside of the mind then this idea of beauty is a mere invention, a figment of one's own brain. If so, then, individual brain became the standard of external truth. Therefore, the only alternative is to believe that there is not only an idea of beauty in one's mind, but that there is such a thing as the one beauty itself, of which one's own idea is mere a copy. This beauty exists outside of the mind, and it is something distinct from all beautiful objects.

Now, what has been said of beauty may equally be said of justice, or goodness, or of whiteness etc. There are many just acts, but only one justice, since we use one word for it. This justice must be a real thing, distinct from all particular just acts. Our ideas of justice are copies of it. So, also there are many white objects, but only one whiteness. Now, beauty, justice, goodness in general is all concepts. The idea of beauty is formed by including what is common to all beautiful objects and excluding those points in which they differ. And this is just what is meant by a concept. Therefore, Plato's theory is that concepts are objectively real. He gives to these objective concepts the technical name Ideas. With the help of Ideas

Plato explained all the appearances and unrealities of things. Let us explain what the characteristics of the Ideas are.

In the first place, Ideas are substance. Substance is a technical term in philosophy. In philosophy Substance means that which has its whole being in itself, whose reality does not flow into it from anything else, but which is the source of its own reality. Substance is self-caused and self-determined. It is the ground of other things, but itself has no ground except itself. For example, if we believe the popular Christian idea that God created the world, He should be an ultimate and uncreated being. The world depends for its existence upon God, but God's existence depends only upon Him. So, God is a substance and the world is not. In this technical sense the Ideas are substances. They are absolute and ultimate realities. All things depend on them, but they depend on nothing. They are the first principles of the universe.

Secondly, the Ideas are universals. An Idea is not any particular thing. The Idea of the horse is not this or that horse. It is the general concept of all horses. It is the universal horse. For this reason the Ideas are sometime called —universal”.

Thirdly, Ideas are Essences of all things. The definition gives us what is essential to a thing. If we define man as a rational anima, this means that reason is the essence of man.

Fourthly, Ideas are rational, that is to say, they are apprehended through reason. Through reason alone is knowledge of the Ideas possible.

It results from this whole theory of Ideas that there are two sources of human experiences, sense-perception and reason. Sense-perception has for its object the world of sense; reason has for its object of Ideas. The world of sense has all the opposite characteristics to the Ideas. The Ideas are absolute reality, absolute Being. Plato identifies Heraclitean theory of absolute Becoming with the world of sense, which contains nothing stable and permanent. The Idea always is, and never becomes; the thing of sense always becomes, and never is. It is for this reason that, in the opinion of Plato, no knowledge of world of sense is possible, for one can have no knowledge of that which changes from moment to moment. The subject of knowledge has to be permanent. So, knowledge is only possible if its subject stands as permanent and changeless. Therefore, the only knowledge is the knowledge of the Ideas.

Let us now turn to Aristotle. It is impossible to understand Aristotle's philosophical project without realizing that he thought that it was of central importance to get clear about the 'Theory of Forms'. Aristotle's *Metaphysics* as the systematic treatise in metaphysics, contains not only discussions of the notion of being but also criticism of earlier thought of the subject, particularly Plato's theory of Forms. Aristotle himself illustrates Plato's importance as an object of criticism in the history of 'metaphysics'. Aristotle's 'metaphysical' theory grows naturally out of his polemic against Plato's theory of Ideas or Forms because his own system was in effect simply an attempt to overcome the defects which he found in Plato. The main heads of this polemic are presented in the following way. The world consists of a multitude of things, and it is the business of philosophy to explain why they exist. By way of explanation Plato merely assumes the existence of another multitude of things, the Ideas. But the only effect of this is to double the number of things to be explained. In his book *Metaphysics* he says in this regard that "Those who first proposed the ideas as causes were in effect doubling the number of things to be explained; as if a man wished to count a few things but imagined he could not do so unless he added two there number."^{vi}

Plato has not explained the relation of Ideas to things. Things, we are told, are “copies” of Ideas, and —participate” in them. But how are we to understand this —participation”?

Ideas are assumed in order to explain what is common to many objects. Wherever there is a common element there must be an Idea. Thus, there is a common element in all men, and there is an Idea of man. But there should also be an element common to the individual man and to the Idea of man. There must, therefore, be a further Idea, the “third man”, to explain this. And between this further Idea and the individual man there must be yet another Idea to explain what they have in common, and so on *ad infinitum*.

Aristotle’s objection to the ideal theory and that which, to all intents and purposes, sums up all the others, is that it assumes that Ideas are the essences of things, and yet places those essences outside the things themselves. The essence of a thing must be in it, and not outside it. But Plato separated Ideas from things, and placed the Ideas away somewhere in a mysterious world of their own. The Idea, as the universal, can only exist in the particular. Possibly the reality in all horses is the universal horse, but, the universal horse is not something that exists by itself and independently of individual horses. Hence Plato was led into the absurdity of talking as if, besides the individual horses we know, there is somewhere another individual called the horse-in-general, or as if besides white objects there is

a thing called whiteness. And this is in fact the supreme self-contradiction of the theory of Ideas that it begins by saying that the universal is real, and the particular unreal, but ends by degrading the universal again into a particular. This is the same thing as saying that Plato's mistake lay in first seeing that existence is not reality, but then going on to imagine that the reality is an existence.

Out of this last objection grows Aristotle's own philosophy, the fundamental principle of which is that the universal is indeed the absolute reality, but that it is a universal which exists only in the particular. What is reality? What is substance? This is the first question for the metaphysician. Aristotle's answers to these questions are most important contribution to metaphysics. The word "being" has a variety of senses. It denotes first what a thing is, and then its quality, quantity or other category. In *Metaphysics* Aristotle says that;

"...of all these senses which being may have, the primary sense is clearly what a thing is; for this denotes substance, whereas nothing else is considered to exist unless by virtue of its being a quantity, quality, affection, or other determination of substance. Hence one might doubt whether or not such terms as walking, being in good health, sitting, etc., signify each of these things as being; for none of them has an

independent existence or can be separated from its substance. Rather, if anything it is the thing which walks or sits or is in good health that is existent, because its subject is something definite; i.e. the substance and individual which is clearly implied in the use of such a designation, since the good or the sitting has no meaning apart from it. Clearly, then, it is by virtue of substance that each of the other categories exists. Therefore that which is primarily (i.e. not in any qualified sense, but absolutely) must be substance”.^{vii}

The ancient and everlasting question what is being? really amounts to what is substance? The central concept of Aristotle’s metaphysics is substance, the concrete individual thing. However, his detailed account of substance is very difficult to understand.

In the Book *Zeta 3* of *Metaphysics* Aristotle gives a list of four possible candidates for being the substance of something that is: essence, universal, genus and subject. Most probably this means that if x is a substance, then the substance of x might be either (i) the essence of x, or (ii) some universal predicated of x, or (iii) a genus that x belongs to, or (iv) a subject of which x is predicated. Book *Zeta* is devoted to an examination of the fourth candidate: the idea that the substance of something is a subject of which it is predicated. Aristotle tells us, a subject is “...that of which other entities are said, it itself never being said of anything else”^{viii}. It also can be said

that “...for a strong case can be made for the claim that it is the primary subject that is substance to the full extent”^{ix}.

According to Aristotle, matter, form, and the compound of matter and form all can be considered as subjects. But which of them is substance?—this is the question to which Aristotle next turns. Substance is “...that which is not predicated itself and is the subject of the predication of other things”^x. The subject criterion by itself leads to the answer that the subject of x is an entirely indeterminate matter of which x is composed. For form is predicated of matter as subject, and one can always analyze a hylomorphic compound into its predicates and the subject of which they are predicated. And when all predicates have been removed (in thought), the subject that remains is nothing at all in its own right—an entity all of whose properties are accidental to it. The resulting subject is matter from which all form has been expunged. So the subject criterion leads to the answer that the subject of x is the formless matter of which it is ultimately composed. But Aristotle rejects this answer as impossible because it lacks two characteristics that are crucial to substance, separability and thisness. So it does not qualify as the substance of the thing whose matter it is. In *Zeta-6* of *Metaphysics* Aristotle goes on to argue that:

“... essence is the criterion of substantiality, that essence is what is definable in a thing and that by the essence criterion it is preliminary species that are substances. He does this by connecting the essence criterion with the subject criterion examined in chapter 3. That chapter had left it open how the subject criterion was to be used, except that it ruled out its use in such a way as to lead to the ascription of substantiality to ultimate matter.”^{xi}

Aristotle also says that “...such things, of course, are the species, which, taken as a whole not as a collection of particulars, are identical with their species essence.”^{xii} At this point there appears to be a close connection between the essence of substance and its species and this might tempt one to suppose that Aristotle is identifying the substance of a thing with its species. But such identification would be a mistake for two reasons: First, Aristotle’s point is that an essence of the primary kind corresponds to a species (e.g., man) and not to some more narrowly delineated kind (e.g., paleman). Second, ‘species’ in the logical works has acquired a new meaning in a hylomorphic context, where it means ‘form’ rather than ‘species’. In the conceptual framework of Book *Zeta* of *Metaphysics* a universal such as man or horse — which was called a species and a secondary substance in the *Categories*— is construed as ‘not a substance, but a compound of a certain formula and a certain matter, taken universally.’

The primary substance in book *Zeta* is not the species that an individual substance belongs to but the form that is predicated of the matter of which it is composed.

The role of form is the central topic of *Zeta* 7-9. Individual substances are seen as hylomorphic compounds, so the role of matter and form in their generation must be accounted for. Whether we are thinking of natural objects such as plants and animals, or artifacts, such as houses, the requirement for generation are the same. We do not produce matter nor do we produce form; rather, we put the form into the matter and produce the compound. Both the form and matter must pre-exist. As Aristotle says, "...the production of composite particulars through the union of form and matter, Aristotle proceeds to his key point, which is that form itself cannot be produced. In a production, say in the production of a bronze sphere, it is the bronze sphere, the composite particular, that is produced."^{xiii}

But the Aristotelian portrait of composite production is something different from Platonic portrait of composite production. As we see in book *Zeta*-8 that —In Plato's theory, the production of the composite particular is explained as something caused by a separately existing form, which is wholly external to the composite. Aristotle has many times argued that such a model of production is incoherent, and in this passage he makes very clear

his view that an external Formal cause is not needed to explain production. The production of the composite particular is sufficiently explained merely by the entry of the immanent form into new indeterminate matter”^{xiv}. In Aristotelian conception the essence of such of hylomorphic compound is its form, nor its matter but the point is that form is not produced. If we make the form, we must make it out of something. In the case of bronze sphere, we make a sphere out of bronze. If we make a spherical form itself then we shall have to make it too out of something, and the process will go on like *ad infinitum*. Therefore, the form is not produced.

But in *Zeta-13* Aristotle throws the entire discussion of substance into disarray. Aristotle introduced four candidates for the title of substantiality in *Zeta-3*: the subject, the essence, the genus, the universal. Now the entire discussion of chapter 13 consists of arguments to the conclusion that universals are not substance. As we see that —The fact is that no universal can be a substance: (a) The substance of a thing is that which is peculiar to it and belongs to nothing else, whereas the universal is common to many.... (b) The substance of a thing is that which is not predicated of a subject, whereas the universal is always predicated of some subject”^{xv}. In *Zeta-17* Aristotle proposes a new point which is what sort of thing a substance is. The new idea is that substance is a principle and a kind of

cause”^{xvi} Aristotle uses the word ‘cause’ in various ways. In one sense, a cause is that out of which a thing comes to be, and which persists: e. g., bronze, silver, and the genus of these are causes of a statue or a bowl. A cause in this sense has been traditionally called a material cause. In a second sense, we have the law, formula or definition of thing giving the principles according to which it is constructed. This is the formal cause. A third sense, traditionally called the efficient cause, is the primary source of change. Forth is what is traditionally called the final cause, which is the end or purpose of thing. In the final chapter of *Zeta* we can see that, Aristotle, in the *Physics*, distinguishes four kinds of explanation, material, motive, final and formal. The material explanation of a thing adverts to its matter and the motive explanation of an events adverts to whatever initiates it. The final explanation of either an event or a thing specifies its purpose (and Aristotle notoriously seems to apply this style of explanation to natural things as well as to artifacts), and the formal style of explanation shows why something must have some feature simply by dint of being the thing that it is”^{xvii}.

The job of a cause or principle of being is to explain why one thing belongs to another; that is, it is to explain some predicational fact. This needs to be explained, for example, why this is a man, or that is a house. But what kind of a question is this? The only thing that can be a man is a man; the only

thing that can be a table is a table. In that case we would appear to be asking why a man is a man, or why a table is a table, and these seem to be foolish questions that all have the same answer: —Because each thing is itself^{xviii}. We must ask, e.g., Why are these things, viz, bricks and stones, a house?^{xix} The answer Aristotle proposes is that the cause of being a substance is the form or essence that is predicated of the matter that constitute that substance. The essence is not always just a formal cause; it is also a final cause, and in some cases an efficient cause.

But what we seek is the cause i.e., the form, by reason of which the matter is some definite thing and this is the substance of each thing, and the primary cause of its being. But in the *Categories*, he talks about substance from the point of view of language and logic. In the *Categories* the number of categories given by Aristotle is ten. The doctrine of categories constitutes the ways in which we can think about things. The list of ten categories constitutes an orderly arrangement, a classification of concepts, the fundamental type's concepts that governs our scientific knowledge. In *Categories* Aristotle considered substance as subject and he also holds the view that as subject substances have priorities over other categories of features of substances and in this way they were all dependent on substance for their being but not vice versa. But many problems are connected with

this view. In *Metaphysics* we find a more understandable approach of substance. The concrete individual things like man, horse, tree, stone and the like may be viewed by the philosophers from two different points of view. (1) They may look at it as a permanent static feature of the world with a fixed nature. (2) They may also look at substances as centers of change. We ask simply, what happens when something changes?

In considering substance as a center of change, we seem to be on more familiar ground. To ask —what happens when x changes?” is a recognizable type of scientific question which can be answered once by putting the name of some specific substance for x. A chemical change can be explained by describing the re-assembling of atoms, a physical change in terms of transformation and discharges of energy. But for Aristotle, this was now a scientific question in our sense of the phrase. No modern scientist would attempt to answer the question what happens when something changes? But Aristotle did attempt to answer just this question. He was looking for an answer to a general question —why are things as they are in general?” His answer to this question is contained in two closely linked parts of his philosophy: his doctrine of matter and form, potentiality and actuality. These doctrines have traditionally been regarded as the very heart of Aristotelian philosophy.

If we consider any object, natural or artificial, we can distinguish it in two factors: the stuff of which it is made and the shape. Two bowls may both be of silver but differ in their design or they may share an identical design but one may be molded in silver and one in gold. This contrast of stuff and shape, material and organization or to use Aristotle's terms matter and form can be traced throughout nature. Aristotle very sharply extends and generalizes the notion of form and matter in three ways:

1. Matter and form are correlative notions that can be distinguish anywhere in nature. A silver bowl may be analyzed into its matter — silver and its form, the structure given to the silver by the craftsman who made the bowl. But a piece of un-worked silver provides the some distinction. It has an observable character; it is different from a similar piece of gold or copper. This is its form. For Aristotle its matter consists of the elements out of which the silver is composed that are fire, earth, air and water. The potentialities of the elements present in the silver are of course part of the form. For it is to these proportions that Aristotle must trace the difference between silver and other substance. But what of the basic elements of fire, earth, air, water themselves? They too are composed of form and matter. Two pairs of contrary qualities, hot –cold, dry –wet are combined in pairs to

make the four elements. Thus the form of fire is the hot and the dry, that of water and soon. But the matter of the elements is what Aristotle calls at higher levels in that it is never found apart from its form. It is entirely featureless and structureless.

2. The second way in which he generalizes his concept of matter and form is that form is the knowledge element in things. It is what we can describe, define, classify, communicate and be aware of. Matter is the unknowable structureless residue of things that mind cannot assimilate or deal with.

3. Lastly, matter is the source of plurality and individuality in things. If the form in two or more things of the same species is identical, those things can be distinguished only by their matter.

Matter and form are the outcome of Aristotle's analysis of things. He develops the concept of matter and form to explain for the fact of change. Things in nature do change. They grow, decay, shed some qualities and assume others, move and so on. Aristotle develops the concept of matter and form to account for the fact of change. Consider a simple case of change say for example, the change of colour in an apple when it ripens. Here matter may be regarded as a substratum in which change takes place. And in order for a given substratum, x , to be the site of a change from

property A to property B, it must have the capacity or potentiality for the change. Nature works in a certain order and within certain limits. Only those changes can take place in things for which the potentiality exists there. Apples become red or yellow but not blue or white. Thus matter and form regarded as factors in a process of change become potentiality and actuality. Potentiality and actuality is the subject of book *Theta*. Actuality and potentiality can be considered in regard to process or change and in regard to substance. In this book Aristotle makes a variety of distinction. —The most important of these is that between active and passive potentiality. The agent of change has an active potentiality to change the object of change, and the object has a passive potentiality to be changed by the agent. Both these potentialities are realized when the change takes place, and in a way they can be considered the same potentiality. But from the point of view of the agent and the object separately, they are, of course, distinct”.^{xx} This distinction is very much important in Aristotelian philosophy. But there exists some opposite view regarding this distinction, for example the School of Megara who had denied any distinction between potentiality and actuality. The position of the School of Megara is like that one is potentially builder only when one is actually employing the power of building. So the non-builder is no bearer of a potentiality for building—the only such bearer is the builder when engaged in his building. For them potentiality and actuality should be identical. Aristotle holds a different

position; he remarks that it would be absurd to say that the builder who is not actually building cannot build. Because he has a potentiality for building, a power to build, even when he is not actually engage in building. A man who is in a state of coma is not actually thinking, but, being a man, he has the potentiality of thinking. But this is not possible in the case of stone, though it is not actually thinking; it has no potentiality for thinking. So potentiality is not identical with actuality.

Aristotle gives actuality priority over potentiality. And that is exactly what we find in book *Theta-8* of *Metaphysics*. Aristotle distinguishes between priority in thought, in time, and in substance. As he says;

—The priority of the actual in thought consists in the fact that one cannot have a conception of a potentiality without already having a conception of the actuality, while the reverse is not the case. The priority in time of the actual refers to the species rather than the individual. At the level of the individual, the potential, the egg, must indeed precede the actual, the chicken, but this is a relatively trivial fact. It is much more important that the species chicken must temporally precede the actual, the chicken, but this is a relatively trivial fact. It is much more important that the species chicken must temporally precede the egg. The substantial priority of the actual is defended in terms of the equation of actuality with form and thus with the principle and cause of a thing's being and that of potentiality with matter.

There is also an argument that the actual, being imperishable, must have priority over the potential, which is perishable”^{xxi}.

Here we can see that Aristotle argues for the priority of actuality over potentiality in two ways. (i) The first argument makes use of his notion of final causality. Things that come to be move towards an end (*telos*)—the boy becomes a man, the acorn becomes an oak. Form or actuality is the end toward which natural processes are directed. Actuality is therefore a cause in more than one sense of a thing’s realizing its potential. The efficient cause here is the actual oak tree that produced the acorn; the formal cause is the *logos* defining that actuality; the final cause is the *telos* toward which the acorn develops an actual oak tree. (ii) A potentiality is for either of a pair of opposites; so anything that is capable of being is also capable of not being. What is capable of not being might possibly not be, and what might possibly not be is perishable. Hence anything with the mere potentiality to be is perishable. What is eternal is imperishable, and so nothing that is eternal can exist only potentially—what is eternal must be fully the actual. So what is actual is prior in substance to what is potential.

The problem regarding substance is the central task of *Metaphysics* and it is discussed from *Zeta* 1 to *Theta*. Aristotle investigates the principle and causes of substance. In book *Lambda* Aristotle describes substance as

something changeable. Here he offers three fundamental types of substance, "...substance which is perceptible and perishable, substance which is perceptible and imperishable and substance which is immune to change of any kind".^{xxii}

The primary two of this category drop in the domain of natural science and the last one in logic and mathematics. Book *Lambda* is all about the discussion regarding the problem of substance, those of divine and of natural. In this book Aristotle presents his legendary conception of God as an unmoved First Mover, as an originator of all course of actions who himself stands outside all change. This conception has mesmerized both theologians and philosophers and also motivated them to attempt to grasp the general account of substance.

In Book *Lambda* of the *Metaphysics* Aristotle develops the concept of God. It can be summarized in the answers to two questions: (1) why must we postulate the existence of God? (2) What can we know about God?

In answers to (1) Aristotle develops one argument, the argument for the existence of change or motion. His statement is very complex, but its main outlines can be indicated as follows: (a) there exists an eternal circular

motion, namely the movement of the sphere of the fixed stars. (b) Everything that is moved is moved by something else.(c) Therefore, there must be either an infinite series of causes or a cause of motion that is itself unmoved.(d) An infinite series of causes and effect is impossible.(e) There is a unmoved causes of motion and that is God. Aristotle reply to (2) runs as follows: Since God is an unmoved mover he must be changeless. He cannot therefore be composed like other substance of potentiality and actuality. He must accordingly be all form, all actuality, and so completely immaterial. He moves the outermost sphere of the fixed stars, and this motion is transmitted to the inner spheres by ordinary mechanical process. But God himself does not move outer haven mechanically. Indeed, he could not do so, sponce he is immortal and not in space. Instead, he moves it in a nonphysical way by being an object of attraction or desire. God is thus efficient cause by being a final cause. His own activity, being that of a purely immaterial being, must be an actively of thought which has itself for its object. In the book *Lambda* Aristotle says, —Therequirement that thought be about itself for the prime mover is intended to eliminate various possibilities that would undermine the dignity of his thought. His thought might not have any object at some point, a danger which is avoided by its being permanently actual”.^{xxiii} So we can see that there is a substance eternal, unchangeable and separate from sensible things.

Throughout the work we can see that Aristotle's aim is to solve the central problem of Metaphysics that is the problem regarding substance. The task of this chapter is to understand the notion of Metaphysics in the light of ancient Greek philosopher's point of view to Aristotelian point of view. There is nothing even in modern world which Aristotle has not touched and in relation to which he has not presented his extraordinary insight. Aristotle has influenced Western thought throughout all ages down to the present time. Not only the philosophers but also the theological systems of Judaism, Islam and the Christian Catholic Church are influenced by the Aristotle's ideas. Aristotle gives us an understanding of physical world and also investigates the nature of its "*being*"—*the being of motion*. Under his influence a large number of medieval and modern thinkers (philosophers, theologians and scientists) pursued this type of investigation.