

THE FOUNDATIONS OF
WISDOM

VOLUME 1
LOGIC

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The Beginnings of Philosophy

The world in which we live is full of things both wonderful and mysterious. Anyone who lives in constant contact with children is continually aware of the wonder which they experience each time they encounter a new reality, or even when they come to understand a new word. I believe it was G. K. Chesterton who observed that, for children, the whole world is new and fantastic; it is just as remarkable to a child that a river should flow with water as with wine since, from his perspective, there is no reason why rivers should have water more than wine. And so, for these neophytes to the world, everything is full of marvels. It is this wonder which is the starting point of philosophy—a wonder begotten of ignorance coupled with a desire to know the reasons for things unknown.¹

According to the earliest historians of philosophy, the branches of knowledge which were developed first were concerned with practical ends, such as agriculture, hunting, and building. It is natural to suppose that so long as man was struggling to meet the practical needs of his day-to-day existence, earning his bread by the sweat of his brow, there would be very little time to devote

¹ This wonder is not mere curiosity, which is a vice. Curiosity means desiring to know something not because it is good for us to know it but rather because of some unreasonable motive.

to more speculative or theoretical pursuits. But once the practical arts had been developed in such a way that certain men were freed from the bonds of labor and given time for leisure, some of these men began to devote themselves to an investigation of the causes of reality. This investigation was not for the sake of some practical end, but it was pursued for its own sake—that is, for the sake of truth—since there is in man a natural desire to know the causes and principles of the things he experiences.

From the earliest historical accounts of the rise of philosophy, it appears that the first attempts at explaining the world in terms of its causes were poetic in nature. Great theological poets, such as Homer and Hesiod, interwove accounts of the origins of man and the universe within their stories. While these accounts were generally mythological in character, they were notable since they aimed at providing reasons for experiences common to all men: the experiences of nature, human love, war and famine, and so on. And while the accounts given were heavily seasoned with fable and myth, they often contained more than a grain of truth.

More or less contemporary with these theological poets were the first mathematicians. These were the first to construct rigorous and sustained arguments which arrived at necessary conclusions about quantity. Next came the philosophers of nature, who are widely regarded as the first true philosophers. For these men did not present their accounts in terms of symbols or myths but rather in the form of carefully reasoned arguments.²

The first such account of the natural world of which we have any record comes from Thales of Miletus, a Greek from the sixth century BC. Recognizing that in order to make sense of

² Supplementary text: Thomas Vernor Smith, *Philosophers Speak for Themselves: From Thales to Plato* (Chicago: University of Chicago Press, 1956), chapter on the Pre-Socratics.

something, it is necessary to understand it in terms of its simplest parts, elements, and causes, Thales posited that the whole of nature was reducible to a single material cause: water. The variations of shapes and forms which are found in the natural world, Thales argued, could be explained by the process of rarifying or compacting water. While the modern student may find such an account laughable, we should not be too quick to dismiss such an explanation. To do so would be to miss the essential insights which later led to more refined discoveries. In fact, if one considers the matter carefully, water seems to be a good first guess as the ultimate material principle of the universe. Water is the most abundant element on the surface of the earth, covering nearly three quarters of the earth's surface. All living things depend upon water, so it seems to be a principle of life. Moreover, water takes the form of a solid when it freezes and a gas when it is heated.

After Thales came a number of other philosophers of nature. Some of these, like Thales, posited a single material principle as the ultimate principle of existing things. For example, Heraclitus posited fire as this ultimate principle, since it most of all seems to be a principle of change, and the world of nature which we observe is constantly in motion. Some other philosophers, considering that a single principle did not seem sufficient to explain the complexity of natural things, posited multiple principles. For example, Empedocles posited four elements: earth, water, air, and fire, which were either brought together by love or torn apart by strife. Still other philosophers, such as Anaxagoras, considered that the various substances which we observe in the natural world were not reducible to one another, and so he posited an unlimited number of principles which were tiny particles found in each thing. Whatever particle predominated in a given substance, say

a piece of gold, was what that substance appeared to be (i.e., it looked like gold because it had more gold particles than anything else). Anaxagoras also posited a kind of mind which was separate from these other particles, and which separated them and brought them together to form various substances.

While each of these philosophers seemed to be in disagreement about the ultimate explanation of the world of nature, a brief investigation of their positions shows a common thread in their accounts: All of them posit some material principle or principles as the underlying substance of all things, and each of them posits some kind of moving force by which these material principles may be moved from one state to another contrary state. That is, all agreed that there is a common material principle under everything and a force that moves this matter.

In this respect, these first philosophers seem to have anticipated some of the claims of modern physics, which, although mathematically sophisticated in its description of these forces and principles, nevertheless provides fundamentally the same account: a single material element (such as a quark), which is combined with or divided from others by opposing forces. We shall consider whether or not an account of reality which posits only material principles as the causes of natural things is tenable in our course on natural philosophy.

What Is Philosophy?

Before considering what philosophy is, it may be helpful to dispel some false notions or characterizations about philosophy. Often, when the modern student thinks of philosophy, he imagines some kind of esoteric theory which has very little to do with the real world. University humanities departments are filled with courses on various philosophers and philosophies, nearly all of which are opposed to one another, and most of which seem to have very little relation to the world in which we live. Often it is asserted that the widespread disagreement among philosophers is a sign that philosophy is not a true science but rather a matter of choice or preference. After all, mathematicians, physicists, and chemists have no problem agreeing on what is true about their respective subjects; surely this is the sign of authentic science.

Whatever the student's preconceived notions may be about philosophy, let us set them aside for now and consider: What did philosophy mean in its original sense? What did it mean for those first philosophers?

For the first philosophers, philosophy had everything to do with the world in which we live. After all, the first philosophers were attempting to give an explanation of this world in terms of its beginnings, causes, and elements. The starting points of

all philosophy were the common experiences had by all men: the experiences of motion, of substances both living and non-living, and of man and the various communities in which he found himself—the family and the citystate. Each of these things is complex and difficult to understand. And so the task of philosophy was to discover what was most basic in each of these experiences. That is, the role of philosophy was to explain these various and complex experiences in terms of their principles, causes, and elements.

It is important to note that it is *common experiences*—that is, experiences capable of being shared by *all men*³—which serve as the starting point of philosophy. In this sense, philosophy is not concerned with personal experiences or preferences. These personal experiences, while they may be important for the life of an individual, cannot be the subject of rational discourse and investigation insofar as they are personal. Therefore, philosophy, since it takes its starting point from common experiences, is firmly rooted in certain and obvious experiences verifiable by anyone who seeks to investigate the matter in detail.

From the foregoing, we can formulate a provisional definition of philosophy: philosophy is an explanation or account—that is, a setting in order—of the causes of reality.

But does philosophy consider every cause of reality? For instance, does a philosopher concern himself with the cause of the cake rising in your mom's oven? Certainly there is a cause there, but the philosopher does not seem to be primarily interested in this kind of a cause. Rather, the philosopher interests himself

³ We note an exception for those who have some defect, such as men born blind. For such men, color can never be a subject of knowledge, since, due to a material defect, they can never experience the nature and properties of color. The same may be said of those lacking any other sense from birth.

principally with the ultimate and most universal causes of reality. For example, Thales was seeking the first causes of all substances and motions. So we might refine our definition of philosophy as an account of the *ultimate* causes of reality.

But doesn't the theologian investigate the ultimate causes of reality too? Yes, but he does so by consulting the sources of divine revelation. The theologian takes, so to speak, God's perspective, which is more universal even than the philosopher's perspective. So to distinguish philosophy from theology, we should add that philosophy is an account of the ultimate causes of reality *according to human reason*. That is, philosophy considers reality insofar as it can be known by human reason alone, without the help of faith in divine revelation. We shall take this as our definition of philosophy throughout this course.

Now let us consider some of those objections in light of our definition of philosophy. First, can it be truly said that there are many philosophies? Surely there can be many accounts of the causes of reality, but not all of them fit the facts. Those accounts of the causes of reality which do not actually explain reality, but explain it away or distort it, are false accounts. They do not actually represent the true causes of reality, and so they are false philosophies. And since reality is one thing, there can only be one true account of the causes of reality. Therefore, while there may be many false philosophies, there is only one true philosophy. And a philosopher is a good philosopher to the extent that he hits upon this true philosophy, and he is a bad philosopher to the extent that he fails to provide a true account of the causes of reality. What then is the ultimate measure of a good philosopher? Common experience. When all is said and done, every philosophy must measure up against the yardstick of reality: a reality readily accessible to all diligent investigators.

But why is it that there is so much disagreement among philosophers, while we find scientists so much in agreement? First of all, it is necessary to distinguish the areas in which there is agreement and disagreement. Scientists, such as physicists and chemists, are, by and large, in agreement about certain things such as the particular measurable and reproducible results of various experiments. It is easy to get someone to agree that when you heat water to one hundred degrees centigrade at an air pressure of fifteen psi, it begins to boil. Philosophers are also in agreement about such things; for example, they agree that living things are in some significant way different from non-living things, and that motion is obvious to the senses. But both the philosopher and the scientist often disagree with their fellow colleagues about what the *true causes* are of these things which are manifest in their particular science. A survey of the recent physical theories from Newton to Bohr to Einstein to Heisenberg reveals a radical disagreement about what are the true and ultimate causes of physical phenomena. It is in the realm of the ultimate causes of common experiences where philosophers disagree as well. And so, in this regard, philosophy is no different from the applied sciences.

There are other reasons, however, why we often find more disagreements among philosophers than among scientists even in the area of ultimate causes. For one thing, philosophy deals with the most universal causes of all reality, while physical scientists usually restrict themselves to a more limited scope, such as the causes of chemical reactions. It is inherently more difficult to arrive at the more universal causes than it is to arrive at more particular causes; for example, it is easy to identify the cause of *this* horse—namely, its two parents—but it is a very difficult thing to identify the cause of horse in general. Therefore, philosophy requires a much broader experience, more careful investigation,

and a longer time before these causes can be determined. It is not surprising then that it is easier to be deceived in the realm of philosophy than in the experimental sciences since the former is more difficult. Finally, since philosophy is so universal, many of the conclusions of philosophy bear upon what is good and bad in human actions. For example, if I discover through philosophy that a man is only perfected through actions under the guidance of reason, then this indicates that those human actions which are performed contrary to reason (under the control of emotion or passion) are evil. On the other hand, if I discover that the interior angles of a triangle are equal to the sum of two right angles, this will have no bearing on anyone's moral life. And so, in the area of philosophy, a bad will can be an impediment to arriving at truth: A man sometimes will not accept a conclusion simply because he doesn't want to, not because the evidence isn't conclusive. On the other hand, in mathematics and the experimental sciences, the will plays little or no part, so it cannot be a source of disagreement.

In summary, philosophy is an account of the ultimate causes of reality according to reason. There is only one true philosophy since reality is one as reflected by the common experiences accessible to all. The disagreements among philosophers that are not found to the same degree in scientists are not a sign that philosophy is not a rigorous science; rather, they indicate that philosophy is very difficult, that it requires much study and experience, and that the student of philosophy must be morally upright.