another individual--in the same universe with the same causal laws causes him to hold that lying or stealing is right, we have, to say the least, a very strange situation, because both views or values are equally necessary and objective moments of the universal process. The atomists are thus in the strange position of seeming theoretically to have provided a base for objective morality, while in fact they have tended to confirm the Sophist subjectivist position that one person's right is as good as any other's even if they contradict each other.

The theory of atomism laid the theoretical foundations, though crudely, for modern science and in the realm of physics provided a consistent and understandable theory, which has a great deal of support in common experience quite independent of science. But it failed badly when it came to the areas in which nature becomes truly human—in thought and moral value. In these areas of experience the theory is quite opaque; it really explains nothing and is seriously at variance with common human experience.

PLATO

We come now to Plato, who stands as tall in the history of philosophy as any person, ancient or modern. He was a student under Socrates' tute-lage, and when Socrates was executed in 399 B.C. was so shocked that his beloved Athens could do such a thing to his beloved teacher that for a time he left Athens and philosophy to try his hand at applied politics. But this did not work out very well for Plato, and he returned to Athens and established a school of philosophy known as the Academy, where he taught and wrote for the remainder of his life. His dialogues, in which Socrates always carries the winning argument, have become classics in the world's philosophical literature. There is no way to describe briefly the nature of the dialogues; the student must simply take time to read at least one of them to discover by direct exposure their flavor, quality, and method. We must push on here with a summary of and commentary on Plato's views.

Plato wrote against the background of the Peloponnesian War (431-404 B.C.). He was born in 427 and died in 347 B.C. The Peloponnesian War is treated in more detail in other sections of this unit; here we shall make only a brief statement about the conditions of the times that provide the background for Plato's concerns.

Political issues had been polarized in the strife between Sparta and Athens. Sparta was governed by oligarchies, and the government and life style were heavy on discipline and often repressive. In Athens there was a very liberal form of democracy, so liberal and democratic in fact that the business of the government was conducted by any of the citizens who happened to drop in on the sessions on any particular day, and the government of one day could overturn the action of the government of the day before. The war dragged on for nearly thirty years and left the Greeks militarily defeated and culturally, morally, and religiously impoverished.

The conflict between Sparta and Athens--between oligarchy and democracy-infected every city so that the political, ideological struggle became
internal as well as external. The oligarchs within the city-states had
learned to exploit the uneducated, unsophisticated poor; the religion of
the state had dried up and left the masses without any spiritual vitality;
the popular moral relativism of the Sophists had destroyed the foundations
of the moral life; and the long, drawn-out war and final military defeat
had left the people and the life of the states physically, economically,
and psychologically depressed. The cynic seemed to be in the saddle with
his view that might made right and that expediency was the principle for
decision-making.

It all served to sharpen the focus of the issue of whether or not there was in the universe any ultimate principle of moral order and justice. Euripides (480-406 B.C.) in *The Trojan Women* seems to start out with the view that there is a natural rational order which rights wrongs and deals out punishments and rewards, but he ends with the view that it all signifies nothing. So the historical moment brings into focus the issue of the rationality of life versus the passion of life. In the plays of Sophocles the same grim issue of the period is dramatically drawn. The earlier faith in a rational moral order seems to have been destroyed by the war. Medea's famous line, after the murder of her own children, underscores the conclusion of the age: "I understand the awful deed I do, but passion, that cause of direst woes to mortal man, has triumphed o'er my sober thoughts."

It was in such a world and to such a world that Plato taught and wrote. It is important to observe that the question of a rational order and a moral order are inextricably mixed. To the Greek mind, as to many minds in all generations, the view would not for long be put down that the moral life is the rational life. It was so for Socrates and Plato. Against this background, then, Plato came to try to lay a new foundation for the old faith in reason and moral law.

Socrates' death and Sparta's defeat of Athens, together with the degenerate state of Greek culture, seem to have convinced Plato that a democratic state was a bad one, and a bad state bred bad people because the masses were ignorant, irrational, and irresponsible. His prime interest, then, following Socrates' concern, was to find out what made a good person and what made a good state in which a good person could live with pride and be happy. But he had first to develop a theory of knowledge and reality that would overcome the deficiency we have spoken of in the atomists' views. As they had provided an objective rational principle for understanding the physical world, so Plato gave himself to finding an objective rational principle for morality.

There had seemed to be no solution thus far to the problem of one substance and change—how one thing became many. It seemed that either there were many things in constant change and the only single abiding thing was the law of change, or there was only one thing and change was an illusion. But suppose that permanence and change were not regarded as contradictory properties of one thing but the properties of two

different things? Suppose there were one thing that was eternally just what it was and nothing else, never changing and hence eternal, and another thing that was forever changing and had no permanence? In such a case, change and permanence would not be contradictory.

That, said Plato, was exactly how things were, and it was, he maintained, exactly as we experienced reality. Reality, he said, was not single but dual. Thus both Heraclitus, who insisted that change was the primary law of reality, and Parmenides, who insisted that permanence was the primary law of reality, were right.

But what is permanent? And what is temporary? What is changing and temporal? And what is unchanging and eternal? To begin with, it is clear that the world of change is the world of sensory experience, of matter. Colors change with light, living things grow and die, acorns become oaks, ice melts to water and vaporizes into air. But what is the world of identity, permanence, changelessness? Plato said it was the world of "forms," and it was perceived by the mind and not by the senses. A square, for example, is a form that never changes--not, notice, a physical square (that could change, be pushed out of shape, disintegrate) but rather the square form understood by the mind so that it is forever the same -- a form with four equal sides and four internal angles of ninety degrees each. It is impossible that this should change. It is because these forms are perceived by the mind and because Plato called them "ideas" that they are often referred to as "Plato's Ideas" and his theory known as "Idea[1]ism." But to use such terms is misleading for us because to us an idea is any thought that may come and go, or remaining, may change; i.e., it is psychological in nature. But Plato's forms were like the square, as we have said, which was forever the same.

Applied to things that do change in growth—for example, an acorn becoming an oak—the idea of form would be the oak—tree form that remains constant throughout the cycle of acorn—oak—acorn. No matter how much the matter in the seed and the tree changes, no matter how much individual acorns or oaks may differ—and every one is different—the form "oak" remains constant. Thus for each kind of thing there is an eternal form which constitutes the "essence" of that kind of thing.

Furthermore, according to Plato, there was a kind of hierarchy of relations in reality. At the bottom were physical shadows of physical objects, which changed and moved as the light source changed or moved. If we never saw anything else, we would think these the real things. Then there were the real physical things, such as particular horses or chairs. If we once saw the real horse or chair, we would understand the shadows for what they were and the superiority and the greater reality of the real physical object. Beyond these there were the forms, which also had a hierarchy. When we have seen many horses, we come to recognize the horse form by which we recognize all individual horses, and so on for all other forms. No matter how much individual species differ or individuals differ within the species, they are all recognized as participating in "horseness" or "chairness" or "squareness" or whatever the form may be. And we can apply this also to ideas as well as things, such as "causeness" and

"thereforeness."

Now, for Plato the lower forms stood to higher forms as physical objects stood to the lower forms. The form of a horse, for example, is finally seen to be a particular example of a larger and higher form—"animal"—which includes all those properties that all animals have in common and that set them apart from "vegetables." And so we continue to "climb"—as Plato images it—to the higher form of "living things," in which all living things participate as distinct from all non-living things. And always the forms are constant and unchanging in themselves, and always the higher forms are more real.

Now one of the striking things about all this is that the higher forms are seen only by the mind and not by the senses; and another is that it is a mental "sight"--a person "perceives" it to be so in a way comparable at a higher level to the way in which in sensory matter the mind "sees" a color to be green or red and an object to have a certain size and shape.

How was it, asked Plato, that one just saw things to be so? His answer was that we saw all physical things to be as they were because of the light of the sun, and because the eye and the mind were formed in such a way as to have a natural affinity with the sun and with the objects illumined by it. What, then, in the world of forms, was analogous to the sun? It was the ultimate, the highest, of all forms, which Plato called the Good. The mind, he said, was attuned to the Good as the senses were attuned to the sun, and by this affinity the mind "perceived" the realities of the world of forms. Plato thus affirmed a natural organic unity of the Good (the very highest spiritual reality) with the mind (by which all forms were perceived) and with the body and its senses (by which physical things were perceived) and with the physical world of nature. He thus also affirmed that it was all objectively knowable, including the moral and religious realities, by an inner light.

Thus, he really argues, we already know the good and all the forms because we are inwardly continuous with the whole order of reality. We already know the good, the true, and the beautiful, and by virtue of that, we already know all particular things in their true nature. Thus learning and knowledge are not a filling of the mind with a collection of facts that are formerly unknown, but an illumination, a perceiving, an understanding that is a direct vision of what inwardly we already know. Is is simply recalling or recognition.

But how does it happen that the vision comes with so much difficulty and is so often so long delayed? Obviously, first of all, because we are so absorbed in the experience of the senses. Sensations are arresting and have a tendency to monopolize our attention. They involve us in bodily pleasure and pain which attract or repel us. So much of just providing a livelihood involves us in the shadow world of the senses. To attend to "invisible" things perceived only by the mind requires a serious and sustained effort of attention, the exercise of mental-spiritual capacities we do not easily achieve or commonly use. To do so may also often mean a deprivation of our sensory interests, and we do not like the effort

or the deprivation. It is only after we have begun to achieve the vision that we understand that it is worth effort.

The role of the teacher, therefore, is not to "inform" students but to point them toward the vision of the higher and better dimensions of experience, to a vision of the forms, and to the knowledge of their ultimate unity with the eternal order and goodness of reality. The good teacher, therefore, is the great-souled person in whom students come to see the Good rather than one by whom they are informed about it.

All of these things are gathered up in Plato's allegory of the cave, which is found in the *Republic*. An individual in this world, Plato said, was like someone in a cave, chained so that all he saw were the shadows of objects thrown on the back of the cave. The shadows were like the sensations of things, and he never saw the objects themselves. In the allegory the objects were behind the person as in reality they are "behind" our sensations of them. If such a person were released from his chains and were to turn toward the opening of the cave to see the real objects and the source of light that illumined the scene and caused the shadows, he would experience not only a great freedom from the chains and the error of believing that shadows were realities, but also a great joy in his freedom and his vision of reality. The person would understand that sense objects were but copies or shadows of higher forms and that lower forms were but shadows or copies of still higher forms.

We cannot stop here to argue whether Plato's theory is sound or unsound—this will be part of everything that follows in the history of philosophy—but perhaps it will be enough if we draw attention to the fact that the world of rationality does in fact deal with dimensions of reality not seen with the senses nor even derived from them purely. Thus, we are, in any case, indebted to Plato for this new avenue of exploration in the search for knowledge of reality. This view offers an interesting possibility of solving the old dilemma of the Sophists between permanence and change, the one and the many, by offering two aspects of reality—the sensory, where change is the law, and the rational—spiritual, where permanence and constancy and necessity are the law.

Plato's chief concern, however, was ethics--moral value. This is understandable because, as we have seen, it was de facto the primary problem of his day. It is obvious that Plato must argue that as there were forms for natural species and for mathematics, and that these forms could be known by the mind, so there must be moral forms of which moral acts were the copies or shadows, and that these moral forms also could be known. Otherwise, Plato would be caught with the skeptics in denying any normative ethical standard and with making each person's "right" as "right" as anyone else's and, hence, have no objective moral norms at all. A social norm in this framework would be only a consensus of individual and group tastes.

Contemporary culture has much more feeling for the latter view than for Plato's, although there are still today many who share Plato's view taken broadly and given a modern version. But as philosophers we must,

anyway, give every view its day in court and a full hearing.

If ethical judgments reflect or participate in ethical forms, then it will be proper to look first at the actual moral judgments that people make to see if they do in fact reflect objective norms. For example, in preparing for an examination, I might be faced with the realization that I have not mastered my material and the possibility of cheating presents itself to me. I must then weigh the alternatives—cheat with the hope that it will get me a better grade, or apply myself with all diligence, write an honest exam, and accept a grade that is an honest assessment of my achievement. Reason will tell me that the first alternative is only a false pretense, an "A" on paper but not in reality, and thus the "A," strange as it may seem to some, is only a poor shadow of the real "C," as the shadow of the horse is a poor thing compared to the real horse. So in moral experience, we find reason identifying an objective hierarchy of values and the mind perceiving that the higher form is better and carries with it a rational and, therefore, a moral obligation.

Contrary to the popular view of his day (and of ours) that pleasure is the ultimate and constant good, Plato believed it to be justice. But how was he to show that this was so? He argued that to find what was "good" in the individual person, the "just" person, it would be easier to find what was "good" or "just" in the large, in society, because if his theory were sound, "justice" or "goodness" would be the same wherever one found it, as an oak tree is always an oak tree whether we take one oak or a forest of oaks. The search for the nature of justice is a long and complicated one, which students can read about in Plato's Republic All we can do here is outline the outcome.

Plato's decision was that the just society was one in which every person was in his own place, doing his own thing, and minding his own business. Society, he said, had three basic classes of people: (1) the producers, like farmers, manufacturers, business and professional people, artisans, craftsmen, and so on; (2) the guardians or military class; and (3) the rulers. These were not closed classes into which people were born for life regardless of their personal merits. Each child was to be given a sort of aptitude test and, regardless of the class of birth, to be trained for the class for which he was, by natural talent, best suited.

The just or good society then was one in which all individuals were in the places for which they were best fitted by nature and training, doing their jobs, and not interfering with other people properly trained and qualified for their roles. Plumbers were not to tell soldiers how to defend the state, and soldiers were not to tell plumbers how to build drainage systems. Physicians were not to try to be rulers or to tell rulers how to rule, and vice versa. Thus each of the basic functions of a society would be provided for and all of them performed well. The just/good society, therefore, was a balanced one, with a harmony of functions between the classes, much as an organism has many organs, and the body is healthy when each organ functions properly for the good of the whole organism; the eye does not try to be the hand nor a lung to be the heart, and so on.

In the same way, the individual person had a threefold nature. There was the life of the body, which was "appetitive"; there was the life of the "spirit" or, perhaps better, "the spirited" nature, involving anger, fear, courage, cowardice, self-discipline, and so on; and the life of reason. The "good" for a person then was what Plato called the "harmony of the soul," in which each part of an individual's nature fulfilled its proper function in the whole person.

Now each part of a person's nature and each class in society had its appropriate virtue. It is important to observe that the Greek word for "virtue" meant "excellence" in the performance of a natural function; the virtue of a flute-player was excellent flute playing. Thus the virtue of society was the excellence of the function of each class as it served the overall excellence of the state. Thus the virtue of the individual person was the harmony of the soul.

But each part of a person's soul had its special virtue. The virtue of the sensory nature of a person and of the corresponding producer class in society was temperance. The producer class and the sensory nature must not be too self-indulgent or it would lead to the neglect and maybe the harm of the rest of a person's nature and to too great a greediness in the desire for the worldly goods it produced, to the detriment of the guardians and the rulers. The virtue of the "spirited" nature in a person and of the military class in society was courage, in both cases to face bravely what must be faced and to fulfill one's rational-moral duty, no matter how difficult or painful it might be. The virtue of reason in the individual and of the ruling class of philosopher-kings was wisdom, which was knowledge of the eternal forms, so that by this wisdom the mind in an individual and the ruler in society could give stability, proportion, and guidance to the rest of a person's life, both private and social. Only from this vantage point, said Plato, could anyone know what the true and fulfilling well-being was in the nature of things for either the body or the spirit or even for the mind itself, and thus for the whole person. So also for society: Only from reason's vision of the eternal forms could we know the true virtue for each individual and class in society.

Thought, for Plato, was thus a good in itself. It had its own intrinsic excellence, which was superior to the virtues of the lower forms and which also carried its own pleasure and satisfactions. But it was also the power by which people directed life. The bodily desires and the passions of the spirit were likely to want to rule life. It was not for reason to deny or suppress their proper interests but rather to establish and direct them in their proper place and proportion. And reason must discipline itself also, first in order to develop its own excellence, but also to keep itself in its proper place and proportion in life and so provide for the overall well-being of body and soul.

The Greeks used the word *eudaemonia* for this overall virtue. It is often translated "happiness" but sometimes better translated "well-being." This translation has the advantage, first, of stressing the naturalness of the moral qualities. It is the fulfillment of the natural function in

accordance with the principles of natural reason, not something alien and external to a person's nature. The second advantage of this translation is that it avoids the trap into which the word happiness gets us. Happiness is so often confused with sensory pleasure—and Plato was very clear about this matter—that while pleasure is a good, it cannot be the good for the whole person because it is only a good for a part of our nature.

It is important to observe that while Plato was affirming all of this, he was not at all talking about what people liked or what they did or thought, etc. Rather he was saying that the nature (form) of "human being" was such that this was the way it must be if we were to fulfill our total nature, and that only when we did could we reach the total happiness. A guitarist with a six-stringed instrument may like to play on only two strings and may think that using only two strings makes better music than using all six. But the fact of the matter is that no matter what this guitarist thinks or likes or does with two strings, the richness and fullness of the very nature of the instrument as an objective matter of fact lies unfulfilled. They are possible only when all six strings are used and used well. So it is in Plato's view with both the life of a person and the life of a society. The good and the right are determined by our nature as people, not by our individual likes and opinions.

The extension of the moral problems and the art of ethics into the socio-political realm becomes the art of politics. Politics is the art of ethics applied at the level of the state. Plato's theory, in a sense, could be applied as the ideal for every individual, but he did not believe that every person was in fact capable of attaining the rational vision of the eternal forms, but that this was possible for only a comparatively few people who were specially gifted in the life of the mind as some people are specially gifted as cabinet makers. This is not such a strange view when we consider that only a comparatively few people are engineers or physicists or astronomers or logicians, etc. and that we do not presume in such matters to hold our own opinions or to minister to ourselves in such matters contrary to the experts. We properly seek the experts when we want to build a Golden Gate Bridge or a sewer system. We do not operate as if we were experts in all matters touching our daily lives. Thus Plato held that it was quite irrational and, therefore, indefensible that in politics everyone's opinion should be regarded as good as anyone else's as in a democracy, when in fact the art of politics was one of the most difficult. Politics in a democracy, thought Plato, amounted to rhetoric, and rhetoric to flattery. To be successful in democratic politics, said Plato, the politician must please the masses, who were really ignorant of what was good for the society, and so the politician who was approved was one who did what people liked, whether it was good for them or not.

What we ought to do, thought Plato, was find the people who were gifted in the arts of reason to perceive wherein good and right really lay and to put them to ruling and to let the ignorant and the emotional many attend to the business of the production and distribution of goods and services of which they were capable. Political democracy, thought Plato, was like

an army where all the soldiers were generals or, as we sometimes say, where there are all chiefs and no braves.

In educating youth for their various roles in society, Plato believed education should be carefully controlled to develop just that set of beliefs, attitudes, habits, values, and skills that were appropriate to those roles. This meant control and censorship of literature, mythology, art, music, etc. in education. He also believed that guardians and rulers should live in common halls and be mated by a selective process for the breeding of children with the best qualities for the class. Such strict controls on the guardians and the rulers left the masses to enjoy what we would consider a more normal pattern of life.

All of this appears to approach totalitarianism and certainly sounds like our modern theories of social engineering. Some people argue, however, that there is an important difference as Plato saw it. The difference, they say, is that in a totalitarian dictatorship the power clique is a dictatorship of a class (for instance, the proletariate) which manipulates the masses for the sake of power for the few, while Plato insisted that since the philosopher rulers were selected because they truly perceived the eternal forms (what was in fact the natural good inherent in their natures), they would for that very reason act only for the good of the society and not for their own power advantage. To act to their own advantage would be contrary to their true vision and would disqualify them as rulers. Even so, whether or not it would ever be possible to find such persons is a fair question.

Plato believed finally that there were four degenerate forms of government--timocracy, oligarchy, democracy, and tyranny--but we will leave the pursuit of these subjects to the interested student, who will find them treated in the *Republic*.

We must turn now to Plato's theory of art, his aesthetics. As we would expect, his theory of forms determined his view of the nature of art, as it determined everything else. All beautiful things--from sunsets, roses, human features and shapes to music, paintings and birds on the wing--were beautiful, he said, because they participated in, or were shadows or copies of, the absolute form "Beauty." All particular beautiful things, being only shadows of the forms, would represent them poorly but well enough so that we could recognize them.

First of all, Plato felt that art gave very little knowledge in the ordinary sense, with which most of us would probably agree, because its intent was not at all to give knowledge but to do something quite different. Most of us would probably agree also that the value of art is more emotive than cognitive, but this was just what led Plato to call for very rigid controls on the place of art, particularly in education. As we have already seen, he held that it was a harmful thing for the appetitive, personal nature to rule the soul. Hence, any strongly emotive art would have to be censored and controlled.

From Plato's view, the trouble with art was that it was primarily

non-conceptual. It could not be reasoned. Its form was perceived, to be sure, but perceived intuitively, "feelingly." It was good for youth in education when the feelings it stimulated were good and did not distort nor dismiss the life of everyday business or the life of the mind, nor disrupt the social order. It was bad when it did these things. It was, therefore, important in Plato's view that only that art which served the harmony of the soul and the justice of society be admitted to education. It is important to observe in all of this that he was not an antagonist of the arts but rather their protagonist, concerned with their proper discipline and use. After all, they participated in the eternal form of beauty that was illumined by the eternal, absolute Good.

Perhaps the most striking of all Plato's departures from his predecessors was in his theology, his theory of God. Earlier views in myth and tradition, with some occasional variations in the early philosophies, were polytheistic and held the gods to be either natural forces or to be created in the cosmic process. They were part of the created order even though they were in command of natural forces. In Plato we move to a monotheistic position, and the one God is the creator, not himself created. It is also important to note at this point that for Plato the existence of God was knowable by reason, and thus his theology was a natural rather than a revealed theology.

First of all, Plato argued that there must be a power which was the source of all motion, which itself was not moved by anything else, or no motion could ever have occurred at all. All physical motions in ordinary experience were caused by other physical motions outside of them, and if attempts were made to trace such a series of causes back, one would see easily enough that either a first cause of motion was never found, or that a first cause was arrived at that caused all other motions and that itself was not caused by anything outside of or prior to itself but rather was self-caused, i.e., carried cause within its own nature.

People had an experience of such a cause, said Plato, in soul, for soul was just this inner power of living things to move physical bodies from within themselves. Soul, therefore, was a kind of self-moving reality. But soul could not be the prime mover because it produced both good and bad, fair and foul, just and unjust motion. However, it might be claimed, he thought, that where motion was pure--well-ordered, regular, and dependable, such as in the motions of the planets--the moving powers within them were good, and thus gods. Again we must draw attention to the fact that for Plato rationality and order were two sides of the same coin; one guaranteed the other, so that to say that anything was orderly was to say that it was the product of reason, and because rational, therefore good.

In Plato's time this was an important counterview to the atheist views of the atomists and the mechanicsts, whose view of all reality was derived only from physical atoms in motion.

But even these gods were not the prime mover, being themselves created by the same "final cause" that created the planets. Prior to the planets

and all other created things, Plato proposed a Prime Mover--God--who caused the mixing of forms with the primal chaos of matter to produce the natural universe.

Thus, for the first time in the history of Western philosophy (note exceptions in Egyptian, Jewish, and Persian religion), God was proposed as a single cosmic creative intelligence imposing order on matter to produce the known universe, and was held to be such a being to meet the demands of natural reason and not by any claim to special revelation. It is easy to see why the Christians, hundreds of years later, found in Plato a suitable model for their own philosophical thinking about the Christian God.

Whatever the advantages of Plato's view over those of his predecessors, the major difficulty seems to have been that he held that the forms and the sensory objects of the material world were separate from each other. The problem was clear to both Plato's contemporaries and to Plato himself: If forms and things were separate from each other—the forms real and the things unreal, the one Being and the other Non-Being or Becoming, the one changeless and the other changing, the one eternal and the other temporal—how could the unreal, Non-Being, the changing and the temporal be a copy of, or a shadow of, or participate in the real, changeless, eternal Being? To say this, it was argued, was to say that rest was like motion and that motion participated in rest. Or how could there be an eternal and changeless form of change and motion?

It was to the solution of these problems that Aristotle addressed himself and to whom we must now turn.

ARISTOTLE

Aristotle was born in 384 and died in 322 B.C. He studied under Plato and later founded his own school of philosophy in Athens known as the Lyceum. His concern was essentially the same as Plato's, to re-establish faith in the real existence of a concrete world that could be objectively known by the human mind, and faith in the objective nature of moral good based in the orders of nature as understood by reason. Aristotle had serious disagreements with his old teacher, but he was essentially Platonic in his view. Aristotle, besides being one of the great philosophers of history, was also one of its great scientists, who created in his logic the form of classification by genus and difference (species) we still use in scientific classification.

The atomists had affirmed the existence of the objective order of the material sensory world at the expense of the inner world of the mind. Plato had thought to establish both worlds but really left the world of matter and sensation in very dubious status while arguing for an objective and eternal order of reason. In any case, he had failed to show realistically how the two worlds could be related or participate in each

other. What Aristotle attempted to do was to show how both the material-sensory world and the rational-moral world were real and how they were really related. The heart of the matter was still the problem of change: How could an unchanging eternal order, such as that known by the mind-forms of Plato, be subject to the material-sensory change of the atomists?

The key difference between Plato and Aristotle lies in the theory of forms. For Plato, as we have seen, the forms were the eternally real things and quite separate in their reality from the temporal things that were their shadows or copies. For Aristotle, the forms were aspects of real material things which the mind could distinguish as aspects of reality but which were not distinct, not separate, from things. This was not a denial of the reality of forms but only of their separateness. The ultimately real for Aristotle, then, was not the ideal form of Plato but rather the concrete individual thing that he called "substance," which was a combination of matter and form.

He held that the individual thing was both matter and form. As matter, it was whatever it was in its own individual concreteness, while as form, it was whatever it shared in common with other substances. It was like a bulldozer, which has its own concrete individuality but is also machine, dirt-mover, and auto-powered. But more importantly for Aristotle, matter was potentiality, possibility, while form was actuality. An acorn is matter insofar as it is all the chemical elements which go to make it up as an individual material thing, and as form it is whatever shapes the chemical substances to become "acorn." In the same way, the acorn is the matter which is in fact the possibility for an oak tree, which in its turn is the actuality of the acorn. Everything, then, was a realized or actualized form of some lower and earlier matter-potential, and every form in its turn might be matter for some higher form.

Thus the world was not really a mass of individual atoms that formed things by some mechanical law with no inherent meaning, but it was an ordered structure of individual actualities that were more like an organism than a machine, like an organism that was brought into existence and directed by some governing inner principle toward the realization of some goal or end, some higher possibility. It seemed to be more purposive (the Greek word is teleological) than the world of the atomists.

While Aristotle, then, believed as Plato did in the existence of forms, his idea of form differed significantly. Like Plato, he believed that the form was more important than the matter because it was the permanent and controlling reality. But unlike Plato, who believed that the forms existed in a separate order, Aristotle believed that they were in and part of the reality of concrete individual things (substances), so that they were actually inseparable.

This form working inside substances was, Aristotle believed, not conscious, as a sculptor would be who fashioned a work of art consciously from the outside. It was unconscious. But we must not suppose that that made it any less purposive and controlling. It was an inner process by which all living things were moved by inner form to the fulfillment of