Chapter—1

The Earliest Roots Of Reason And Experience In Man

(THE THREE GREAT GREEK THINKERS)

1] Socrates

2] Plato

3] Aristotle
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‘How man is related to the world’. Is it always possible to give an account of the world ignoring the presence of man in it and the difference that human presence brings about in the world - situation. It is being admitted by implication that ordinary language serves the purpose of the ultimate meta-language, and this meta-linguistic role is due to its immense intuitive resources. Practically we are neither completely absorbed in, nor completely abstracted from, our own experience. World-man relationship has been and even continues to be a very difficult problem. It is reasonable for us to think whether man’s first thinking was practical or theoretical. Life has to be secure before it can be improved. Food, warmth and shelter from the weather and refuge from danger are the goals of mind. The world does not always adjust itself to man’s needs. For example - The hunting grounds turn out to be a bare of game, the weather destroys crops, loved or needed people fall and die. In such circumstances it is natural for a man to think hope that what we cannot do for ourselves, nor can do for us.

Man learns from experience, but from experience - as - such, if any, he has nothing to learn. It is experience, alone which contributes to human knowledge. So far man is concerned experience as such is a limiting concept. All sense perception is merely one outcome of the dependence of our experience upon bodily functionings. The human individual is one fact, body and mind - I am experiencing and my body is mine. The functioning of our body is of a much wider influence than the mere production of sense
experience. The enjoyment of health, good or bad, is a positive feeling only casually associated with particular sense. For example, you can enjoy the ease with which your eyes are functioning even when you are looking at the bad picture or a vulgar building. This direct feeling of the derivation of emotion from the body is among our fundamental experience. There are various types of emotion, which is at least modified by derivation from the body. The fundamental fact is that the whole complexity of mental experience is either derived or modified by such functioning. Even our basic feeling is this sense of derivation, which leads to our claim of body and mind. Our immediate experience also claims derivation from another source, and equally claims a unity founded upon this alternative source of derivation. This source is our own state of mind directly preceding the immediate of our conscious experience. Thus, our experience in the present discloses its own nature in two sources of derivation, the body and the antecedent experimental functionings. There is a claim for identification with each of these sources. There is a unity of the body with the environment, as well as unity of body and soul into one person.

In conceiving our personal identity we are apt to emphasize rather the soul than the body. An individual is that coordinated stream of personal experiences which is my thread of life or your thread of life. It is that succession of self-realization, each occasion with its direct memory of its past and with its anticipation of the future. That claim to enduring self-identity is our self-assertion of personal identity.

To man absolutely structureless experience is unknown. Even his self-knowledge assumed of necessity an objective structure; otherwise experience could not have any critical saying in the growth of knowledge. Had sense manifold been really 'blind' it could be at best a passive and not a critical collaborator of reason in the mind's quest for knowledge. Man does not know by experience alone, nor does have knowledge without experience either. He can participate the objective structure of some of his possible experience but the actual details of experience may prove inconsistent with, therefore critical of apriori anticipates (unlike God's) human knowledge is not necessarily valid or deductively systematized. There is always possibility of surprise in what we come across in our experience, indicating thereby the limitations of purely a priori functioning attributed to reason. There is an objective to historical i.e. changing, ground of human knowledge being limited, corrigible and growing.
Generally, history of intellectual discipline and philosophy in particular is a standing refutation of the view and knowledge is timeless, knows no growth, and ultimately indifferent to what is empiral. Indifference to the empirical entails indifference to the human model of knowledge and tacit acceptance of the divine model. But it is not easy to define the empirical metamorphosis of the criteria of the empirical make the point clear. If verifiability is too wide falsifiability is too narrow and conformability vitiated by paradoxes. But falsifiability, unlike other two inductive concepts could be further liberalised and usefully applied to the domain of the empirical and the transcendental science and metaphysics. The notions of basic statement, advocated by rationalists and empiricists, ultimately untenable. The basic statements are all criticisable and relatively basic. The west has been strongly influenced by the intellectual way of life. The fondness of scientific clarity has, at least to some extent, overshadowed the sense for the 'mystery', for the unknown, for the unexpected supra - rational enlightenment - the sense, which is so characteristic of eastern philosophies and religion. Truth cannot be reached by mere reason or by mere intellectual contemplation but through a supernatural 'Revelation'.

Man is obliged to be persistent in all his thought and action this obligation is existential. Physical science has reduced Nature to activity, and has discovered mathematical formulae, which are illustrated in these activities of Nature. But the fundamental question arises how do we add content to the notion of bare activity? It can only be answered by fusing life with Nature. The various examples of the higher forms of life exhibit the variety of grades of effectiveness of mentality. In the social habits of animals there is evidence of flashes of mentality in the past, which have degenerated into physical habits. In the higher mammals and more particularly in mankind, we have clear evidence of mentality habitually effective. In our experience, our knowledge consciously entertained and systematized can only mean such mentally, directly observed. The qualities entertained as objects in conceptual activity are of the nature of catalytic agents (chemistry). They modify the aesthetic process by which the occasion constitutes itself out of the many streams of feeling received from the past. It is not necessary to assume that conceptions introduce additional sources of measurable energy. But the operation of mentality primarily to be conceived in a diversion of the flow of energy. Existence is the activity ever emerging into the future.
Human reason does not have a history independent; it is carried out by concrete men and is supposed in the field of praxis to affect the organization of the empirical world. How can a bridge be built between the history of reason and empirical world? Reason is to grow, mature, and affect the world in and through empirical history, which goes on in time and is bound by natural laws. How can the correspondence between real states in experience and the stages in the volition of reason be accounted for? Philosophy of an empirical tendency has generally simplified the problem of their epistemology by reducing the claims of knowledge to the level of principles by which they have sought to explain it. Unconditional validity, strict universality and necessity, cannot belong to our judgments, which are merely the cumulative result of a number of particular experiences. The appearance of rational demonstration is for them only a grab, which is assumed by a form of cognition, which rests at bottom upon particular data of immediate experience, and in so far as it transcends is infected with uncertainty and imperfection.

We all realize that reason is capable, in co-operation with the physical sciences, of attaining a growing measure of the understanding of nature. In future we may realize more clearly than at present, that reason is capable, in co-operation while social sciences, of obtaining a growing measure of influence in society. The wise man of the past, the lovers of wisdom (knowledge), are bound to come back, practical as ever, interested as ever in the whole scope of human affairs with much enriched by the factual information gathered in course of ages by scientific naturalists. 18th century thinkers' equated reason with anything from commonsense to strict logical deduction on a geometric model, they generally agreed that there exists an innate intellectual power, which is nearly equal in all men. They reasoned that all men have what Descartes had called *bon sens*. Consequently, given adequate education, men will be able to solve all the problems that arise in course of their lives. Reason will demonstrate—reason was already demonstrating, in the work of physicists, anthropologists and historians—that nature is orderly. Reason will demonstrate that each man's long-range interests dovetail with those of other man, and thus man can work together in peace and harmony, each pursuing his own good. Thinking cannot, be done *in terms* of sensory images or of what they refer to in the external world. Our all sense perception is merely one outcome of the dependence of our body functionings. All our personal experiences depend upon our personal bodies. Our experience of the world involves the exhibition of the soul itself as one of the components within the world. There is a dual aspect in the relationship of an occasion of experiences as one relatum and
experienced world as another relatum. To illustrate, suppose you are in the room, and the room is in an item in your present experience. But your present experience is what now you are.

The history of mankind has slipped to a great extent from man’s memory. It is only by means of progressive investigation that it reveals itself to a certain extent. The depth of a long pre-history, containing the reasons for all later events, cannot be illuminated by dull lights—concerning the historical period, the period of written testimony, these evidences are incidental and incomplete. The future is uncertain, an unlimited realm of possibilities.

"The unity of history cannot be known by rational procedures. It is not knowable as the unity of biological origin. Unity regarded as the unity of the surface of the earth and as enclosed by the common real time is only a superficial one. The unity of the all-embracing aim cannot be made visible. The idea of world order of the law is directed towards the foundation of man’s existence, not towards the reason of history as a whole and is in itself questionable. The unity is not the progress towards an aim or progress of an infinite process of escalation. The unity does not consist in a reason according to which everything happens. Nor is unity the structured organism of a totality of mankind. The totality of history is veritably present in a vision, neither as reality nor as reason. Every line of development, every typical shape, all facts of unity are simplifications within the realm of history which prove themselves wrong when claiming to understand history to its totality."  

Greek philosophy is dominated from the beginning to the end by the problem of reality to anyone who has tried to live in sympathy with the Greek philosophers. It is based on the faith that reality is Divine. Philosophers believed that it was only through the knowledge of reality that men could learn their own place in the world, and also fit themselves to be fellow workers with God, and believing this he could not rest till he had spread the knowledge of it to others. The ancient Greek poets and philosophers were guided in their reflection by a basic distinction between natural process and human construction, between physical movements and the creation of human art. Mankind lives in two worlds, Nature and art. Greeks were accustomed to distinguish between their natural relations and their social relations. To be governed by man-made laws or human reason was very essence of freedom to Greeks. Living under destiny is human tragedy; living under reason is both logic and freedom. Greek philosophy rested on a growing confidence in arts and sciences; it is man who is the creator, the maker, the doer.
Greek philosophers put knowledge on a firm footing. Knowledge had taken many dimensions. From the time of the Greeks to the present day, the thread of knowledge has never been broken. It may have lost at times, but it has always been possible to find it again. The Greeks achieved what they did. They were very good observers and went to make experiments of a quite modern character. The reasoning power of Greek were exceptional; they were quite conscious of the need of verification. Most of the basic themes of Western philosophy found their first formulations in the statement of some ancient Greeks. The West alone has discovered in reason the source of knowledge which needs no external testing at all, since every experience is automatically interpreted by and consequently dependent on our intelligence. This evaluation of knowledge as the final instance of knowledge is one of the pillars of Western spirituality. The feeling of certainty and universality of rational truth, which cannot be deduced from experimental data, presupposes, if not necessarily higher intellect modelling our consciousness, at least the existence in ourselves of universally valid mental faculty irreducible to sensorial perceptions. In the perspective of the Western spirituality, most important are concepts by postulation and rational relations, which do not need any experimental verification and can be tested by reason itself. Though abstract confidence in such omnipotence of abstract rational truth is not and has not been shared by all Western Currents of thought, it remains one of the most original and distinctive features which have shaped the Western mentality.

Greek thought traces the building up of capital ideas that we have been living ever since. Early Greek philosophers discovered the ideas of matter, mechanical causality, mathematics, form and self which helps us to understand our world and ourselves. Greek philosophy from its earliest stages to the Athenian culmination in the 4th century B.C. begins in the early 6th century and has its setting on the Greek frontier. Rationalism, for what ever its value, appears to have emerged from mythology with the Greeks. In engaging in this intellectual exercise, the Greeks assumed, of course, that nature would play fair; that, if attacked in the proper manner, it would yield its secrets and would not change position or attitude in midplay. Over two thousand years later, Albert Einstein expressed this feeling when he said, "God may be subtle, but He is not malicious." There was also the feeling that the natural laws, when found, would be comprehensible. This Greek optimism has never entirely left the human race. With
confidence in the fair play of nature, human beings needed to work out an orderly system for learning how to determine the underlying laws from the observed data. To progress from one point to another by established rules of argument is to use "reason." A reasoner may use "intuition" to guide the search for answers, but must rely on sound logic to test particular theories. To take a simple example: if brandy and water, whiskey and water, vodka and water, and rum and water are all intoxicating beverages, one may jump to the conclusion that the intoxicating factor must be the ingredient these drinks hold in common - namely, water. There is something wrong with this reasoning, but the fault in the logic is not immediately obvious, and in more subtle cases, the error may be hard indeed to discover. Socrates, Plato and Aristotle are the three great eminent thinkers of this period, which are mentioned as follows.

I. **Socrates (469-399 B.C.E.)**

Socrates was the most influential thinker in the fifth century, whose dedication to careful reasoning transformed the entire enterprise. Since he sought genuine knowledge rather than mere victory over an opponent, Socrates employed the same logical tricks developed by the Sophists to a new purpose, the pursuit of truth. Thus, his willingness to call everything into question and his determination to accept nothing less than an adequate account of the nature of things make him the first clear exponent of critical philosophy. His chief concern was to meet the challenge of sophistry, which in understanding knowledge, threatened the foundations of morality and the state. He saw clearly the prevailing ethical and political fallicies sprang from a total misconception of meaning of truth, and the problem of knowledge was the key to the entire situation.

Socrates (469-399), despite his foundational place in the history of ideas, actually wrote nothing. Most of our knowledge of him comes from the works of Plato (427-347), and since Plato had other concerns in mind than simple historical accuracy it is usually impossible to determine how much of his thinking actually derives from Socrates.

He lived for the rest of his life in Athens and devoted nearly all of his time to freewheeling discussion with its aristocratic young citizens, insistently questioning their confidence in the truth of popular opinions, even though he often offered no clear alternative. Their parents, however, were often displeased with his influence, and his association with opponents of the democratic regime made him a controversial political
figure. An Athenian jury officially convicted Socrates (of corrupting youth and interfering with the religion of the city) and sentenced him to death in 399 B.C.E. Accepting this outcome, Socrates drank hemlock and died in the company of his friends and disciples.

The best sources of information about Socrates's philosophical views are the early dialogues of his student Plato, who attempted to provide a faithful picture of the methods and teachings of the master. The extended conversations of Socrates aim at understanding (and, therefore, achieving) virtue (Gk. areth [aretē]) through the careful application of a dialectical method that uses critical inquiry to undermine the plausibility of widely-held doctrines. In Euqufrwn (Euthyphro), for example, Socrates systematically refutes the superficial notion of piety or moral rectitude defended by a confident young man. Plato's Apologhma (Apology) is an account of Socrates's (unsuccessful) speech in his own defense before the Athenian jury; it includes a detailed description of the motives and goals of philosophical activity as he practiced it. The Kritwn (Crino) reports that during Socrates's imprisonment he responded to friendly efforts to secure his escape by seriously debating whether or not an individual citizen can ever be justified in refusing to obey the laws of the state.

The Socrates of the Menwn (Meno) investigates the nature of virtue, defending the doctrine of recollection as an explanation of our most significant knowledge and maintaining that knowledge and virtue are so closely related that no human agent ever knowingly chooses evil: improper conduct is a product of ignorance rather than of weakness of the will (Gk. akrasia [akrastia]). The same view is also defended in the ProtagoraV (Protagoras), along with the unity of the virtues. Although Socrates continues to appear as a character in the later dialogues of Plato, these writings more often express philosophical positions Plato himself developed long after Socrates's death.

1.1 Aim

The aim of Socrates was to arouse in man the love of truth and virtue, to help them to think right in order that they might live right. His purpose was practical, rather than speculative; and was interested in the correct method of inquiring knowledge, by his examples taught others to follow. The true approach of knowledge was through
conversation. Socrates' foremost aim was to bring home himself and others the fact that the most important questions affecting human life were as yet unsolved riddles, that words and ideas which everyone had been accustomed from the days of childhood upwards to bandy about the thoughtless confidence, wherein truth thickly beset with contradiction and ambiguities.

1.2 Method

1.2.1 Questioning Method

The goal of Socratic interrogation, is to help individuals to achieve genuine self-knowledge, even if it often turns out to be negative in character. As his cross-examination of Meletus shows, Socrates means to turn the methods of the Sophists inside-out, using logical nit-picking to expose (rather than to create) illusions about reality. If the method rarely succeeds with interlocutors, it can nevertheless be effectively internalized as a dialectical mode of reasoning in an effort to understand everything.

Socrates' method of philosophical inquiry consisted in questioning people on the positions they asserted and working them through questions into a contradiction, thus proving to them that their original assertion was wrong. Socrates himself never takes a position; in The Apology he radically and skeptically claims to know nothing at all except that he knows nothing. Socrates and Plato refer to this method of questioning as elenchus, which means something like "cross-examination" The Socratic elenchus eventually gave rise to dialectic, the idea that truth needs to be pursued by modifying one's position through questioning and conflict with opposing ideas. It is this idea of the truth being pursued, rather than discovered, that characterizes Socratic thought and much of our worldview today. The Western notion of dialectic is somewhat Socratic in nature in that it is conceived of as an ongoing process. Although Socrates in The Apology claims to have discovered no other truth than that he knows no truth, the Socrates of Plato's other earlier dialogues is of the opinion that truth is somehow attainable through this process of elenchus.
A comparison of Socratic and Scientific method:

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<th>Socratic Method</th>
<th>Scientific Method</th>
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<tr>
<td>2. Hypothesis. Suggest a plausible answer (a definition or definiens) from which some conceptually testable hypothetical propositions can be deduced.</td>
<td>2. Hypothesis. Suggest a plausible answer (a theory) from which some empirically testable hypothetical propositions can be deduced.</td>
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<tr>
<td>3. Elenchus; &quot;testing,&quot; &quot;refutation,&quot; or &quot;cross-examination.&quot; Perform a thought experiment by imagining a case, which conforms to the definiens but clearly fails to exemplify the definiendum, or vice versa. Such cases, if successful, are called counterexamples. If a counterexample is generated, return to step 2, otherwise go to step 4.</td>
<td>3. Testing. Construct and perform an experiment, which makes it possible to observe whether the consequences specified in one or more of those hypothetical propositions actually follow when the conditions specified in the same proposition(s) pertain. If the experiment fails, return to step 2, otherwise go to step 4.</td>
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<td>4. Accept the hypothesis as provisionally true. Return to step 3 if you can conceive any other case, which may show the answer to be defective</td>
<td>4. Accept the hypothesis as provisionally true. Return to step 3 if there other predictable consequences of the theory which have not been experimentally confirmed.</td>
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<td>5. Act accordingly.</td>
<td>5. Act accordingly.</td>
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The comparison is just illustrated to see the difference and oneness prevailing between the two.
1.2.2 Dialectic Method

Socrates considers dialectic the essential basis of both speech and thought. Orator for example needs knowledge of mind and character (psyche) as much a doctor does of a body. To understand, for practical ends, the nature of anything, one must first decide whether it is simple or complex; then consider what it can act on, and by what means, or by what and how it can be acted upon, if simple; and if complex, ask the same question about each part. The orator’s object being to work upon the mind, he must grasp its nature, and then classify the types of mind. The orator must grasp both in theory and by observation, until he recognizes type and the arguments, which will appeal to it, and moreover understand when to speak and when not, and when to use brevity, pathos, attack, or any other devices. Like everything else it needs a combination of natural talent with knowledge and practice.4

What Socrates is in fact describing is philosophical method, not rhetorical. Socrates knows his interlocutors and skillfully adapts his approach to Protagoras, Meno, Gorgias, and Phaedrus. Moreover ability to ‘expound all the reasons’ is what in the Meno converted belief into knowledge. A finished orator must have knowledge and not ‘go chasing after beliefs’.5 This directly contradicts rhetorical teaching, as exemplified in Plato’s time by Socrates who wrote that as a guide in practical matters knowledge was unattainable, and the wise man would rely on belief.6

1.3 Knowledge

Socrates had proposed in the Meno, the most important varieties of human knowledge are really cases of recollection. Consider, for example, our knowledge of equality. We have no difficulty in deciding whether or not two people are perfectly equal in height. In fact, they are never exactly the same height, since we recognize that it would always be possible to discover some difference—however minute—with a more careful, precise measurement. By this standard, all of the examples we perceive in ordinary life only approach, but never fully attain, perfect equality. But notice that since we realize the truth of this important qualification on our experience, we must somehow know for sure what true equality is, even though we have never seen it.7
Socrates felt that knowledge was a living, interactive thing. The Athenians, with the exception of Plato, thought of Socrates as a Sophist, a designation he seems to have bitterly resented. He was, however, very similar in thought to the Sophists. Like the Sophists, he was unconcerned with physical or metaphysical questions; the issue of primary importance was ethics, living a good life. He appeared to be a sophist because he seems to tear down every ethical position he's confronted with; he never offers alternatives after he's torn down other people's ideas. Socrates insists that his mission was to make people consciously aware of what they already knew (and Plato's) whole aim was to get men to think, to reflect on the various uses of a world and the reasons why same word is used each time.

Socrates raises a serious dilemma: how can we ever learn what we do not know? Either we already know what we are looking for, in which case we don't need to look, or we don't know what we're looking for, in which case we wouldn't recognize it if we found it. The paradox of knowledge is that, in the most fundamental questions about our own nature and function, it seems impossible for us to learn anything. The only escape, Socrates proposed, is to acknowledge that we already know what we need to know. This is the doctrine of recollection, Plato's conviction that our most basic knowledge comes when we bring back to mind our acquaintance with eternal realities during a previous existence of the soul.

The example offered in this dialogue is discovery of an irrational number, the square root of 2. Socrates leads an uneducated boy through the sophisticated geometrical demonstration with careful questions, showing that the boy somehow already knows the correct answers on his own. All of us have had the experience (usually in mathematical contexts, Plato believed) of suddenly realizing the truth of something of which we had been unaware, and it does often feel as if we are not really discovering something entirely new but rather merely remembering something we already knew. Such experiences lend some plausibility to Plato's claim that recollection may be the source of our true opinions about the most fundamental features of reality. What is more, this doctrine provides an explanation of the effectiveness of Socratic method: the goal is not to convey new information but rather to elicit awareness of something that an individual already knows implicitly.
The doctrine of *anamnesis* (recollection, calling to mind) is that the human soul is immortal and has been through many earthly lives and many periods of existence outside the body. It has thus ‘seen all things, both those here and those in the other world, and there is nothing it has not learned.’ Moreover ‘all nature is akin’, so that a soul which has been reminded of the one thing only may from one thing go on to rediscover anything else if it is willing to preserve. The experience of birth and association with a body has made the soul forgetful, and the copies can remind it of what it once knew. In Meno the soul has seen all things, and the *Phaedrus* describes the circuit of gods and philosophic souls around the rim of heaven, where with the eye of the mind they see the truth, they behold reality-intangible, without colour or shape-they ‘catch sight of’ justice, temperature and knowledge as they are in themselves, not the knowledge based up with becoming that varies with the changing objects which we now call real, but the true knowledge of what truly is.’

To illustrate how could we know any two sticks are unequal? For this we must apply the criterion of equality and find them wanting. Our knowledge of this criterion cannot have derived from sensory experience. It is the empirical fact, that we judge the sticks unequal proves both that we have a knowledge of equality, and this equality cannot be physical. It is proved that either we know something (that is, at least one thing) or we know nothing. Hence, there is at least one thing that is known, therefore, knowledge is possible, and for only forms have the characteristics-immutably, eternity requisite for knowledge. As quoted below:

"...it is through the senses that we must learn that all sensible strive after absolute equality and fall short of it..........then before we began to see or hear or use the other senses we must somewhere have gained a knowledge of abstract or absolute equality."  

Hence, according to Socrates, it seems we reach the conclusion that our souls existed before we were born, and that the essence of which we speak likewise exists. Socrates explains something reminds us of something else because of a resemblance, we are aware of any imperfections in the resemblance because we know the original. To conclude, *doxa* in the Meno is a dim and uncertain awareness of the same objects (the Forms) of which knowledge is the full, clear and stable understanding. The difference...
between the two conceptions of \textit{doxa} and knowledge is that between different grades of
cognition of the same objects and cognition of two different classes of objects, and one
would suppose that whereas the one kind of \textit{doxa} can be converted into knowledge,\textsuperscript{15} the
other cannot. Virtue is knowledge, the knowledge that has been shown to be the recovery
of the changeless Form of virtue from the depths of the mind. Given that, a man cannot
fail to act in accordance with it. It can be taught if teaching is understood to be what
Socrates describes in \textit{Theatetus} \textsuperscript{16} as assisting in bringing to birth truths with which
another is pregnant; but not in the Sophistic sense of handing over ready-made packets of
knowledge.

1.3.1 \hspace{1pt} Forms

In \textit{Meno} Forms in themselves and their relation to particulars are in many aspects
same in the Socratic dialogues Forms exist and are unchanging; they are \textit{in} things and
are that \textit{by} which the particulars are characterized,\textsuperscript{17} which \textit{makes}’ them have it,\textsuperscript{18}
i.e., by their presence,\textsuperscript{19} or association.\textsuperscript{20} Things \textit{have}’ them\textsuperscript{21} or \textit{share in}’ them,\textsuperscript{22} or
they are \textit{added} to things.\textsuperscript{23} The Forms are patterns as perfect models which particulars in
this world endeavour, with incomplete success, to reproduce. Here doubt is raised which
Aristotle and many since have found objectionable. Not only are the forms in things,
imparting their character by their presence or association \textit{or whatever it may be}; they
exist also separately and \textit{by themselves}. Existence is divided into categories, the visible\textsuperscript{24} perishable contrasted with the invisible eternal, also called divine.\textsuperscript{24} Forms belong to the
latter, grasped by mind not the senses, eternal and changeless, simple and uniform, it is
only to their realm the term \textit{being} properly belongs.\textsuperscript{25}

\textit{Meno} says, that the soul, being immortal, has learned and seen everything both
here and in the other world and may be reminded of its previous knowledge Given (as
Plato grants even in the \textit{Phaedo}) that the first step towards recognition of the Forms must
be through the senses, they are most easily achieved through appreciation of beauty,
because beauty is the only Form whose counterpart on earth is directly visible to the eye
of the body as itself to the eye of the soul;\textsuperscript{26} it must be beauty \textit{of a person}, not of nature,
music or anything else, because the heights of philosophy can only be sealed by \textit{two
going together}, lover who have sublimated their desire in a common pursuit of dialectic.
It is said only souls "Which have seen the truth" (i.e., Forms) can be born as men. This is because only men have power to reason, to form a general concept from a number of acts of perception, in doing so they are in fact being reminded of the realities which saw they saw in their journey with the Gods. They are not Platonic Forms but "called after them" and to acquire them is a universal human faculty. Without it men could not even use terms. It is a mark of our common humanity, of which no more can be said, as said by Aristotle, 'the mind is such as to be capable of this experience' and 'in this way sense-perception itself implants the universal.' The dialectician works only with these specific or generic universals and not with particulars at all. At the same time, owing to man's common possession of reason, the process of recollection is a continuous process. Collection gives the wider concept, or genus, in which the notion to be identified is to be included. This 'common kind' is irrationality or madness, it was perceived not by the process of argument or methodical examination of individual cases but directly, by intuition or insight.

The learning was a continuous process with several stages between apparent blank ignorance and knowledge. Knowledge is of what exists, of what does not exist there can only be ignorance. It is important because it invalidated the Sophists' favourite method of attack by the 'either or' question: 'How can we learn either what we know or what we don't know' or the similar question in the Ethydemus. 'Who are the learners, the wise or the ignorant'? It is said that Plato gave no explanation of false beliefs, which the slaves first produced. It is true only at the latter stage when his philosophy had become more critical, (in the Theaetetus and Sophist) he did seriously tackle the question of origin of false opinions. But at present anamnesis is itself an explanation for him. Knowledge enables us to reject the wrong and recognize the right one which it comes. If the false-suggestion do not intervene, we should have no process of learning but the impossible leap from sheer ignorance to knowledge, which-the anamnesis is designed to avoid. According to it, there is no such thing as blank ignorance in the sense that the mind is a tabula rasa or blank sheet of paper. Rather there is writing on it in invisible ink, awaiting the proper reagent to make it perceptible. And if we try to decipher it hastily, or before it has fully come up, we may make mistakes.
"No men err of his own free will." This means that he who knows what is right does what is right. Every moral deficiency has its origin in the intellect, and depends on a vagary of the understanding. The zeal of that age in the culture of the intellect, and its employment in the elucidation of the chief problems both of corporate and of individual life, the earnest endeavour to replace tradition by self-won knowledge, blind faith by illuminated thought. But the intellectualism, of that age culminates in Socrates. Socrates affirmed contradiction between knowledge and action to be impossibility, and drew the inference that all moral excellence is simply and solely wisdom. By its application to different branches of life, virtue appeared to be manifold; in truth it was one because identical with insight or wisdom.

According to Socrates true virtue should be the same for everyone. This broad concept of virtue may include such specific virtues as courage, wisdom, or moderation, but it should nevertheless be possible to offer a perfectly general description of virtue as a whole, the skill or ability to be fully human. But what is that? When Meno suggests that virtue is simply the desire for good things, Socrates argues that since different human beings are unequal in virtue, virtue must be something that varies among them, he argues, but desire for one believes to be good is perfectly universal Since no human being ever knowingly desires what is bad, differences in their conduct must be a consequence of differences in what they know. Socrates holds that knowing what is right automatically results in the desire to do it, even though this feature of our moral experience could be doubted. (Aristotle, for example, would later explicitly disagree with this view, carefully outlining the conditions under which weakness of will interferes with moral conduct.) In this context, however, the Socratic position effectively shifts the focus of the dialogue from morality to epistemology: the question really at stake is how we know what virtue is.

The further question of the dialogue is whether or not virtue can be taught. On one hand, it seems that virtue must be a kind of wisdom, which we usually assume to be one of the acquirable benefits of education. On the other hand, if virtue could be taught, we should be able to identify both those who teach it and those who learn from them, which we cannot easily do in fact. (Here Socrates offers a scathing attack on the sophists,
who had often claimed that they were effective teachers of virtue.) So it seems that virtue cannot be taught. Plato later came to disagree with his teacher on this point, arguing that genuine knowledge of virtue is attainable through application of appropriate educational methods.

Perhaps our best alternative, Socrates held, is to suppose that virtue is a (divinely bestowed?) true opinion that merely happens to lack the sort of rational justification which would earn it the status of certain knowledge. Whether or not we agree with this rather gloomy conclusion about the unteachability of virtue, the distinction between genuine knowledge and mere true opinion is of the greatest importance. For philosophical knowledge, it is not enough to accept beliefs that happen to be true; we must also have reasons that adequately support them.

1.4 Socratic Paradox

The claim put in the mouth of Socrates is called Socratic paradox. ‘Socratic paradox’ that to do wrong is worse than to suffer it is linked with the immediately preceeding assertion that a man’s proper concern is with the welfare of his psyche rather than with his earthly fortunes and reputation. Morally bad actions in fact harm their perpetrator because they inevitably injure him in his real self (psyche), not simply in externals. 37 Socrates doesn’t seem to be a radical skeptic, though. Scholars generally believe that the Socratic paradox is actually Socratic rather than an invention of Plato. The one positive statement that Socrates seems to have made is a definition of virtue (arete): "virtue is knowledge." If one knows the good, one will always do the good. It follows, then, that anyone who does anything wrong doesn't really know what the good is. This, for Socrates, justifies tearing down people's moral positions, for if they have the wrong ideas about virtue, morality, love, or any other ethical idea, they can't be trusted to do the right thing.

1.5 Life Of Socrates

An application of careful techniques of reasoning results in genuine (if negative) progress in the resolution of a philosophical issue. Socrates's method of insistent questioning at least helps us to eliminate one bad answer to a serious question. At most, it
points us toward a significant degree of intellectual independence. Socrates because of his political associations with an earlier regime, the Athenian democracy put Socrates on trial, charging him with undermining state religion and corrupting young people. The speech he offered in his own defense, as reported in Plato's Apology (Apology), provides us with many reminders of the central features of Socrates's approach to philosophy and its relation to practical life.

Ironic Modesty: Explaining his mission as a philosopher, Socrates reports an oracular message telling him that "No one is wiser than you." 38 He then proceeds through a series of ironic descriptions of his efforts to disprove the oracle by conversing with notable Athenians who must surely be wiser. In each case, however, Socrates concludes that he has a kind of wisdom that each of them lacks: namely, an open awareness of his own ignorance.

Devotion to Truth: Even after he has been convicted by the jury, Socrates declines to abandon his pursuit of the truth in all matters. Refusing to accept exile from Athens or a commitment to silence as his penalty, he maintains that public discussion of the great issues of life and virtue is a necessary part of any valuable human life. "The unexamined life is not worth living." 39 Socrates would rather die than give up philosophy, and the jury seems happy to grant him that wish.

Plato's dramatic picture of a man willing to face death rather than abandoning his commitment to philosophical inquiry offers up Socrates as a model for all future philosophers. Perhaps few of us are presented with the same stark choice between philosophy and death, but all of us are daily faced with opportunities to decide between convenient conventionality and our devotion to truth and reason. How we choose determines whether we, like Socrates, deserve to call our lives philosophical.

1.6 Conclusion

Reason before authority, utility before tradition or blind emotion—such is the battle cry in the campaign prepared, but only partially conducted by Socrates. He himself remained to a considerable extent under the sway of the traditional sentiments of his countrymen. The fundamental principle for which he strove to win recognition was the supremacy of the enlightened reason. Socrates thought that there were certain secrets
which would remain forever inaccessible to human intellect, facts connected with the 
structure of the universe which the gods had recovered for their own exclusive 
cognisance. This, for him (Socrates) was a kind of knowledge which, even if it be 
obtained, would not be particularly worth having, and search after which would leave no 
leisure for more useful acquisitions.

Socrates accepts the Sophistic scepticism so far as it applies to the existing state of 
science, but does not push it to the same fatal conclusion. Socrates grants that current 
beliefs should be thoroughly shifted and, if necessary, discarded, but only that more solid 
convictions may be substituted for them. Socrates first brought out the ideas of mind in 
its full significance. He at first studied the whole circle of human interests as affected by 
mind; that, in creating dialectics, he gave his method the only subject-matter on which it 
could be profitably exercised, finally, that but these immortal achievements, philosophy 
was constituted, that received a threefold verification- (1) From the life of its founder; 
(2) From the success with which his spirit was communicated to a hand of followers; 
(3) From the whole subsequent theory of thought.

The mind of Socrates resembles a diamond, that cuts everything, but is cut by 
nothing itself; and that resolves every ray it receives into bands of coloured light. The 
Socratic dialogue has a double aspect; it is like all philosophy, a perpetual carrying of life 
into ideas and of ideas into life. Life is raised to a higher level by thought; thought, when 
brought into contact with life, gains moment and growth, assimilative and reproductive 
power. If action is to be harmonised, we must regulate it by universal principles; if our 
principles are to be efficacious, they must be adopted; if they are to be adopted we must 
demonstrate them to the satisfaction of our contemporaries. Language consisting as it 
does almost entirely of abstract terms, furnishes the materials out of which alone such an 
ideal union can be framed. But men do not always use the same words, least of all if they 
are abstract words, in the same sense, and therefore a preliminary agreement must be 
arrived at in this respect, a fact which Socrates was the first to recognise. The Socratic 
method of analogical reasoning gave a retrospective justification to early Greek thought 
of which Socrates was not himself aware.

Socrates in restricting philosophy to human interests, was guided by a just tact; 
that in creating a method of dialectic abstraction, he created an instrument adequate to 
this investigation, but to this alone; and, finally, that human interests, understood in the
largest sense, embrace a number of subsidiary studies which either did not exist when he taught, or which inevitable superstitions of his age would not allow it to pursue. It remains to glance at another aspect of dialectic method first developed on a great scale by Plato, and first fully defined by Aristotle, but already playing a certain role in the Socratic teaching. This is the testing of common assumptions by pushing them to their logical conclusion, and rejecting those which lead to consequences inconsistent with themselves. So understood, dialectic means the complete elimination of inconsistency, and has never since remained the powerful weapons of philosophic criticism.

We can follow Plato to the nice ties of "Socratic Problem". Since we are concerned with the theory itself—the question it was intended to answer, its success or failure, and its subsequent development in the hands of others— we need not attempt to separate Socrates' contribution from Plato's. Whenever "Plato's theory" is referred to, it may be taken to mean "the theory of Socrates-Plato".

II Plato (427-347 B.C.)

1.7 Two Historical Divisions

Two historical divisions dominate Greek philosophy: the Platonic and the Aristotelian.

(1) Plato divides philosophy into dialectic, physics, and ethics. This division is not found in Plato's own writings, and it would be impossible to fit his dialogues into the triple frame, but it corresponds to the spirit of the Platonic philosophy. According to Zeller, Xenocrates (314 B.C.) his disciple, and the leading representative of the Old Academy, was the first to adopt this triadic division, which was destined to go down through the ages, and Aristotle follows it in dividing his master's philosophy. Dialectic is the science of objective reality, i.e., of the Idea (idea eidos), so that by Platonic dialectic we must understand metaphysics. Physics is concerned with the manifestations of the Idea, or with the Real, in the sensible universe, to which Plato attributes no real value independent of that of the Idea. Ethics has for its object human acts. Plato deals with logic, but has no system of logic; this was a product of Aristotle's genius.
Aristotle, Plato's illustrious disciple, the most didactic, and at the same time the most synthetic, mind of the Greek world, drew up a remarkable scheme of the divisions of philosophy. The philosophical sciences are divided into theoretic, practical, and poetic, according as their scope is pure speculative knowledge, or conduct (praxis), or external production (poiesis). Theoretic philosophy comprises: (a) physics, or the study of corporeal things which are subject to change (achôrista men all' ouk akinêta) (b) mathematics, or the study of extension, i.e., of a corporeal property not subject to change and considered, by abstraction, apart from matter (akinêta men ou chôrista d'isôs, all' hós en hulê); (c) metaphysics, called theology, or first philosophy, i.e. the study of being in its unchangeable and (whether naturally or by abstraction) incorporeal determinations (chôrista kai akinêta). Practical philosophy comprises ethics, economics, and politics, the second of these three often merging into the last. Poetic philosophy is concerned in general with the external works conceived by human intelligence. To these may conveniently be added logic, the vestibule of philosophy, which Aristotle studied at length, and of which he may be called the creator.

Plato was born to an aristocratic family in Athens. He eventually became a disciple of Socrates, accepting his basic philosophy and dialectical style of debate: the pursuit of truth through questions, answers, and additional questions. Plato witnessed the death of Socrates at the hands of the Athenian democracy in 399 BC. Plato one of the most creative and influential thinkers in Western philosophy, In his earliest literary efforts, tried to convey the spirit of Socrates's teaching by presenting accurate reports of the master's conversational interactions, for which these dialogues are our primary source of information. Early dialogues are typically devoted to investigation of a single issue, about which a conclusive result is rarely achieved. Thus, the Eudocryon (Euthyphro) raises a significant doubt about whether morally right action can be defined in terms of divine approval by pointing out a significant dilemma about any appeal to authority in defence of moral judgments.

The middle dialogues of Plato develop, express, and defend his own, more firmly established, conclusions about central philosophical issues. Beginning with the Menon (Meno), for example, Plato not only reports the Socratic notion that no one knowingly does wrong, but also introduces the doctrine of recollection in an attempt to discover whether or not virtue can be taught. The Faidwn (Phaedo) continues development of
Platonic notions by presenting the doctrine of the Forms in support of a series of arguments that claim to demonstrate the immortality of the human soul.

The masterpiece among the middle dialogues is Plato's Politeia (Republic). It begins with a Socratic conversation about the nature of justice but proceeds directly to an extended discussion of the virtues (Gk. areth [aretē]) of justice (Gk. dikaiwsunh [dikaiosunē]), wisdom (Gk. sophia [sophia]), courage (Gk. andreia [andreia]), and moderation (Gk. swfrosunh [sophrosunē]) as they appear both in individual human beings and in society as a whole. This plan for the ideal society or person requires detailed accounts of human knowledge and of the kind of educational program by which it may be achieved by men and women alike, captured in a powerful image of the possibilities for human life in the allegory of the cave. The dialogue concludes with a review of various forms of government, an explicit description of the ideal state, in which only philosophers are fit to rule, and an attempt to show that justice is better than injustice. Among the other dialogues of this period are Plato's treatments of human emotion in general and of love in particular in the FaidroV (Phaedrus) and Sumposion (Symposium). Plato's later writings often modify or completely abandon the formal structure of dialogue. They include a critical examination of the theory of forms in ParmenidhV (Parmenides), an extended discussion of the problem of knowledge in QeaithtoV (Theaetetus), cosmological speculations in TimaioV (Timaeus), and an interminable treatment of government in the unfinished LegeiV (Laws).

1.8 Theory Of Knowledge

Plato's theory of Forms and his theory of knowledge are so interrelated that they must be discussed together. Influenced by Socrates, Plato was convinced that knowledge is attainable. He was also convinced of two essential characteristics of knowledge. First, knowledge must be certain and infallible. Second, knowledge must have as its object that which is genuinely real as contrasted with that which is an appearance only. Because that which is fully real must, for Plato, be fixed, permanent, and unchanging, he identified the real with the ideal realm of being as opposed to the physical world of becoming. One consequence of this view was Plato's rejection of empiricism, the claim that knowledge is derived from sense experience. He thought that propositions derived from sense experience have, at most, a degree of probability. They are not certain. Furthermore, the
objects of sense experience are changeable phenomena of the physical world. Hence, objects of sense experience are not proper objects of knowledge.

Plato devoted a great deal of attention to epistemology. Like Democritus Plato saw that to answer the Sophists he had to find solutions to the various apparently insoluble dilemmas, growing out of earlier theories. Plato realized these dilemmas—the problem of one and many, the problem of appearance and reality, the problem of change—grew out of the questions asked by earlier philosophers. All these problems were implied in Thales' apparently innocent question, "what is the one out of which everything comes?" For example on the assumption that everything is really one, say, water, it is obvious that things look different from what they are: How can reality appear to be different from what it is? Again, saying that everything is really one involves us in the problem of the one and the many, for we are saying that what is one (water), is a plurality, which sounds like a contradiction. Since nobody had been able to give a reasonable account of the "somehow or the other", the Sophists became skeptical reason. It would seem that both Parmenides and Heraclitus saw that this contradiction. Hence each tries to get away with explaining the universe in terms of one of the conflicting concepts. Since Heraclitus saw that the difference must be admitted, he rejected identity (which seemed to him incompatible with difference) and tried to explain everything in terms of flux; but this is unsatisfactory.

Parmenides realizing that whatever changes must be identical throughout its change, took identity as a basic concept and was forced to deny change, since the two concepts seemed to him, too, incompatible. In this conclusion Parmenides was reinforced by Zeno, who was thought to have proved that motion (a particular type of change—change of place) was Impossible. Plato realized these problems about change, the one and the many, and appearance and reality. As long as change was incapable of rational explanation, as the Sophists maintained a hopelessly fallible instrument.

According to Plato: Both Heraclitus and Parmenides are correct, for they were talking about different type of objects. The Sophists had supposed, as indeed Heraclitus and Parmenides themselves had probably supposed, that they were both talking about the same type of objects, namely the objects of sense perception in the physical world. It is a contradiction to assert of the same object the completely different predicates that
Heraclitus and Parmenides attributed to "reality”. But what is reality is not single, as the Milesians had supposed? What if it is dual, as the Pythagoreans had maintained? Then we could say that one of these realities is in a constant flux, just as Heraclitus had asserted, and that the other is eternally one, as Parmenides had claimed. This resolves the dilemma formally, for there is no problem about asserting contradictory predicate (for e.g., barren women’s child) of different objects. But are there two worlds, if yes, what are they? There is no doubt about the world of sense-perception—it obviously exists and, what is more, it seems to have the Heraclitean characteristics; it is a flux, but a flux that conforms to the "measures”. According to Plato, there is another world beyond the world of physical objects a space and time, standing in ultimate relation to it. This another world is nonphysical, non-spatial, and non-temporal; Plato called this the world of ideai.

The higher level of awareness is knowledge, because there reason, rather than sense experience, is involved. Reason, properly used, results in intellectual insights that are certain, and the objects of these rational insights are the abiding universals, the eternal Forms or substances that constitute the real world. Plato’s own theory of knowledge is found in the Republic, particularly in his discussion of the image of the divided line and the myth of the cave. In the former, Plato distinguishes between two levels of awareness: opinion and knowledge. Claims or assertions about the physical or visible world, including both commonsense observations and the propositions of science, are opinions only. Some of these opinions are well founded, some are not; but none of them counts as genuine knowledge. The higher level of awareness is knowledge, because there reason, rather than sense experience, is involved. Reason, properly used, results in intellectual insights that are certain, and the objects of these rational insights are the abiding universals, the eternal Forms or substances that constitute the real world.

1.8.1 The Divided Line

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In figure shown above the vertical line from X to Y is a continuous line, suggesting that there is some degree of knowledge at every point. As the line passes through the lowest forms of reality to the highest, there is a parallel progression from the lowest degree of truth to the highest. Imagine a line divided into two unequal parts, and each part divided into same ratio. The main divisions represent the visible and intelligible worlds. The subdivisions in the visible world are (a) images, specified as shadows, reflections 'and the like', (b) actual objects of the natural and man made world ('animals, plants and every kind of manufactures object'). The lower part (A+B) is at first called 'the visible; but elsewhere the field of doxa in wide sense ... and so it includes many conventional notions of the multitude' about morality. It is the physical and moral world as apprehended by those 'lovers of appearances' who do not recognize the absolute ideals, which Plato calls real. As the two parts of the lower section stand to each other in respect of their reality, so are objects of belief (doxa) to objects of knowledge, that is, as copies to originals.
In lower sub division, the psyche treats the originals of the lower main solution (objects in the physical world) as themselves imagers, and bases its inquiries on assumptions (hypotheses in Greek), not progressing from them to a primary principle but using them as premises to argue deductively to a conclusion. Then upper division proceeds from assumption or hypotheses to a self-authenticating (lit. 'Unhypothesized') first principle, making no use of sensible things at all, but only of Forms, 'moving through Forms from to the other and ending with Forms.'

The lower form of cognition is called eikasia. It is etymologically connected with eikon=image, likeness, and with eikos=likely, and it can mean either likeness (representation) or likening (comparison) or estimation of likelihood (conjecture). 'Imagining' is the least unsatisfactory rendering. It seems to be wholly unenlightened state of mind, which takes sensible appearances and current moral notions at their face value—the conditions of the unreleased prisoners in the allegory, who see only images of images. The higher section stands common-sense belief (pistis) in the reality of the visible and tangible things commonly called substantial. In moral sphere it would include 'correct beliefs without knowledge.' 'True beliefs are sufficient guides for action, but are insecure until based on knowledge of reasons for them.'

It must be agreed that the objects of thought, whose nature the mathematician studies through the medium of their visible images, are Forms (of square etc.), not the mathematics which nevertheless Plato did posit a intermediate between Forms and sensibles. In the Meno for example, the slave, if he were capable of completing the process begun by Socrates' questions about a geometrical problem, would understand not only geometry but 'all other subjects', because 'the truth about existing things' (or realities, i.e., Forms) 'is always in psyche.' Plato calls this stage dianoia (though or reasoning). When a person moves from believing to thinking he moves from the visible (realm of opinion) world to intelligible (realm of knowledge) world. Dianoia suggests discursive thinking or reasoning from premise to conclusion, whereas noesis is constantly compared to immediate act of vision and suggests rather the direct intuition or apprehension of its objects. As quoted by Plato

"This is the class of things that I spoke of as intelligible, but with two qualifications: first, that the mind, in studying them, is compelled to employ..."
assumptions, and, because it cannot rise above these, does not travel upwards to a first principle, and the second, that it uses as images of their own in the section below them and which, in comparison with those shadows and reflections, are reputed to be more palpable and valued accordingly.”

Perfect intelligence represents the mind as completely released from sensible objects. At this level (Section D in the figure) the mind deals directly with the Forms. It is the faculty or power of dialectic that the mind moves towards its highest goal. Perfect intelligence means Synoptic view of reality and this for Plato implies unity of knowledge. According to the figure, as regards the relation, within the realm of forms, between lower (C) and higher (D) forms, there is a correspondence, or an analogy, with the relation between A and B. The higher still illumines the lower. Plato quotes it as follows:

“By the second section of the intelligible world (D) you may understand me to mean all that unaided reasoning apprehends by the power of dialectic, when it treats its assumptions, not as first principles, but as hypothesis in the literal sense, things, “laid down” like a flight of steps up with it may mount all the way to something that is not hypothetical, the first principle of all; and having grasped this, may turn back and, holding on to the consequences which depend upon it, descend at last to a conclusion, never making use of any sensible object, but only of Forms, moving through Forms From one to another, and ending with Forms... And you may take, as corresponding to the four sections, these four states of mind: Intelligence for the highest, thinking for the second, belief for the third, and for the last imagining. These you may arrange as the terms in a proportion, assigning to each a degree of clearness and certainty corresponding to the measure in which their objects possess truth and reality.”

Knowledge forms a pyramid. The nearer to the base, the more conditioned our knowledge is. The higher we rise, the more we free ourselves from conditions, until finally—this seems to have been Plato’s view—we reach a single point on which everything else depends and which itself depends on nothing else. If we could know it, it would illumine and throw into proper scale and perspective all the rest of our knowledge. Being completely knowable in itself, it could not be made more meaningful by our coming to know something else. Since it is unconditioned, we would know everything about it that there was to know; our knowledge of it would be final, immutable complete: Plato called this the “Form of Good”. Latter in the Timaeus Plato offers a detailed cosmology, these truths remain: the teleological ordering of our world and its dependence on a higher, the nature of that higher world as itself perfect kosmos, and the supremacy of
the nous. The first cause is not there called the Good, but God, the divine Mind. Some thought that the Good in the Republic is itself Plato’s god, but so far as his words go there is no suggestion that it is personal, or anything, but he is final object of thought. It is anachronistic to suggest that, as in the philosophy of Plato’s greatest pupil, ‘Mind and its object are the same’? This summit to the pyramid of knowledge Plato called the “Form of the Good”, which is unfortunately very difficult Plato found it impossible to give a formal analysis of it; he could, he saw, only suggest it by analogy, this he presented it in the myth of the sun.

‘There is an “affinity” between our eyes and the sun’; in Republic Socrates tries to bring out this point in his comparison of the Form of the Good with the sun. Here Plato had in mind a contemporary physiological theory according to which the eye contains fire (because it shines and is bright) just as the sun does. Hence, it is an affinity between the sun and our eyes that makes visible things visible. In the same way there is an affinity between the Form of the good and our minds, such that the Form of the Good satisfies the kinds of questions, which our mind asks. The realm of forms might conceivably be indifferent to us, state and aloof. There might be objective, public reality, but this reality might have no affinity with us. Atomism revealed this reality, and it is the kind of modern science discloses: a world of energy that, by some curious coincidence, behaves in ways our mathematical minds can understand by it is totally indifferent to the questions our moral natures ask- a world in which our cosmic hopes and fears get no answers. Plato denies this conception of reality. Plato thought, that, man is not merely a neutral knower, merely curious about the world; he is not indifferent to everything except knowing what reality is. Plato was affirming the old Greek notion of cosmos The world and man form an organic unity. Man is moral, aesthetic, social, and religious creature; therefore, the world in which he lives must be one that can satisfy the demands his complex nature makes. Plato called the highest reality the Form of the Good; it is something that, when known, answers our ultimate questionings. Finally, Plato in the Myth of the Cave brings out these, and many other notions.

1.8.2 The Myth Of The Cave

In the Cave Plato insists of what knowledge consists and how our human mind achieves it. In the Allegory of cave the progress of mind from the lowest state of
The myth of the cave describes individuals chained deep within the recesses of a cave. Bound so that vision is restricted, they cannot see one another. The only thing visible is the wall of the cave upon which appear shadows cast by models or statues of animals and objects that are passed before a brightly burning fire. Breaking free, one of the individuals escapes from the cave into the light of day. With the aid of the sun, that person sees for the first time the real world and returns to the cave with the message that the only things they have seen heretofore are shadows and appearances and that the real world awaits them if they are willing to struggle free of their bonds. The shadowy environment of the cave symbolizes for Plato the physical world of appearances. Escape into the sun-filled setting outside the cave symbolizes the transition to the real world, the world of full and perfect being, the world of Forms, which is the proper object of knowledge.

For Plato knowledge was based upon what is most real so for Plato was possible and virtually infallible. Plato rejected the skepticism of Sophists by his views of two worlds, the dark world of the cave and bright world of the light. The dramatic contrast between the shadows, reflecting and actual objects was for Plato the decisive due to different degrees to which the human beings could be enlightened. Plato saw the counterparts of shadow in all of human life and discourse Sophists were skeptical about
the possibility of true knowledge. Sophists were impressed by the variety and constant change in things, argued that since our knowledge continues from experience our knowledge will reflect this variety and therefore will be relative to each person. Plato agreed with Sophists that knowledge based on sense experience would be relative not absolute but did not accept Sophistic notion that all knowledge is relative. Plato was convinced that the human mind could discover that "single mark" that "real" object behind all the multitude of shadows, also that mind could attain true knowledge.

Plato thinks that the state of most people is radically unlike the way they think it is. As far as having any knowledge goes, we are like the philosophers in the Cave - as far from true understanding as it is possible to be. On the one hand there is reliance on experience - confidence that the world is the way our senses report it, reliance on the value that society teaches us. According to Plato, this will never achieve any truth. Plato stresses the most abstract kind of thinking, mathematics and philosophy, which relies at least on and takes least interest in the particular details of the world we experience. Plato thinks, this has the only hope of leading us to understand the world and ourselves, and to come to have a true insight into what is valuable. Plato brings out the final point in the Symposium. "The way of ascent is a process: One moves by stages, from one level to another, from one compartment of learning to another on which the former turns out to depend. But the view from the top is a vision. At the end there are no stages, no compartments. The whole is not experienced as a collection of neatly connected parts; it is a true whole - unified, harmonious, and complete."

1.9 Theory Of Forms

Plato was the first philosopher to advance a theory of ideas; but his 'ideas' are so unlike the sort of ideas we think of as having their home in people's minds that it is better to use a semi-technical form and talk of his theory of 'Forms'. Forms or ideas are those changeless, eternal, and non-material essences or patterns of which the actual visible objects we see are only poor copies. Plato believed that there is a world of forms, over and beyond the sensible, these forms are non-physical, non-spatial, and non-temporal yet very real. Forms cannot be known in sense perception, they are known in thought; they are in fact, the objects of thought. Whenever we are thinking, what we are thinking about are forms. Plato's theory of forms has traditionally been seen as a theory of universals. It was
evidently favored by Aristotle, who opposed the theory of his own about universal (universal in rebus) to the one he attributed to Plato (universal ante rem)

How can we be aware of what is eternal and unchanging? According to Plato “Geometry is the knowledge of the eternally existent.” The theory of Forms may best be understood in terms of mathematical entities. A circle, for instance, is defined as a plane figure composed of a series of points, all of which are equidistant from a given point. No one has ever actually seen such a figure, however. In the Meno Plato propounds a theory about what it is to learn a geometrical truth. The theory draws on belief in the existence of a disembodied soul before birth. What we call ‘learning geometrical truths is really recalling what one had learnt, otherwise than by the use of the senses, when one’s soul inhabited the intelligence world before birth’. What people have actually seen are drawn figures that are more or less close approximations of the ideal circle. In fact, when mathematicians define a circle, the points referred to are not spatial points at all; they are logical points. They do not occupy space. Nevertheless, although the Form of a circle has never been seen—indeed, could never be seen—mathematicians and others do in fact know what a circle is. That they can define a circle is evidence that they know what it is. For Plato, therefore, the Form “circularity” exists, but not in the physical world of space and time. It exists as a changeless object in the world of Forms or Ideas, which can be known only by reason. Forms have greater reality than objects in the physical world both because of their perfection and stability and because they are models, resemblance to which gives ordinary physical objects whatever reality they have.Circularity, squareness, and triangularity are excellent examples, then, of what Plato meant by Forms. An object existing in the physical world may be called a circle or a square or a triangle only to the extent that it resembles (“participates in” is Plato’s phrase) the Form “circularity” or “squareness” or “triangularity.”

Plato extended his theory beyond the realm of mathematics. Indeed, he was most interested in its application in the field of social ethics. The theory was his way of explaining how the same universal term can refer to so many particular things or events. The word justice, for example, can be applied to hundreds of particular acts because these acts have something in common, namely, their resemblance to, or participation in, the Form “justice.” An individual is human to the extent that he or she resembles or participates in the Form “humanness.” If “humanness” is defined in terms of being a
rational animal, then an individual is human to the extent that he or she is rational. A particular act is courageous or cowardly to the extent that it participates in its Form. An object is beautiful to the extent that it participates in the Idea, or Form, of beauty. Everything in the world of space and time is what it is by virtue of its resemblance to, or participation in, its universal Form. The ability to define the universal term is evidence that one has grasped the Form to which that universal refers.

According to Plato Forms are more real than sensible things. (i) Plato employs causal terms to describe how the intelligible is related to the sensible, for instance the Form of beauty is said to be the cause of things beings beautiful; not in the sense in which a carpenter is the cause of a table, but in some sense. (ii) Plato persistently employs words like ‘imitate’ and ‘copy’ when he is talking about how sensible things are related to the Forms. They can hardly be meant literally, but they indicate fairly clearly that Plato thought of the things in which opposites are confounded as being secondary, in some sense, to opposites by themselves, Forms. In Republic Plato shows that there is some kind of hierarchy, in which Forms come above sensible things. Plato conceived the Forms as arranged hierarchically, the supreme Form is the Form of the Good, which, like the sun in the myth of the cave, illuminates all the other Ideas. There is a sense in which the Form of the Good represents Plato’s movement in the direction of an ultimate principle of explanation. Ultimately, the theory of Forms is intended to explain how one comes to know and also how things have come to be as they are. In philosophical language, Plato’s theory of Forms is both an epistemological (theory of knowledge) and an ontological (theory of being) thesis. Plato says, the ultimate aim of the philosopher is to attain the apprehension of the supreme reality, ‘the limit of the intelligible’. These central features of Plato’s theory of forms are absent in Parmenides.

There is not the problem of understanding how an intelligible thing, a Form, could bring a visible thing into existence, but there is a problem connected to this. If, suppose we approach Plato through Aristotle, it can be placed like this. In Aristotle’s conceptual scheme, ‘matter’ is ‘in-formed’ by ‘forms’. What in Plato’s theory, corresponds to ‘matter’ in Aristotle’s theory? In Timaeus Plato gives a solution to this problem. Up till now there were said to be Forms of fire, water and earth. In Plato’s terminology, Forms are ‘copied’ in the sensible world. But the copies of them are not sensible fire, water and earth conceived of as things; but rather, they are, the fieriness, the wateriness, and the
earthiness of some other 'thing'. What is this other 'thing'? Here Plato needs a form of reality, something into which the Form is copied, or, as he puts it, a 'receptable' for the copy. It must be itself devoid of character, lest the characters it is to receive get distorted. Plato says, in thinking of it as 'invisible and formless being which receives all things and in some mysterious way partakes of the intelligible, and is most incomprehensible'. Plato finally space the form of reality. Besides space, change, in the sensible world is the 'form of reality'.

In Timaeus Plato answers that, since 'the world is the fairest of creations and he [the divine craftsman] is the best of causes', he must have patterned it on forms. It is 'framed in the likeness of that which is apprehended by reason and mind'. Plato here seems to have thought that the efficient causes are all causes within an everlasting natural order. The 'separate' Platonic Form is read into the individual thing; it becomes what the thing essentially is. Plato's theory of intelligible Forms becomes a theory of sensible things with intelligible essences. The Platonic heaven is brought down to an Aristotelian earth.

There is no suggestion, in what Plato says, that the Forms exist merely as ideas in the mind of the divine craftsman. But this is what they become in Plotinus and in the Christian Neo-Platonism of St. Augustine. Plato's Forms become archetypal ideas in the mind of God; and the ground was laid for philosophical acceptance of the conception of ideas as non-archetypal things in the minds of men. Another major change is needed before the 'Way of Ideas' of Descartes and Locke could grow in that ground. Whereas Plato's Forms are 'apprehended by reason and mind' Locke's 'ideas' come from sensation, or from something said by Locke to be very like it, reflection (introspection). To understand how that change came about we need to consider Aristotle's reaction to Plato, and Descartes' reaction to Aristotle.

Finally, Plato is convinced that there is a right and wrong way to approach our knowledge of the world. We get knowledge of ourselves and the world we live in through the various Sciences and the ways we try to unify and co-ordinate their results. In the Republic, Plato is concerned with both, our mathematical and scientific view of the world as well as with our knowledge of society. Our most abstract knowledge and its objects depend on the Good, all inquiry is at bottom an enquiry into what is valuable.
Plato employed the conversational structure as a way of presenting dialectic, a pattern of argumentation that examines each issue from several sides, exploring the interplay of alternative ideas while subjecting all of them to evaluation by reason. Plato was a more nearly systematic thinker than Socrates had been. Although he shared Socrates's interest in ethical and social philosophy, Plato was much more concerned to establish his views on matters of metaphysics and epistemology, trying to discover the ultimate constituents of reality and the grounds for our knowledge of them.

Plato believed that the same point could be made with regard to many other abstract concepts—even though we perceive only their imperfect instances, we have genuine knowledge of truth, goodness, and beauty no less than of equality. Things of this sort are the Platonic Forms, abstract entities that exist independently of the sensible world. Ordinary objects are imperfect and changeable, but they faintly copy the perfect and immutable Forms. Thus, all of the information we acquire about sensible objects (like knowing what the high and low temperatures were yesterday) is temporary, insignificant, and unreliable, while genuine knowledge of the Forms themselves (like knowing that $93 - 67 = 26$) is perfectly certain forever.

Since we really do have knowledge of these supra-sensible realities, knowledge that we cannot possibly have obtained through any bodily experience, Plato argued, it follows that this knowledge must be a form of recollection and that our souls must have been acquainted with the Forms prior to our births. But in that case, the existence of our mortal bodies cannot be essential to the existence of our souls—before birth or after death—and we are therefore immortal.

Parmenides raised a question whether there are Forms for such things as mud and dirt on the assumption of Plato’s physics, what we call mind is a composite of earth, air, fire and water in certain portions. There are Forms of these elements, they and the mathematical formula of their combination can be known, means it can be known about mud. Thus Platonism can survive with a very limited number of Forms. It is not necessary to assume a separate Form for each physical object, nor for man-made objects.
How can many particular objects participate in the same form? Is form divided up? Or is the Form wholly in each of the particulars? It seems that the old problem of one and many, the theory of forms intended to solve, breaks out again, in the theory itself. Plato separated form from spatio-temporal things. He hoped to resolve the contradiction between the theories of Parmenides and Heraclitus. The doctrine of two worlds did give Plato a formal solution, but since he could not give a meaningful account of the way the sense world participates in the forms and gains some degree of reality from them, his whole spatio-temporal world seems mere appearance. Plato in Timaeus expresses the relation between eternal things and their changing spatiotemporal copies is hard to express; but in the Parmenides Plato himself suggests that the notion of participation is intrinsically confused.

In case of knowledge, Knowledge itself is the essence of knowledge, will be knowledge of that Reality itself, the essentially real. Whereas the knowledge in our world will be knowledge of the reality in our world; and it will follow again each branch of knowledge in our world must be knowledge of some department of things that exist in our world. But, “we do not possess the Forms themselves, nor can they exist in our world.” On the other hand Parmenides continued, “but, if, in view of all these difficulties and others like them, a man refuses to admit that Forms of things exist or to distinguish a definite Form in every case, he will have nothing on which to fix his thought, so long as he will to allow, that each thing has a character which is always the same; and in doing so he will completely destroy the significance of all discourse. But of that consequence I think you are only too aware”

Parmenides’ criticism is that, on the original theory, forms and sense objects are too separate; ideal and actual are separated by unbridgeable chasm. Parmenides points out, that, transcendence creates equally grave problems with regard to this theory of knowledge. Here Plato faced dilemma, on one hand, if the forms are not apart, they are not (Plato thought) true objects, and if there are no form-objects, there is nothing to have knowledge of. On the other hand, if they are apart, they are unknowable. In his latter dialogues Plato tried to bridge the chasm between the intelligible world and the sensible world. Soul, or psyche was the instrument for this purpose. Soul is not only immortal and supremely valuable, but also, a self-mover. Assuming as a basic principle the old dictum that “like knows like”, it was clear to Plato that psyche must be like forms; immortal, eternal and a kind of unchanging identity. But psyche is also a self-mover, and because it
moves it is like the Heraclitus flux, if one part of soul knows the forms, another part perceives sense-objects; on the like knows like principle, one part of psyche must be like the sense world. Plato criticizes two rival theory of The Sophists, the view of the materialists and Plato describes “friends of forms” Some modern critics think that Plato could not have been criticizing his own position; they think that Plato was seeking to correct some of his pupils who had branched out their own It seems more reasonable to conclude that in the Sophist, as in the Parmenides, Plato is criticizing his own view; but unlike the criticism in Parmenides, that in the Sophists is followed by what seems to be an attempt to modify the original theory.

Finally, to conclude, in a way Plato was right in his approach not to abandon the theroy of forms The sources of Plato’s perennial appeal was his ability to see all sides of a question even though, he was an idealist, he was fully aware that men are men and that good life for man is this side of the forms. Plato was a rationalist who held that knowledge at its best transcends conceptual means of communication. Plato believed in a kind of knowledge that is absolutely valid, but he denied that it is possible to have knowledge of this kind about the changing world of sense experience.

1.11 Conclusion

Plato has not bothered to analyse very carefully what ‘the senses’ covers Analogously he is so lyrical in his praise of thinking and its objects because he has not seen that there are many distinctions that could be made. One of the critical thinking as opposed to taking things for granted; another is that of pure thinking as opposed to relying on experience. Plato think so understanding as involving the rigour and perception of mathematics, but also as being a grasp of what is truly good This is one of the aspects of his thought which is least familiar in the 20th century, for usually mathematical rigour is opposed to study of value, the latter is often thought of as imprecise and unscientific.

Plato simply asserts that knowledge based on abstract thinking, which takes one way from interest in the world of experience, is not just compatible with effective dealing in that world, but actually enables one to do it best. Plato’s faith in Republic-that theoretical understanding leads to practical ability is, inspiring but unrealistic about human nature. At the very least Plato needs to make a great many more distinctions than he does to clarify his contrast between the world of thought and the world of experience.
We are less likely to think that years of highly mathematical society will make us the best people to run society.

Today there would be criticisms arising from our view that there can be no knowledge without a mind and no mind without a brain. So that there can be no knowledge without at least part of corporeal body. How, therefore, could an immaterial acquire knowledge, knowledge which could be later recollected in a material brain? Even if the possibility of the existence of an immaterial soul is admitted, Plato’s account of knowledge by recollection seems far fetched to us. Yet it remains true that Plato did bring our problems of knowledge, and the problem of relationship between sense-perception and reasoning, which are still with us today; we may not agree with Plato’s conclusion, but should study them sympathetically.

Aristotle in his early thought was very much influenced by Plato. It is very important to emphasize the Platonic period in Aristotle’s development. Though Aristotle rejected the apartness of Forms, he was fundamentally and acknowledgedly a Platonist, and his work can be understood only as an effort to reformulate the insights of Plato.

III Aristotle (384-322 B.C.)

1.12 A New Approach to Philosophy

Aristotle’s interest in empirical fact was not absolutely new in Greek thought—witness Thales, Anaximander, and Empedocles; but certainly the dominant tendency of earlier thinkers had been towards rationalism. Philosophers and scientists had been more interested in logical consistency than in facts. Having accepted some initially plausible hypothesis, they were content to deduce its consequences leaping overhastily to the conclusion that what is logically consistent must be true, instead of asking whether logical consistency is a sufficient, as well as a necessary, condition of truth. So, Aristotle’s method was healthy corrective to the overrationalism of his philosophical predecessors including Plato.
1.13 Aim

Aim of Aristotle was to discover what is real. Thales and other Milesians, and the later Atomists, had undertaken to find this in the material universe. Matter—variously defined as “water”, “air”, “boundless”, “seeds”, “atoms”—had been asserted by the thinkers of this school to be the only real. But after Thales the failure of this materialistic answer had been demonstrated. The materialists were unable to give an adequate account of the nature of man as a moral and religious creature. Plato had sought to locate reality in an immaterial world of forms; but like materialists, this was too exclusive, like their answer it simplified, though in an exactly opposite direction. Because Plato had affirmed that the forms are apart from things, he had been, unable to relate values to the world of sense perception.

Aristotle wanted to establish a theory of reality that would allow both value and sense of objects to be real. Aristotle saw that the satisfactory account of reality must resolve the problem of change. This problem is there from the very beginning, for though change is one of the most obvious facts of experience, it is also seemingly irrational. All thinkers from Thales’ time suffered from this problem. The Atomists had reduced all qualitative change to motion, that is, change of place, as for Plato, he had originally virtually denied the fact of change. Affirming with Parmenides that the real and knowable must be unchangeable. Subsequently Plato had reached this position and allowed a motion that was supposedly initiated by the psyche; but neither his procedure nor that of the Atomists was satisfactory, and as long as the problem of change defined the best efforts of human reason, a doubt existed about the power of reason.

Aristotle saw, that, any adequate metaphysics must show reality really changes, as it appears to do, and thus rehabilitate reason as a valid instrument for obtaining knowledge; it must vindicate our intuition of man as a moral creature, a focus of values Aristotle set himself to this great dual understanding. The root of all differences between Plato and Aristotle lies in Aristotle’s reformulation of the theory of forms was the result, in part, of a purely intellectual struggle to solve the epistemological problem; but it was also rooted in a temperamental difference. In a way, Plato was otherworldly and idealistic whereas Aristotle was Practical and empirical.
The works of Aristotle reflect his gradual departure from the teachings of Plato and his adoption of a new approach. Unlike Plato, who delighted in abstract thought about a supra-sensible realm of forms, Aristotle was intensely concrete and practical, relying heavily upon sensory observation as a starting-point for philosophical reflection. Interested in every area of human knowledge about the world, Aristotle aimed to unify all of them in a coherent system of thought by developing a common methodology that would serve equally well as the procedure for learning about any discipline.

For Aristotle logic is the instrument (the "organon") by means of which we come to know anything. He proposed as formal rules for correct reasoning the basic principles of the categorical logic that was universally accepted by Western philosophers until the nineteenth century. This system of thought regards assertions of the subject-predicate form as the primary expressions of truth, in which features or properties are shown to inhere in individual substances. In every discipline of human knowledge, then, we seek to establish the things of some sort have features of a certain kind.

Aristotle further supposed that this logical scheme accurately represents the true nature of reality. Thought, language, and reality are all isomorphic, so careful consideration of what we say can help us to understand the way things really are. Beginning with simple descriptions of particular things, we can eventually assemble our information in order to achieve a comprehensive view of the world.

Aristotle's logical works, On Interpretation, considers the use of predicates in combination with subjects to form propositions or assertions, each of which is either true or false. We usually determine the truth of a proposition by reference to our experience of the reality it conveys, but Aristotle recognized that special difficulties arise in certain circumstances.

Although we grant (and can often even discover) the truth or falsity of propositions about past and present events, propositions about the future seem problematic. If a proposition about tomorrow is true (or false) today, then the future event...
it describes will happen (or not happen) necessarily; but if such a proposition is neither true nor false, then there is no future at all. Aristotle’s solution was to maintain that the disjunction is necessarily true today even though neither of its disjuncts is. Thus, it is necessary that either tomorrow’s event will occur or it will not, but it is neither necessary that it will occur nor necessary that it will not occur. (On Interpretation 9) Aristotle’s treatment of this specific problem, like his more general attempt to sort out the nature of the relationship between necessity and contingency in On Interpretation 12-13, is complicated by the assumption that the structure of logic models the nature of reality. He must try to explain not just the way we speak, but the way the world therefore must be.

1.16 Aristotle’s thinking

The aim of Aristotle’s logical treatises (known collectively as the Organon) was to develop a universal method of reasoning by means of which it would be possible to learn everything there is to know about reality. Thus, the Categories proposes a scheme for the description of particular things in terms of their properties, states, and activities. On Interpretation, Prior Analytics, and Posterior Analytics examine the nature of deductive inference, outlining the system of syllogistic reasoning from true propositions that later came to be known as categorical logic. Though not strictly one of the logical works, the Physics contributes to the universal method by distinguishing among the four causes which may be used to explain everything, with special concern for why things are the way they are and the apparent role of chance in the operation of the world. In other treatises, Aristotle applied this method, with its characteristic emphasis on teleological explanation, to astronomical and biological explorations of the natural world.

In Metafusikh (Metaphysics) Aristotle tried to justify the entire enterprise by grounding it all in an abstract study of being qua being. Although Aristotle rejected the Platonic theory of forms, he defended his own vision of ultimate reality, including the eternal existence of substance. On The Soul uses the notion of a hylomorphic composite to provide a detailed account of the functions exhibited by living things—vegetable, animal, and human—and explains the use of sensation and reason to achieve genuine knowledge. That Aristotle was interested in more than a strictly scientific exploration of human nature is evident from the discussion of literary art (particularly tragedy) in Peri PolhtikhV (Poetics) and the methods of persuasion in the RhitereiaV (Rhetoric).
Plato thought of the forms as separate entities in which the individual particulars of this world obscurely participate. Aristotle held them to be embedded in the particulars; Plato’s tendency to treat them as independently existing things, had serious consequences in every department of his thought.

1) If what we know is form and if form is separate from space-time world, it follows that we cannot know space-time world.

2) If only form is truly real and form is separate from things we experience in sense-perception, these things are not truly real.

So it seemed to Aristotle-separation leads to other worldliness, to a chasm between the actual and the ideal. Hence, Aristotle was led to deny Plato’s dualism to reject the separation of the universe into two worlds. For Aristotle, there was one world, the world of actual things; form is simply one aspect of this world, distinguishable in thought (e.g., colour, shape) but not distinguished in fact (e.g., uncoloured, or colours that have no shape). Taking form as separate entities, according to Aristotle results from confusing intellectual analysis and ontological status. It is as if, because we can think of colour abstracted (“separated”) from shape, we are to suppose there exists somewhere in absolute parity and perfection colour by itself. Hence, according to Aristotle, Plato’s forms are mere abstractions—not illusions, but certainly not the whole reality. Reality for Aristotle consists of that from which the forms are abstractions, and this is individual things e.g., particular man, plants, rocks, and animals. Aristotle called them “substances” and his reality was in terms of individual substances.

Aristotle puts four main argument against Plato’s doctrine of Ideas.

1) William of Occam, developed into the formula: “Entities are to be multiplied unnecessarily”. (“Entia non sunt multiplicanda prates necessitatem”). This objection is expressed by Stagrite in a manner which borders on scorn; the authors of the doctrine of Ideas “desired to ascertain the causes of sensible objects, and therefore added to them an
equal number of other objects. Just as if one who had to account a set of things were to think himself unequal to his task till he doubled their number.

2) The arguments adduced in support of the doctrine of Ideas prove too much. If they were valid, there would have to be ideas of negative and relative concepts. It is precisely these “more accurate grounds of proof” that are said to lead to the hypothesis of the “third man”.

3) The doctrine of ideas is barren. It contributes nothing to the understanding of the world. The ideas, too are not the causes either of any moment or of any change. If they are explained as patterns upon which things are modelled this is “empty talk and mere poetic metaphor; What then is the active principle which works with an eye on the Ideas fashioning things in their likeness?” And again, for one and the same thing not one pattern would be required, but several; e.g., for individual man we should need the Ideas of “living being” of “biped”, and of “man”.

4) It must be held impossible that the essence of a thing and the thing of which it is the essence should subsist in separation from each other. This objection to “separation” or transcendence is at the same time the bridge which leads to Aristotle’s transformation of Plato’s doctrine, his theory of the immanence of the Ideas.

The fundamental error from which Aristotle cannot break loose may be formulated as follows:

The things of a sense are countless multitude, perishable, vowed to everlasting flux; therefore they cannot be the object of genuine solid knowledge. Such knowledge would thus have to be renounced were there not, in addition to individual things, something abiding and imperishable are hyperphysical object of real knowledge. To this two answers may be possible.

1. A sound theory of matter, like that off atomists, be it or be it not the last word of Science, has in any case proved the most powerful level of scientific progress. The Democritician theory of atoms and not the Heraclitean doctrine of flux was the right starting-point to choose: in this direction salvation was to be hoped for.
2. Even in the Theory of Heraclitean theory, good fruit have grown if only the universal reign of law which was proclaimed with the greatest imaginable emphasis had not been grudged the central position which was its due

The things of sense be in themselves never so incapable of appearing as the object of scientific knowledge the regularities of nature are none the less of exceeding strictness; the laws of nature might have been for Plato and Aristotle what they are for us, a type of scientific precision and scientific certainty.

1.18 Form And Matter

Matter is the physical "stuff" out of which something is made; form is the physical shape that the 'thing' contains. The concept or form for Aristotle is the principle, which gives form to things, and thus the agent, which provides each one of them with its unity and determinate individuality. It is highly noteworthy that what for Aristotle is matter in one regard is form for him in another. The material elements indeed are among the things so treated by him. As contrasted with all other bodies they are matter; they are form relatively to that truly primary matter. Hence the antithesis of form and matter is discovered in the world of thought, in the material universe, in the realm of life. It is claimed that the subordinate species is related to the comprehending genus, the elements which rule in the upper regions to those which are found below, the soul to the body, the male to the female-each as form to its correspondent matter. Still more luxuriant growths occur in a closely related region.

The Forms are practically equal. In Form to each thing there answers an entity which has the same name and exists apart from the substances, and so also in the case of all other groups there is a one over many, whether the many are in this world or are eternal. Further, of the ways in which we prove that the Forms exist, none is convincing; for from some no inference necessarily follows, and from some arise Forms even of things of which we think there are no Forms. For according to the arguments from the existence of the sciences there will be Forms of all things of which there are sciences and according to the 'one over many' argument there will be Forms even of negations, and according to the argument that there is an object for thought even when the thing has perished, there will be Forms of perishable things; for we have an image of these
Further, of the more accurate arguments, some lead to Ideas of relations, of which we say there is no independent class, and others introduce the 'third man' And in general the arguments for the Forms destroy the things for whose existence we are more zealous than for the existence of the Ideas; for it follows that not the dyad but number is first, i.e. that the relative is prior to the absolute.-besides all the other points on which certain people by following out the opinions held about the Ideas have come into conflict with the principles of the theory.

Further, according to the assumption on which our belief in the Ideas rests, there will be Forms not only of substances but also of many other things (for the concept is single not only in the case of substances but also in the other cases, and there are sciences not only of substance but also of other things, and a thousand other such difficulties confront them). But according to the necessities of the case and the opinions held about the Forms, if Forms can be shared in there must be deals of substances only. For they are not shared in incidentally, but a thing must share in its Form as in something not predicated of a subject (by 'being shared in incidentally' I mean that e.g. if a thing shares in 'double itself', it shares also in 'eternal', but incidentally; for 'eternal' happens to be predicatable of the 'double'). Therefore the Forms will be substance; but the same terms indicate substance in this and in the ideal world (or what will be the meaning of saying that there is something apart from the particulars-the one over many?) And if the Ideas and the particulars that share in them have the same form, there will be something common to these; for why should '2' be one and the same in the perishable 2's or in those which are many but eternal, and not the same in the '2' itself as in the particular 2? But if they have not the same form, they must have only the name in common, and it is as if one were to call both Callias and a wooden image a 'man', without observing any community between them.

Above all one might discuss the question what on earth the Forms contribute to sensible things, either to those that are eternal or to those that come into being and cease to be. For they cause neither movement nor any change in them. But again they help in no wise either towards the knowledge of the other things (for they are not even the substance of these, else they would have been in them), or towards their being, if they are not in the particulars which share in them; though if they were, they might be thought to be causes, as white causes whiteness in a white object by entering into its composition.
But this argument, which first Anaxagoras and later certain others used, is very easily upset; for it is not difficult to collect many insuperable objections to such a view.

But, further, all other things cannot come from the Forms in any of the usual senses of 'from' And to say that they are patterns and the other things share in them is to use empty words and poetical metaphors For what is it that works, looking to the Ideas? And anything can either be, or become, like another without being copied from it, so that whether Socrates or not a man Socrates like might come to be; and evidently this might be so even if Socrates were eternal. And there will be several patterns of the same thing, and therefore several Forms, e.g. 'animal' and 'two-footed' and also 'man himself' will be Forms of man. Again, the Forms are patterns not only sensible things, but of Forms themselves also; i.e. the genus, as genus of various species, will be so; therefore the same thing will be pattern and copy.

It would seem impossible that the substance and that of which it is the substance should exist apart, how, therefore, could the Ideas, being the substances of things, exist apart? In the Phaedo' the case is stated in this way—that the Forms are causes both of being and of becoming, yet when the Forms exist, still the things that share in them do not come into being, unless there is something to originate movement; and many other things come into being (e.g. a house or a ring) of which we say there are no Forms. Clearly, therefore, even the other things can both be and come into being owing to such causes as produce the things just mentioned.

If the Forms are numbers, how can they be causes? Is it because existing things are other numbers, e.g. one number is man, another is Socrates, another Callias? Why then are the one set of numbers causes of the other set? It will not make any difference even if the former are eternal and the latter are not. But if it is because things in this sensible world (e.g. harmony) are ratios of numbers, evidently the things between which they are ratios are some one class of things. If, then, this—the matter—is some definite thing, evidently the numbers themselves too will be ratios of something to something else. E.g. if Callias is a numerical ratio between fire and earth and water and air, his Idea also will be a number of certain other underlying things; and man himself, whether it is a number in a sense or not, will still be a numerical ratio of certain things and not a number proper, nor will it be of number merely because it is a numerical ratio.
From many numbers one number is produced, but how can one Form come from many Forms? And if the number comes not from the many numbers themselves but from the units in them, e.g. in 10,000, how is it with the units? If they are specifically alike, numerous absurdities will follow, and also if they are not alike (neither the units in one number being themselves like one another nor those in other numbers being all like to all); for in what will they differ, as they are without quality? This is not a plausible view, nor is it consistent with our thought on the matter. Further, they must set up a second kind of number (with which arithmetic deals), and all the objects, which are called 'intermediate' by some thinkers; and how do these exist or from what principles do they proceed? Or why must they be intermediate between the things in this sensible world and the things-themselves? Further, the units in must each come from a prior but this is impossible.

With form and matter is associated the pair of ideas, the antithesis of the real and the possible, the actual and the potential. The first pair of opposites applies to the division of a thing into two parts or aspects; the second is concerned with events and processes and with qualities, which they produce. This pair of ideas comprehends very much that is bound together by the threads of analogy rather than embraced under a strict definition is what Aristotle himself informs us when he presents a warning against seeking logical regur everywhere. The rising scale is hence constituted, the apex of which consists in the full realization of the powers and faculties latent in a being, and is called “entelechy” Even within the entelechy itself, that which is the state or condition is distinguished from what is actual operation; and called the first entelechy (for e.g., the lowest of the upper stages). Such is in the intelligence as a quality distinguished from the actual process understanding things. With the fuller realization of capacity there goes hand in hand a sharper impress of form, so the highest actuality becomes at the same time the complete triumph of form over characterless matter. Accordingly, form is identified with the realization of concepts, matter with their merely potential existence, and the two pairs of opposites coincide in this application of them. The soul, is in fact, is sometimes called the entelechy and sometimes the form of the body.
1.19 Forms and Souls

Aristotle considered the most fundamental features of reality in the twelve books of the Metafusikh. Although experience of what happens is a key to all demonstrative knowledge, Aristotle supposed that the abstract study of "being qua being" must develop more deeply, in order to understand why things happen the way they do. A quick review of past attempts at achieving this goal reveals that earlier philosophers had created more difficult questions than they had answered. The Milesians over-emphasized material causes; Anaxagoras over-emphasized mind; and Plato got bogged down in the theory of forms. Aristotle intended to do better.

Although any disciplined study is promising because there is an ultimate truth to be discovered, the abstractness of metaphysical reasoning requires that we think about the processes we are employing even as we use them in search of that truth. As always, Aristotle assumed that the structure of language and logic naturally mirrors the way things really are. Thus, the major points of each book are made by carefully analyzing our linguistic practices as a guide to the ultimate nature of what is

1.19 The Nature of Souls

According to Aristotle, every animate being is a living thing which can move itself only because it has a soul. Animals and plants, along with human beings, are more like each other than any of them are like any inanimate object, since each of them has a soul. Thus, his great treatise on psychology, On The Soul, offers interconnected explanations for the functions and operations of all living organisms.

All such beings, on Aristotle's view, have a nutritive soul which initiates and guides their most basic functions, the absorption of food, growth, and reproduction of its kind. All animals (and perhaps some plants) also have a sensitive soul by means of which they perceive features of their surroundings and move in response to the stimuli this provides. Human beings also possess (in addition to the rest) a rational soul that permits representation and thought. Notice that each living thing has just one soul, the actions of which exhibit some degree of nutritive, sensitive, and or rational functioning. This soul is the formal, efficient, and final cause of the existence of the organism; only its material
cause resides purely in the body. Thus, all of the operations of the organism are to be explained in terms of the functions of its soul.

1.20 Change

Aristotle's analysis of reality in terms of form and matter made it possible for the first time to come to grips with change. Now, for example, consider a piece of clay being worked on by a sculptor. Throughout his successive manipulations the clay endures, what changes are the forms (i.e., shapes) through which the sculptor advances to the final, esthetically satisfactory object that is the end of his activity. In a simple way, one form (shape) is lost and another is achieved without any internal transformation of the matter. Here matter equals physical material whereas form equals physical shape, and change is simply the substitution of one physical shape for another; even in more complicated kinds of changes the principle remains the same. In addition, there is an articulation of structure, in which each successive stage appears as the actualization of structure, in which each successive stage appears as the actualization of the form that was potentially present in the earlier stage and in turn becomes matter of a later stage. In spite of these complexities the analysis is identical. We can draw a distinction between "change" and "development". Development, or growth, is a change in which a succession of steps follow a pattern toward an end. It is the fact of development, of movement toward an end. What unites all the various stages is simply that they are stages. The purpose (whatever it is) unifies all the steps that are the means to its fulfillment.

Aristotle defined Nature as the totality of sensible objects capable of spontaneous change.

"All things mentioned present a feature in which they differ from things which are not constituted by nature. Each of them has within itself a principle of motion and of stationaries (in respect of place, or of growth and decrease, or by way of alteration). On the other hand, a bed an a coat and anything else of that sort, qua receiving these designations-i.e., in so far as they are products of art-have no innate impulse to change. But in so far as they happen to be composed of stone or of earth or of a mixture of the two, they do have such an impulse, and just to that extent-which seems to indicate that nature is a source of cause of being moved at rest in that to which it belongs primarily in virtue of itself and not in virtue of a concomitant attribute."
Was there ever a time when there was no change? Will there be such a time in future? Aristotle dealt very effectively with arguments that deny the eternality of motion. Aristotle said conceive a time at which there was no change. Then conceive the beginning of the first change. Whatever, it is, must have changed, otherwise it would still be a hindrance. Therefore, change is occurred before our hypothetical first change. Every change that occurs is caused by some antecedent change, and this by another, and so on. For nothing moves until something, or some other occasions its change. Aristotle thought, there must eventually be a mover who is himself unmoved who transmits motion but who is by no antecedent, external movement. As quoted by Aristotle:

"But evidently there is a first principle, and the causes of things are neither an infinite series not indefinitely various in kind. For neither can one thing proceed from another, as from matter, ad infinitum (e.g flesh from earth, earth from air, air from fire, and so on without stopping), nor can the sources of movement form an endless series (man for instance being acted on by air, air by the sun, and sun by the Strife, and so on without limit). Similarly the final causes cannot go ad infinitum, for the sake of health, thus for the sake of happiness, happiness for the sake of something else, and so one always for the sake of another . . . . . . . if there is no first there is no cause at all"  

1 2 1 The Four Aristotelian Causes

Applying the principles developed in his logical treatises, Aristotle offered a general account of the operation of individual substances in the natural world. He drew a significant distinction between things of two sorts: those that move only when moved by something else and those that are capable of moving themselves. In separate treatises, Aristotle not only proposed a proper description of things of each sort but also attempted to explain why they function as they do.

Aristotle considered bodies and their externally-produced movement in the *Physics*. Three crucial distinctions determine the shape of this discussion of physical science. First, he granted from the outset that, because of the difference in their origins, we may need to offer different accounts for the functions of natural things and those of artifacts. Second, he insisted that we clearly distinguish between the basic material and the form which jointly constitute the nature of any individual thing. Finally, Aristotle
emphasized the difference between things as they are and things considered in light of their ends or purposes. Armed with these distinctions, Aristotle proposed that we employ four very different kinds of explanatory principle to the question of why a thing is, the four causes.

1] The **material cause** is the basic stuff out of which the thing is made. The material cause of a house, for example, would include the wood, metal, glass, and other building materials used in its construction. All of these things belong in an explanation of the house because it could not exist unless they were present in its composition.

2] The **formal cause** (Gk. eidos [eidos]) is the pattern or essence in conformity with which these materials are assembled. Thus, the formal cause of our exemplary house would be the sort of thing that is represented on a blueprint of its design. This, too, is part of the explanation of the house, since its materials would be only a pile of rubble (or a different house) if they were not put together in this way.

3] The **efficient cause** is the agent or force immediately responsible for bringing this matter and that form together in the production of the thing. Thus, the efficient cause of the house would include the carpenters, masons, plumbers, and other workers who used these materials to build the house in accordance with the blueprint for its construction. Clearly the house would not be what it is without their contribution.

4] The **final cause** (Gk. telos [telos]) is the end or purpose for which a thing exists, so the final cause of our house would be to provide shelter for human beings. This is part of the explanation of the house's existence because it would never have been built unless someone needed it as a place to live.

All four sorts of causes are necessary elements in any adequate account of the existence and nature of the thing. Aristotle believed, since the absence or modification of any one of them would result in the existence of a thing of some different sort. Moreover, an explanation that includes all four causes completely captures the significance and reality of the thing itself.
In regard to matter, Aristotle completed the breach which Plato had opened with the hylozoism of the older thinkers. The essential attribute of matter is according to him, an pure passivity. It is the medium in which the purposes of nature find their realization, but it is a refactory medium, resisting the impress of form. Matter supplies the justification of all that we now call “dysteleology”: it is the vehicle of what has recently been aptly termed Platonic Manichaeism: It contains, too, the ultimate roots of that which is opposed to purposeless or indifferent, among which things are reckoned all individual varieties found among organized beings, and incidentally also, though without logical justification.

Plato’s acceptance of the transcendental character of knowledge led to a separate world of forms and eventually to the Form of the Good, mysterious and incommunicable. Aristotle never passed beyond this world to a suprasensible realm of forms. For him knowledge of an individual particular requires transcendence of this individual, but the supplement that is required is merely knowledge of other individual particulars. Plato and Aristotle agreed that knowledge of the isolated particular is not knowledge at all. Both agreed that complete knowledge is impossible; yet the difference varies between them (Plato and Aristotle). The knowledge Plato thirsted for is an abstract, general, static-knowledge from which all particularly has been purged. For Aristotle complete knowledge would have been the same sort of knowledge we now have, that is, knowledge of the multiple interrelations of particulars – of “formed matters.”

1.21.1 The Appearance of Chance

The four causes apply more appropriately to artifacts than to natural objects. The rise of modern science resulted directly from a rejection of the Aristotelean notion of final causes in particular. Still, the scheme works so well for artifacts that we often find ourselves attributing some purpose even to the apparently pointless events of the natural world. In many applications the formal, efficient, and final causes tend to be combined in a single being that designs and builds the thing for some specific purpose. Thus, the fundamental differentiation in the Aristotelean world turns out to be between inert matter, on the one hand and intelligent agency on the other.
For things that appear to arise by pure chance, Aristotle argued that since the purposeful origination described by the four causes is the normal order of the world, these instances must either be things that should have had some cause but happen to lack it or (more likely) things that actually do have causes of which we are simply unaware. The craft evident in the manufacture of artifacts, he believed, is evidence for the purposive character of nature, and it shares the same necessity, even though we are sometimes ignorant of its internal operations.  

Although I would be hard-pressed to come up with a final cause for the existence of the mosquito that is now biting me, for example, Aristotle supposed that there must ultimately be some explanation for its present existence and activity. Many generations of Western philosophers, especially those concerned with reconciling Christian doctrine with philosophy, would explicitly defend a similar view.  

1.22 Human Knowledge  

Knowledge is the object of our inquiry, and men do not think they know a thing till they have grasped the 'why' of (which is to grasp its primary cause). So clearly we too must do this as regards both coming to be and passing away and every kind of physical change, in order that, knowing their principles.  

In the Prior Analytics and Posterior Analytics, Aristotle offered a detailed account of the demonstrative reasoning required to substantiate theoretical knowledge. Using mathematics as a model, Aristotle presumed that all such knowledge must be derived from what is already known. Thus, the process of reasoning by syllogism employs a formal definition of validity that permits the deduction of new truths from established principles. The goal is to provide an account of why things happen the way they do, based solely upon what we already know.  

In order to achieve genuine necessity, this demonstrative science must be focussed on the essences rather than the accidents of things, on what is "true of any case as such," rather than on what happens to be "true of each case in fact." It's not enough to know that it rained today; we must be able to figure out the general meteorological conditions under which rain is inevitable. When we reason from necessary universal and
affirmative propositions about the essential features of things while assuming as little as possible, the resulting body of knowledge will truly deserve the name of science.

Scientific knowledge is judgment about things that are universal and necessary, and the conclusions of demonstration, and all scientific knowledge, follow from first principles (for scientific knowledge involves apprehension of a rational ground). This being so, the first principle from which what is scientifically known follows cannot be an object of scientific knowledge, of art, or of practical wisdom; for that which can be scientifically known can be demonstrated, and art and practical wisdom deal with things that are variable. Nor are these first principles the objects of philosophic wisdom, for it is a mark of the philosopher to have demonstration about some things. If, then, the states of mind by which we have truth and are never deceived about things invariable or even variable are scientific knowledge, practical wisdom, philosophic wisdom, and intuitive reason, and it cannot be any of the three (i.e. practical wisdom, scientific knowledge, or philosophic wisdom), the remaining alternative is that it is intuitive reason that grasps the first principles.

Therefore wisdom must plainly be the most finished of the forms of knowledge. It follows that the wise man must not only know what follows from the first principles, but must also possess truth about the first principles. Therefore wisdom must be intuitive reason combined with scientific knowledge—scientific knowledge of the highest objects, which has received as it were its proper completion. Of the highest objects, we say; for it would be strange to think that the art of politics, or practical wisdom, is the best knowledge, since man is not the best thing in the world. Now if what is healthy or good is different for men and for fishes, but what is white or straight is always the same, any one would say that what is wise is the same but what is practically wise is different; for it is to that which observes well the various matters concerning itself that one ascribes practical wisdom, and it is to this that one will entrust such matters. This is why we say that some even of the lower animals have practical wisdom, viz. those that are found to have a power of foresight with regard to their own life. It is evident also that philosophic wisdom and the art of politics cannot be the same; for if the state of mind concerned with a man's own interests is to be called philosophic wisdom, there will be many philosophic wisdoms; there will not be one concerned with the good of all animals (any more than there is one art of medicine for all existing things), but a different philosophic wisdom.
about the good of each species. But if the argument be that man is the best of the animals, this makes no difference; for there are other things much more divine in their nature even than man, e.g., most conspicuously, the bodies of which the heavens are framed. From what has been said it is plain, then, that philosophic wisdom is scientific knowledge, combined with intuitive reason, of the things that are highest by nature. This is why we say Anaxagoras, Thales, and men like them have philosophic but not practical wisdom, when we see them ignorant of what is to their own advantage, and why we say that they know things that are remarkable, admirable, difficult, and divine, but useless: viz. because it is not human goods that they seek.

Now practical wisdom is concerned with action, therefore one should have both forms of it, or the latter in preference to the former. But of practical as of philosophic wisdom there must be a controlling kind. What has been said is confirmed by the fact that while young men become geometricians and mathematicians and wise in matters like these, it is thought that a young man of practical wisdom cannot be found. The cause is that such wisdom is concerned not only with universals but with particulars, which become familiar from experience, but a young man has no experience, for it is length of time that gives experience; indeed one might ask this question too, why a boy may become a mathematician, but not a philosopher or a physicist. It is because the objects of mathematics exist by abstraction, while the first principles of these other subjects come from experience, and because young men have no conviction about the latter but merely use the proper language, while the essence of mathematical objects is plain enough to them?

Further, error in deliberation may be either about the universal or about the particular; we may fall to know either that all water that weighs heavy is bad, or that this particular water weighs heavy. That practical wisdom is not scientific knowledge is evident; for it is, as has been said, concerned with the ultimate particular fact, since the thing to be done is of this nature. It is opposed, then, to intuitive reason; for intuitive reason is of the limiting premisses, for which no reason can be given, while practical wisdom is concerned with the ultimate particular, which is the object not of scientific knowledge but of perception—not the perception of qualities peculiar to one sense but a perception akin to that by which we perceive that the particular figure before us is a triangle; for in that direction as well as in that of the major premiss there will be a limit.
But this is rather perception than practical wisdom, though it is another kind of perception than that of the qualities peculiar to each sense.

Aristotle divided the mental functions or faculties into two classes, the "cognitive powers" (those of knowledge and reason), and the "motive powers" (those of feeling, desire and action). This division survived until the threefold Kantian classification of intellect, feeling, and will came in. Aristotle's theory of knowledge extended from sense-perception at the bottom of the scale to the active reason at the top. There are three stages: sense-perception, imagination, and thought. He accounted for perception by assuming harmony or correspondence between the sense-function and the stimulating external conditions - as, for example, between vision and the illuminated object - the harmony consisting in the form common to the two, and its favourable condition being a mean between extremes of stimulation. The general function of sensation is to take the form of the object, without the matter, over into the mind. He distinguished five senses, correlating them with the physical elements. Colours were compounds of black and white, the original qualities of light. Similarly, all tastes were combinations of sweet and bitter.

For the co-ordination of the various sensations and their formation into true perceptions, Aristotle supposed a "common sense," located in the heart. It is also by the common sense that images arise and become memories, dreams, and fancies. These images in their revival follow three laws of association: "contiguity," "resemblance," and "contrast." It is in the common sense, moreover, that the judgment of things as true or false takes place, and the common "sensible qualities" -- motion, number, shape, size -- are attributed to things. The common sense gives unity to consciousness itself. Only man has active recollection and constructive imagination (as employed in art). The imaging function is necessary to thought as sensation is to imagination. By the productive imagination the necessary schemata are supplied to the reason.

In the creative or higher reason, Aristotle finds a principle which brings rational certitude into the empirical matter of the common sense. As adding an element of absolute form, it is "active"; as having commerce with empirical data it is "passive." The interpretation, however, of the active as contrasted with the passive reason, is in dispute. In the investigation of thought proper, the entire body of formal or "Aristotelian" logic was worked out. The theory of syllogistic inference sprang full-formed from the brain of
Aristotle He even suggested, in his treatment of the "practical syllogism," that the laws of conduct might be thrown into similar form.

Sensation is the passive capacity for the soul to be changed through the contact of the associated body with external objects. In each variety of sensation, the normal operations of the appropriate organ of sense result in the soul's becoming potentially what the object is in actuality. Thus, without any necessary exchange of matter, the soul takes on the form of the object. When I feel the point of a pin, its shape makes an impression on my finger, conveying this form to my sensitive soul (resulting in information).

Thought is the more active process of engaging in the manipulation of forms without any contact with external objects at all. Thus, thinking is potentially independent of the objects of thought, from which it abstracts the form alone. Even the imagination, according to Aristotle, involves the operation of the common sense without stimulation by the sensory organs of the body. Hence, although all knowledge must begin with information acquired through the senses, its results are achieved by rational means. Transcending the sensory preoccupation with particulars, the soul employs the formal methods of logic to cognize the relationships among abstract forms.

Desire is the origin of movement toward some goal. Every animate being, to some degree, is capable of responding to its own internal states and those of its external environment in such a way as to alleviate the felt absence or lack of some pleasure or the felt presence of some pain. Even actions taken as a result of intellectual deliberation, Aristotle supposed, produce motion only through the collateral evocation of a concrete desire.

1.22.1 Sense And Sensible

The senses, which operate through external media, viz. smelling, hearing, seeing, are found in all animals, which possess the faculty of locomotion. To all that possess them they are a means of preservation, their final cause being that such creatures may, guided by antecedent perception, both pursue their food, and shun things that are bad or destructive. But in animals which have also intelligence, they serve for the attainment of a higher perfection. They bring in tidings of many distinctive qualities of
things, from which the knowledge of truth, speculative and practical, is generated in the soul.

Seeing, regarded, as a supply for the primary wants of life, and in its direct effects, is the superior sense; but for developing intelligence, and in its indirect consequences, hearing takes the precedence. The faculty of seeing, thanks to the fact that all bodies are coloured, brings tidings of multitudes of distinctive qualities of all sorts, whence it is through this sense especially that we perceive the common sensibles, viz. figure, magnitude, motion, number: while hearing announces only the distinctive qualities of sound, and, to some few animals, those also of voice. Indirectly, however, it is hearing that contributes most to the growth of intelligence. For rational discourse is a cause of instruction in virtue of its being audible, which it is, not directly, but indirectly; since it is composed of words, and each word is a thought-symbol. Accordingly, of persons destitute from birth of either sense, the blind are more intelligent than the deaf and dumb.

The nature of the sensory organs, or parts of the body in which each of the senses is naturally implanted, inquirers now usually take as their guide the fundamental elements of bodies. Not, however, finding it easy to coordinate five senses with four elements, they are at a loss respecting the fifth sense. Since the object of sense is what causes the actualization of each sense, so that it (the sense) must (at the instant of actualization) be (actually) that which before (the moment of actualization) it was potentially. Now, odour is a smoke-like evaporation, and smoke-like evaporation arises from fire. This also helps us to understand why the olfactory organ has its proper seat in the environment of the brain, for cold matter is potentially hot. In the same way must the genesis of the eye be explained. Its structure is an offshoot from the brain, because the latter is the moistest and coldest of all the bodily parts.

The organ of touch proper consists of earth, and the faculty of taste is a particular form of touch. This explains why the sensory organ of both touch and taste is closely related to the heart. For the heart as being the hottest of all the bodily parts, is the counterpoise of the brain. This then is the way in which the characteristics of the bodily organs of sense must be determined. Since the [subjective] of sense-perception is not perceptible in itself, nor capable of separate existence (since it exists only potentially in

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the more distinctly perceivable whole of sense-perception), so neither will it be possible to perceive [actually] its correlative small object [sc. its quantum of sensible quality] when separated from the object-total. But yet this [small object] is to be considered as perceptible, for it is both potentially so already [i.e. even when alone], and destined to be actually so when it has become part of an aggregate.

One may ask—do the objects of sense-perception, or the movements proceeding from them [since movements there are] in whichever of the two ways [viz. by emanations or by stimulatory kinesis] sense-perception takes place), when these are actualized for perception, always arrive first at a spatial middle point [between the sense-organ and its object], as Odour evidently does, and also Sound? For he who is nearer [to the odorous object] perceives the Odour sooner [than who is farther away], and the Sound of a stroke reaches us some time after it has been struck. Is it thus also with an object seen, and with Light? Empedocles, for example, says that the Light from the Sun arrives first in the intervening space before it comes to the eye, or reaches the Earth. This might plausibly seem to be the case. For whatever is moved [in space], is moved from one place to another, hence there must be a corresponding interval of time also in which it is moved from the one place to the other. But any given time is divisible into parts; so that we should assume a time when the sun’s ray was not as yet seen, but was still travelling in the middle space.

Therefore we must conclude that all magnitudes are perceptible, but their actual dimensions do not present themselves immediately in their presentation as objects. One sees the sun, or a four-cubit rod at a distance, as a magnitude, but their exact dimensions are not given in their visual presentation. Nay, at times an object of sight appears indivisible, but [vision like other special senses, is fallible respecting ‘common sensibles’, e.g. magnitude, and] nothing that one sees is really indivisible. The olfactory sense of man is inferior in acuteness to that of the lower animals, and is, when compared with our other senses, the least perfect of Man’s sense of Touch, on the contrary, excels that of all other animals in fineness, and Taste is a modification of Touch.

Democritus and most of the natural philosophers who treat of sense-perception proceed quite irrationally, for they represent all objects of sense as objects of Touch. Yet, if this is really so, it clearly follows that each of the other senses is a mode of Touch; but
one can see at a glance that this is impossible. They treat the percepts common to all senses as proper to one. For [the qualities by which they explain taste viz.] Magnitude and Figure, Roughness and Smoothness, and, moreover, the Sharpness and Bluntness found in solid bodies, are percepts common to all the senses, or if not to all, at least to Sight and Touch. This explains why it is that the senses are liable to err regarding them, while no such error arises respecting their proper sensibles; e.g. the sense of Seeing is not deceived as to Colour, nor is that of Hearing as to Sound.

All the sensibles involve contrariety; e.g. in Colour White is contrary to Black. and in Savours Bitter is contrary to Sweet; but no one figure is reckoned as contrary to any other figure. in all classes of things lying between extremes the intermediates must be limited. But contraries are extremes, and every object of sense perception involves contrariety: e.g. in Colour, White x Black; in Savour, Sweet x Bitter, and in all the other sensibles also the contraries are extremes. Now, that which is continuous is divisible into an infinite number of unequal parts, but into a finite number of equal parts, while that which is not per se continuous is divisible into species, which are finite in number. Since then, the several sensible qualities of things are to be reckoned as species, while continuity always subsists in these, we must take account of the difference between the Potential and the actual. It is owing to this difference that we do not [actually] see its ten-thousandth part in a grain of millet, although sight has embraced the whole grain within its scope, and it is owing to this, too, that the sound contained in a quarter-tone escapes notice, and yet one hears the whole strain, inasmuch as it is a continuum; but the interval between the extreme sounds [that bound the quarter-tone] escapes the ear [being only potentially audible, not actually]. So, in the case of other objects of sense, extremely small constituents are unnoticed; because they are only potentially not actually [perceptible e.g.] visible, unless when they have been parted from the wholes. So the foot length too exists potentially in the two-foot length, but actually only when it has been separated from the whole. But objective increments so small as those above might well, if separated from their totals, [instead of achieving 'actual' existence] be dissolved in their environments, like a drop of sapid moisture poured out into the sea.

1.22 2 Memory

The persons who possess a retentive memory are not identical with whose who excel in power of recollection; indeed, as a rule, slow people have a good memory.
whereas those who are quick-witted and clever are better at recollecting. When one has scientific knowledge, or perception, apart from the actualizations of the faculty concerned, he thus 'remembers' (that the angles of a triangle are together equal to two right angles), as to the former, that he learned it, or thought it out for himself, as to the latter, that he heard, or saw, it, or had some such sensible experience of it. For whenever one exercises the faculty of remembering, he must say within himself, 'I formerly heard (or otherwise perceived) this,' or 'I formerly had this thought'.

Therefore, Memory is neither Perception nor Conception, but a state or affection of one of these, conditioned by lapse of time. As already observed, there is no such thing as memory of the present while present, for the present is object only of perception, and the future, of expectation, but the object of memory is the past. All memory, therefore, implies a time elapsed; consequently only those animals which perceive time remember, and the organ whereby they perceive time is also that whereby they remember. Memory (not merely of sensible, but) even of intellectual objects involves a presentation: hence we may conclude that it belongs to the faculty of intelligence only incidentally, while directly and essentially it belongs to the primary faculty of sense-perception.

Hence, not only human beings and the beings, which possess opinion or intelligence, but also certain other animals, possess memory. If memory were a function of (pure) intellect, it would not have been as it is an attribute of many of the lower animals, but probably, in that case, no mortal beings would have had memory; since, even as the case stands, it is not an attribute of them all, just because all have not the faculty of perceiving time. Whenever one actually remembers having seen or heard, or learned, something, he includes in this act the consciousness of 'formerly'; and the distinction of 'former' and 'latter' is a distinction in time. Very young and very old persons are defective in memory; they are in a state of flux, the former because of their growth, the latter, owing to their decay. In like manner, also, both those who are too quick and those who are too slow have bad memories. The former are too soft, the latter too hard (in the texture of their receiving organs), so that in the case of the former the presented image (though imprinted) does not remain in the soul, while on the latter it is not imprinted at all.
Mnemonic exercises aim at preserving one's memory of something by repeatedly reminding him of it, which implies nothing else (on the learner's part) than the frequent contemplation of something (viz. the 'mnemonic', whatever it may be) as a likeness, and not as out of relation. As regards the question, therefore, what memory or remembering is, it has now been shown that it is the state of a presentation, related as a likeness to that of which it is a presentation; and as to the question of which of the faculties within us memory is a function, that it is a function of the primary faculty of sense-perception. i.e. of that faculty whereby we perceive time

Recollection

Recollection implies to those who recollect the presence of some spring over and above that from which they originally learn. Acts of recollection, as they occur in experience, are due to the fact that one movement has by nature another that succeeds it in regular order. If this order be necessary, whenever a subject experiences the former of two movements thus connected, it will (invariably) experience the latter; if, however, the order be not necessary, but customary, only in the majority of cases will the subject experience the latter of the two movements. But it is a fact that there are some movements, by a single experience of which persons take the impress of custom more deeply than they do by experiencing others many times; hence upon seeing some things but once we remember them better than others which we may have been frequently.

Whenever, we are recollecting, we are experiencing certain of the antecedent movements until finally we experience the one after which customarily comes that which we seek. This explains why we hunt up the series (of kineseis) having started in thought either from a present intuition or some other, and from something either similar, or contrary, to what we seek, or else from that which is contiguous with it. Such is the empirical ground of the process of recollection; for the mnemonic movements involved in these starting-points are in some cases identical, in others, again, simultaneous, with those of the idea we seek, while in others they comprise a portion of them, so that the remnant which one experienced after that portion (and which still requires to be excited in memory) is comparatively small. This explains why attempts at recollection succeed soonest and best when they start from a beginning (of some objective series). For, in order of succession, the mnemonic movements are to one another as the objective facts
(from which they are derived). Accordingly, things arranged in a fixed order, like the successive demonstrations in geometry, are easy to remember (or recollect) while badly arranged subjects are remembered with difficulty.

1.23 Categories

Aristotle proposed that we develop descriptions of individual things that attribute to each predicates (or categories) of ten different categories. Substance is the most crucial among these ten, since it describes the thing in terms of what it most truly is. For Aristotle, primary substance is just the individual thing itself, which cannot be predicated of anything else. But secondary substances are predicable, since they include the species and genera to which the individual thing belongs. Thus, the attribution of substance in this secondary sense establishes the essence of each particular thing.

The other nine categories—quantity, quality, relative, where, when, being in a position, having, acting on, and being affected by—describe the features which distinguish this individual substance from others of the same kind; they admit of degrees and their contraries may belong to the same thing. (Categories 4) Used in combination, the ten kinds of predicate can provide a comprehensive account of what any individual thing is. Thus, for example: Chloe is a dog who weighs forty pounds, is reddish-brown, and was one of a litter of seven. She is in my apartment at 7:44 a.m. on June 3, 1997, lying on the sofa, wearing her blue collar, barking at a squirrel, and being petted. Aristotle supposed that anything that is true of any individual substance could, in principle, be said about it in one of these ten ways.

1.24 The Rational Psyche

Aristotle regards thinking both speculative and practical as akin to a form of perceiving.

"Thinking both speculative and practical is regarded as akin to a form of perceiving, for in the one as well as the other the soul discriminates and is cognizant of something which is . . . . . . . for the formal is universal in the animal world, the later is found only a small division of it. Further, speculative thinking is also distinct from perceiving—it mean that in which we find rightness and wrongness—rightness is prudence, knowledge, true opinion, wrongness is their opposites, for perception of special objects.
of sense is always free from error, and is found in all animals, while it is possible to
think falsely as well as truly, and thought is found only where there is discourse of
reason as well as sensibility. . . . 92

Aristotle accordingly says:

"Mind is in a sense potentiality whatever is thinkable, though actually it is nothing
until it has thought. What it ranks must be in it just as characters may be said to be on
a writing-tablet on which as nothing yet actually stands written, this is what happens
with the mind." 93

Hence, according to Aristotle, in every case the mind which is actively thinking is
the object which it thinks; and knowledge 94 and sensation are divided to correspond with
the realities. Finally, Aristotle 95 concludes that the soul is analogous to the hand; for as
the hand is a tool of tools; so the mind is the form of forms and sense the form of sensible
things. Aristotle thinks, according to common agreement nothing is separate in existence
from sensible spatial magnitudes, the objects of thought are in the sensible forms, viz.
both the abstract objects and all states and affections of sensible things. Hence, in the
absence of sense, no one can learn or understand anything and when the mind is actively
aware of anything it is necessarily aware of sense along with an image; for images are
like sensuous contents except in that they contain no matter

1.25 Evaluation

The revolution affected by Aristotle, that he found Greek thought in the form of a
solid, and unrolled it into, a surface of the utmost possible tencity, transparency, and
extension. In so doing; he completed what Socrates and Plato had begun, he offered the
first example of what since then has more than once recurred in the history of philosophy
It was thus the residual substance of Locke and Berkeley was resolved into phenomenal
suggestion by Hume. Neither Plato nor Aristotle considered the possibility that
knowledge about different kinds of objects (mathematical entities as opposed to empirical
facts) might be justified in different ways for them; all knowledge had to be logically
necessary and indubitable. To Plato, the objects of knowledge were universals, intuitively
apprehended by mental contemplation but according to Aristotle there could be
knowledge of existent entities in so far as their species attributes, i.e., their universal
attributes were concerned; knowledge depended upon mental intuition which gave the
cause and deduction, but it also required sense-experience. The view that knowledge had
to be logically necessary and analogous to mathematical knowledge persisted for centuries—but there were different opinions to how could it be obtained and whether it could be obtained.

The substantial forms of Aristotle, combining as they do to the notion of a definition with that of a moving can use and a fulfilled purpose are evidently derived from the Platonic Ideas; a reflection which at once leads us to consider the relation in which he stands to the spiritualism of Plato and to the Mathematical idealism of the Neo-Pythagoreans. He agrees with them in thinking that general concepts are the objects of knowledge, and sole enduring reality is a world of change. He differs from them—or supposes that the difference—in maintaining that such conceptions have no existence apart from particulars which they reside.

On Aristotle's view, the theory of forms cannot adequately explain the occurrence of change. By identifying the thing with its essence, the theory cannot account for the generation of new substances. A more reasonable position must differentiate between matter and form and allow for a dynamic relation between the two. Aristotle therefore maintained that each individual substance is a hylomorphic composite involving both matter and form together. Ordinary predication, then, involves paronymously attributing an abstract universal of a concrete individual, and our experience of this green thing is more significant than our apprehension of the form of greenness. This account, with its emphasis on the particularity of individual substances, provided Aristotle with a firm foundation in practical experience.

Summing up, we may say of Aristotle that his philosophical theory did not advance or clarify the dualism of mind and body, but that this dualism was re-cast by him in the distinction of "matter and form." This obscured the subjective point of view. It placed emphasis upon the objective to such an extent that mental phenomena, considered as vital form, became matter for objective observation along with physical phenomena. In this way, psychology was treated as a branch of natural history or "physics", and as such it took an enormous stride forward. Incidentally, also, the doctrine of the soul as form led Aristotle to combat theories of a spiritistic and "psychosophic" character, such as metempsychosis and pre-natal reminiscence. This was an important gain to the naturalistic point of view. But Aristotle's vitalism prevented its issuing in a complete scientific naturalism.
The Stoic movement was a return to sober and practical understanding, after the vogue of high theories of the reason. Knowledge in the interest of practical life; prudence guided by information; freedom as expression of personality in a world ruled by law and subject to fate; social obligation and calm enjoyment over against capricious individual pleasure: such were the Stoic counsels of moderation, justified here and there by personal and eclectic philosophical considerations. On the whole, the Stoics vindicated the Socratic practical wisdom in real life: a tempered and humane enjoyment and a just resignation. Their dualism was that which appears between the values of experience and life on the one hand, and a colourless but necessary world-order on the other. They undoubtedly gave a more positive and lasting meaning to the subjective life, the inner seat of affective and active processes, sharing this with the Epicureans. And in the doctrine of the unity of common sense or knowledge, they transferred speculative interest to the self as the bearer of consciousness and the centre of values. This was the transition of viewpoint required to give to psychology its restricted sphere and to justify its place as a science of inner or conscious phenomena, after the undue objectivation of the mental by Aristotle.

With the clarification of the inner sphere thus brought about, the analogy with the "subjective" stage in the individual's self-apprehension goes forward. Racial reflection, like that of the individual - when once the thought of self as the centre of conscious processes is achieved - never again loses this vantage-ground. Consciousness, the background of the Sophists' skepticism, the theatre of Socrates' dialectic, the object of Aristotle's research, and the postulate of occultism and theological mysticism, is on the point of becoming the presupposition of speculative thought. It had to wait, however, to come actually and fully into its own, for the emancipation of reflection, after the period of the domination of the Church.

References

1. *This fundamental question is the ontological bone of Karl Jaspers' famous book "Van Ursprung und Ziel der Geschichte" (On the Origin and Final Aim of History), 1949.*
2. *Ibid., Jaspers answers at the end of critical discourse.*
3. *Bryn Mawr Classical Review 94.05.09: Reviewed by Elinor J.M. West, Long Island University.*
5. 262 C. The contrast between knowledge and opinion in Meno and Symposium.
7. Phaedo 75b.
8. Meno 80e.
9. Meno 85d.
10. According to the principle of association of ideas, laid down at Phaedo 73c-e.
11. In the Republic, Plato symbolises this by the myth of the water of Lethe.
12. 81c6.
13. Phar. 247 c d.
17. Euthyphro.
19. (i) Lys. 217 e (n) Hippias Major 294 a and c.
20. Hippias Major 100 a 10.
22. Gorg. 467 e.
23. Hippias Major 292 d.
24. 79a, 80a.
25. Phaedo 78d.
26. 250b-d.
27. Burnet with Hackforth and de Vries notes.
28. 'The gift of humanity is precisely that, unlike the animals, we form concepts' (J. Bronowski, Identity of Man 48).
29. 249 b7.
31. 265e.
33. Parm. 2.7 Grote(II, 455-7).
34. Ethydemus 275 d.
35. Meno 77e.
36. Meno 96c.
38. Apology 21a.
40. (Grundriss d Geschichte d griechischen Philosophie, 144).
42. THE DIVIDED LINE (Adam II, 64).
44. THE DIVIDED LINE, 510 a 9.

45. Pace Murphy., Interpr 156 f., Cf sense II in Lidell-Scott-Jones A English Lexton, 9th ed.

46. THE DIVIDED LINE, 511 c.

47. Meno 97.

48. Republic, II, 68 and 159 ff.; Hardie: Socrates in Plato, 52 ff. Their arguments are criticized by Brentlinger in Phron. 1963, 147 ff.; Comford: Mind 1932, 38.; Stocks (Classical Quarterly 1911, 83) that the introduction of intermediates would destroy the parallelism with world of sense. For the use of images as a means to the knowledge of forms in general, including Forms of values, Copper in Classical Quarterly 1966. Wedberg, after a sensible discussion, concludes (PPM10) : 'Although the doctrine of Intermediates is not clearly expressed in the Republic, it is, so to speak, striving to come to surface.'

49. Meno, 85 e, 86 b.; 505 a. Cf. also Symposium, 211 C.


52. De an. 430 a 3.; Metaphysics, 1072 b 3., cf.


56. Republic, VII, 5 26 e – 527 c.

57. Meno, 81 a – 86 c.

58. Phaedo, 100 c.

59. Phaedo, 100 c.

60. Republic, Books VI and VII.

61. Republic, VII, 532 b.

62. Parmenides, 13 1 e – 13 c.

63. Timeaus, 49 a.

64. Timeaus, 51 a – b.

65. Timeaus, 28 a – 29 d.


67. De Diversis Quaestisombatibus, L XXX III, Question 46.


69. Ibid., 27.


71. (350 BC) METAPHYSICS by Aristotle translated by W. D. Ross: Book I

72. Metaphysics.

73. On the Soul II 2

75. Ibid.


77. Ibid., 258 13 ff; Metaphysics, translated by W. D. Ross, in Works, Vol. VIII (1928), 99 4 a 1 ff

78. Physics II, 3.

79. (Gk. aition \[aition\]).

80. Physics II, 8.


82. (350 BC) NICOMACHEAN ETHICS by Aristotle translated by W. D. Ross

83. By Prof. W. A. Hammond, it is entitled Aristotle’s Psychology (1902). In his general psycho-physical conception, Aristotle is startlingly modern, save, of course, in the actual results reached. He gives detailed and conclusive reasons for locating the soul not in the head but in the heart, which, as he discovered, was the centre of the vascular system; for considering heat the material substratum of life and mind; for regarding the veno-arterial system (with the blood) as the channel of communication of sense and motion. But for our knowledge of nerve and brain, we should consider his argument a model of inductive reasoning, as indeed it was taken to be for generations.

84. Hammond’s account of the different views (Aristotle’s Psychology, Introduction). No doubt the best commentary is that afforded by the theoretical developments which followed upon Aristotle’s incomplete statements.

85. Eth. Nic, 1147b, 18. The "Nichomachean ethics" is thought be a treatise on morals addressed by Aristotle to Nichomachus, his son.

86. On the Soul II 5.


88. On the Soul III 10

89. (350 BC) ON SENSE AND THE SENSIBLE by Aristotle translated by J. I. Beare.


93. Ibid.

94. Ibid

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