

## Reason and the Divine

### Lecture One – Ancient Greece

#### I

*the first step is always what matters most*  
Plato

‘Reason’ in its broadest sense, the sense I will be using it here, is the exercise of human understanding. There are many ways of exercising our understanding, and hence reason can be empirical, when I exercise my understanding with respect to objects in the world, as when I try to figure out the path a ball will follow as it rolls down an inclined plane, or it can be pure, as when I try to figure out a mathematical problem without any reference to the ‘real world’, or it can be practical, when it results in action rather than merely the adoption of a new belief. But for our purposes, at least to begin with, the differences between these forms of reasoning will not matter as much as what they have in common. In all cases, reason is what we use when we apply our minds carefully to some question.

‘Divine’ is defined by the Oxford English Dictionary as ‘Of, from, like God or a god’, which would give us a meaning for ‘the divine’ as that which is of, from, or like God. Of course, if one takes seriously the claim that everything comes from God, this definition entails that everything is divine, a thesis that some (William Blake, for example, or Spinoza) have held, but which hardly helps us specify the area of our concern. I will in fact use the phrase in two senses, a narrow and a wide sense. I will use ‘the divine’ in the narrow sense to mean God. But I will also use it, especially this evening, in a wide sense, to mean ‘that which is of special or momentous concern’, which captures the idea that the divine is usually taken to be something separate from the everyday world of our experience, whilst leaving open the possibility that the divine might be understood non-theistically, which will be especially helpful for us this evening.

It remains merely for me to remark that bringing ‘reason’ and ‘the divine’ together raises not only with the question of what reason can tell us about the divine, but also with the question of whether it is an appropriate way of approaching the divine at all. These two questions form the framework of our investigations. Plenty to keep us occupied then, and so, throat-clearing over, let us travel two and a half thousand years back in time.

#### II

*All things are full of gods*  
Thales of Miletus

If we are to believe the myths, the ancient world was full of gods, personifications of the natural world dancing in the olive groves and deserts of the Mediterranean and the Near

East. The Egyptians had Ra, the sun god, Geb, the god of the earth, Nut, the sky goddess, arched protectively over the world, Osiris, god of the afterlife, Set, Isis, Tefnut, and a whole host of other deities, whose interactions provided explanations of recurring natural phenomena, as well as significant unusual events. These Egyptian gods quarrel and bicker, have children, move to Nubia, in nearly all respects behaving exactly like the humans who worship them. Indeed, Egyptian pharaohs were considered to be, and considered themselves, deities. This is not surprising if one considers the awesome power wielded by the pharaohs over their fellow human beings, as well as the sharply human nature of the gods themselves.

The Ancient Greek deities (taken over more or less wholesale by the Romans and thus surviving with their powers intact well into the Christian era) exhibit the same characteristics as their Egyptian cousins, they quarrel, fornicate, deceive, are bad-tempered, jealous, fickle, as well as occasionally noble, and as such are perfectly suited to explain a whole range of worldly events.

My favourite example of this is the Greek sun-god, Helios, who rode his golden chariot across the sky every day, returning by night via the world ocean ready to begin his journey again the next morning. We are also told that on one occasion, Phaeton, Helios' son, attempts to drive his father's chariot (the behaviour of sons apparently constant across the ages), but loses control and sets the world on fire. It does not take too much imagination to guess what natural disaster might have provoked this story.

Such accounts appear to us no doubt as primitive, superstitious, ultimately empty. But the personification of nature is a deep-seated impulse in us human beings, which we are not immune to even today, and the need that such an impulse answers is the need for explanation. We human beings take it that events in the world do not just happen, but that they happen for a reason. Such a claim seems obvious, irresistible even, and no doubt it is, for humans – it is this that marks a fundamental divide between us and the rest of nature. Anthropomorphising apart, I doubt that any other animal wonders why the events that befall them are occurring, still less proffers any kind of explanation.

What is primitive about mythological explanations, and why they belong to the childhood of human thought, from both a religious and a scientific point of view, is that the reasons they proffer for more or less everything are essentially human reasons. This explains their continuing poetic and psychological force, even as we recognise that the reasons of God transcend the human, and that much can be explained without invoking any kind of personal agency, divine or otherwise. Nevertheless, later scientific and religious accounts still cleave to that desire for explanation that we find in the earliest and most obscure myths, and furthermore, still depend on the idea, present right from the start, that the way things appear to us are to be explained by features of the world that are hidden from casual inspection.

As far as we can tell, between about 600 and 500 BC, civilisations around the Mediterranean begin to move away from the mythological mode, and to develop more sophisticated and fruitful ways of thought. Of the developments towards monotheism

made at this time by certain tribes slightly to the east of Greece, we will hear more later. Our focus for the present is on what happens in Greece itself.

### III

*Nozzle of the bellows*  
Anaximander of Miletus

In Greece at around this time we begin to glimpse in the fragments of text from the so-called pre-Socratic philosophers, the beginnings of a distinct attitude towards the nature of reality. Much must remain obscure when the surviving texts are so fragmentary, and much scholarly ink has been spilled on the interpretation of gnomic fragments such as the one above, but not all are quite so obscure as this, and some of them illuminate the Ancient Greek mind like shafts of light in the darkness. In around 560 BCE, Anaximander (he of the bellows) says ‘the non-limited is the original material of existing things’, and that ‘the non-limited is immortal and indestructible’. Whether this is proto-scientific speculation, or a reflection of a nascent monotheism, it is not profitable to enquire, for we are not yet at the stage where such distinctions make much sense. More pertinently for our purposes perhaps, Heraclitus of Ephesus (around 500 BCE) says, ‘Let us not conjecture at random about the greatest things.’ In this fragment we see the earliest evidence we have for the idea that human reason must be used carefully if we are to understand the nature of reality.

We do not really know how Heraclitus proposed to conjecture non-randomly, but it is unlikely that he thought that blind obedience to religious orthodoxy was what was required, since he also says, ‘the rites accepted by mankind in the Mysteries are an unholy performance’ (we can thus see that the idea that ritual observance has little to do with holiness is hardly modern). We do not have to wait too long to see a far more complete expression of the Greek use of reason, in the Socratic dialogues of Plato. But it will be profitable for us to stay with the pre-Socratics a little while longer, for whilst Plato is often taken, with justice, to be a beginning, he can also be viewed as a culmination.

One way of viewing the pre-Socratics is as involved in a debate about, in Anaximander’s phrase, ‘the original material of existing things’. This enquiry into the ultimate nature of reality we shall call ‘metaphysics’ and at least as long as we think that the question of the ultimate nature of reality is a momentous one, as the Ancient Greeks did, this is a question about the divine in the wide sense that I outlined just now.

The full story of pre-Socratic philosophy is complex, but for simplicity, I will focus on just two representative figures, Heraclitus, and Zeno of Elea.

Here is the problem as they saw it. The world appears to contain objects, such as mountains, trees, buildings, indeed people, that persist through time to varying degrees,

but that also change. So I have persisted through time from 1971 until the present day. But I have also changed during that time – I have grown taller and heavier, for example, and there is less hair on my head than once there was. Such is the way of the world, perhaps, or more carefully, such is the way the world appears to be, for it is surely possible that the nature of reality departs, in certain respects at least, from the way it appears, just as a stick half submerged in the water appears to be bent, but is really straight.

For Heraclitus, in reality, nothing whatsoever persists through time, and change is the only thing that is real. So, for example, he says, “It is not possible to step twice into the same river”; likewise, “the sun is new each day”. There is something in this view that resonates, none of us are quite the same as once we were, and change does appear to be a fundamental feature of the world, although we want to say no doubt that he just got it plain wrong about the sun. But his thesis, properly understood, is not one that can be refuted by astronomical discovery – his view is not just that change is real, but that persistence is illusory, and (poetic considerations aside), what he ought to have said is that the sun is new at every instant of time.

For Zeno, the situation is exactly the opposite; in reality, things persist through time, and it is change that is illusory. In fact, since change is illusory, in reality, there is not just persistence, but absolute permanence. If we have only fragments of Heraclitus, nothing whatsoever of the writings of Zeno himself have survived, but Aristotle reports several of his arguments, including this one, which was called (by Aristotle) ‘the dichotomy paradox’.

Suppose I want to travel some distance, to walk across the room, for example, or indeed to wave my hand about, since my hand then travels through the air. There would seem to be no problem with this, as I can easily demonstrate. But, says Zeno, before my hand can travel any distance, it must first travel half that distance; before it can travel half the distance, it must first travel a quarter of the distance; before it can travel a quarter of the distance, it must first travel an eighth of the distance; before an eighth a sixteenth, and so on, you get the idea.

This can be represented as follows:

$$\left\{ \dots, \frac{1}{16}, \frac{1}{8}, \frac{1}{4}, \frac{1}{2}, 1 \right\}$$

The trouble is that those three little dots represent an infinite sequence – once started on this division, I could carry on for ever, and, hence, in order to get to move my hand a certain distance, I will have had to have completed an infinite number of tasks, which (Zeno maintains) is impossible.

It is worse – according to Zeno my hand could not even begin to move. There is no possible first, smallest, distance for my hand to move, for any finite first distance could be divided in half and so would not be first after all. Thus, movement of anything over

any (finite) distance whatsoever can neither be completed nor begun, and so motion (and hence change) is impossible.

This conclusion is apt to strike us as comical – watch as I defy Zeno by vigorously waving my hand. But Zeno, it seems, was serious. Greek philosophers in general took their conclusions seriously. Diogenes lived in a barrel in the marketplace so as not to have material possessions distract him from philosophising. And Cratylus was so convinced that because the world was in flux words could have no meaning that he foreswore speech and only waggled his little finger. What all these thinkers were serious about was trying, through reason, to discover how the world really is, regardless of how it appears to be.

Perhaps we can reconstruct Zeno's line of thought in the following way. OK, I know that appearances sometimes deceive (think of the stick in the water). But when exactly, and in what respects, do they deceive? Well, as Heraclitus says, I should not conjecture at random about the greatest things, and this is a pretty important question (at least if I want to know when I can rely on appearances and when I can't). And here I have a line of argument, based actually on mathematics, which already has a reputation as a solid route to knowledge, and that line of argument tells me that motion (and hence change) is impossible. So if my senses tell me that there is motion, they must, at least in this admittedly major respect, deceive me as to the nature of reality.

The natural response to all this is to say that since motion patently is possible (look!), there must be something wrong with Zeno's argument, even if we can't quite say what it is. This is an entirely natural and intuitive response, but Zeno would be within his rights to reply that he is not denying that there seems to be motion. I can wave my hands as much as I like, but I can't get away from the fact that I need to show exactly how the argument goes wrong. And that, unfortunately, is surprisingly hard to do. The standard story is that a successful response to Zeno's argument was not available until the seventeenth century, when Leibniz' and Newton's development of the calculus showed us how to deal mathematically with infinite series, but there are those who dispute that even calculus really helps us here.

Fortunately, we can safely leave that debate to the specialists. My point in discussing the dichotomy paradox is not to endorse Zeno's conclusion, or even to endorse the philosophical project that it exemplifies, but merely to provide an illustration of how the Greeks sought to use reason in the attempt to discern the ultimate nature of reality. If the mythological mode represents the childhood of human thought, then perhaps Zeno is an instance of its exuberant and vaguely embarrassing adolescence, although if that is the case then it has to be said that the adolescence of human thought has been rather protracted. As Cicero, the great Roman orator, remarked a few hundred years after Zeno, "there is nothing so absurd but some philosopher has said it", and, it has to be said, it will get worse before it gets better. But before we descend, with Aristotle, to something more nearly approximating the world of good old-fashioned common-sense, we need to see how Plato seeks to occupy the world of even more old-fashioned wild metaphysical speculation.

#### IV

*All philosophy is footnotes to Plato*  
Alfred North Whitehead

A brief fixing of historical facts. Plato was born somewhere between 429 and 423BCE, probably in Athens, and died in 348 or 347BCE. He was the student of Socrates, the teacher of Aristotle, and founder of the Academy in Athens. Thirty-six dialogues and thirteen letters have been ascribed to him, although some ascriptions are more dubious than others.

We cannot hope in the time available to us tonight to begin to do justice to the breadth and sophistication of Plato's thought. Instead, what we can hope to do is to sketch some Platonic themes as they apply to our larger discussion. In order to do this, we will focus on one of Plato's major dialogues, *The Republic*, for reasons which will shortly become apparent.

Socrates (469-399BC) is the major character in *The Republic*, dominating as he does the discussion that the dialogue purports to record. Plato's writings are the main source we have concerning Socrates' life, and, especially, his thought, although he also appears in writings by Xenophon, Aristotle, and Aristophanes, who in his play *The Clouds* depicts Socrates as a clown who teaches his students how to bamboozle their way out of debt. The explanation for why we have none of Socrates' own writings has, in this case, nothing to do with the vagaries of history, and everything to do with the fact that Socrates himself wrote nothing. This is not (Aristophanes notwithstanding) because Socrates was lazy, but because his style of philosophising was unavoidably verbal. Plato's works concerning Socrates are mostly in dialogue form since that was undoubtedly the best way Plato could find of representing the thought of the man, which developed in response to the remarks of his interlocutors, although it must be said that in *The Republic* and other dialogues, Socrates dominates the conversation and doesn't always know when to shut up. (In this respect, I agree with Aristophanes.)

A large scholarly literature has developed discussing the question of whether Plato is attempting to represent the views of Socrates, or whether he is using Socrates merely as a mouthpiece for his (that is, Plato's) own views. I propose to deal with this academic controversy by ignoring it; life is short after all, and in any case, the scholarly consensus is that in putting forward the theory of the forms (which is what I really want to tell you about), Plato is going way beyond anything that could be reliably attributed to the historical Socrates.

*The Republic* is largely a discussion of the nature of justice and the ideal form of political organisation. To the secret delight of members of my profession ever since, Plato has Socrates propose the truly absurd proposition that the ideal state is one which is governed

by philosopher-kings, and in seeking to explain why it is that philosophers have the best claim to kingship, Plato puts forward his famous analogy of the cave. We may as well present it in Plato's own words (it is Socrates who is talking).

"Imagine an underground chamber like a cave, with a long entrance open to the daylight and as wide as the cave. In this chamber are men who have been prisoners there since they were children, their legs and necks being so fastened that they can only look straight ahead of them and cannot turn their heads. Some way off, behind and higher up, a fire is burning, and between the fire and the prisoners and above them runs a road, in front of which a curtain-wall has been built, like the screen at puppet shows between the operators and their audience, above which they show their puppets."

The mechanics of what is described here is perhaps obscure and a little awkward to describe, but the intent is clear, for we are invited to assume that the prisoners in the cave can see nothing "except the shadows thrown by the fire on the wall of the cave opposite them". We would do little violence to the set up if we imagine instead of Plato's clumsy apparatus, a group of people similarly constrained to watch a movie screen in a darkened room. Not only does Plato say that the prisoners would "assume that the shadows they saw were the real things" but that they would also believe that "the shadows ... were the whole truth".

This is meant to be an analogy with our predicament in the world. When we are aware via the senses of the world around us, we are like the prisoners in the cave, taking what we sense to be the whole truth. As is made clear by the analogy, Plato does not mean that the sensory world is straightforwardly illusory, but rather that what we are aware of via our senses is not 'the whole truth', not what is most real. As we have already seen, this thought is not original to Plato, we have seen it already in Heraclitus and Zeno, but Plato puts a distinctive twist on the theme. Let us see how he develops the analogy further.

"Suppose one of [the prisoners] were let loose, and suddenly compelled to stand up and turn his head and look and walk towards the fire; all these actions would be painful and he would be too dazzled to see properly the objects of which he used to see the shadows ... Don't you think he would be at a loss, and think that what he used to see was far truer than the objects now being pointed out to him? ... And if he were made to look directly at the light of the fire, it would hurt his eyes and he would turn back and retreat to the things which he could see properly, which he would think really clearer than the things being shown him ... And if he were forcibly dragged up the steep and rugged ascent and not let go until he had been dragged out into the sunlight, the process would be a painful one, to which he would much object, and when he emerged into the light his eyes would be so dazzled by the glare of it that he wouldn't be able to see a single one of the things he was now told were real."

The idea here (translating the simile back into our actual situation) is not only that the world we experience through our senses is a pale reflection of reality, but that if we 'compelled' or led to become aware of that reality (by philosophers such as Plato, or

Zeno), we will find the experience disorientating, painful even, not something we would happily undertake.

As an advert for the joys of philosophy, it is I admit not great, but I guess the imagery tallies well with our reactions to Zeno. But before we turn our heads and retreat back to the shadows, remember that our prisoner, when released, is not only led to examine the fire and the objects that cast the shadows, but is also led outside into the sunlight. This has significance for Plato too, but to appreciate this we need to introduce his theory of forms.

As we have just seen for Plato, the world that we are aware of through the senses, the world of appearances, is only a pale reflection of what truly exists. Consider some object that we are aware of through our senses, a tomato, for example. Lets focus on one of its properties, say the property of being red. For Plato, for an object to have the property of being red is for that object to partake of the form of red, where the form of red is something permanently and independently existing that we become (dimly) aware of through our experience of red things. What is true of properties such as being red is also true of properties such as being a chair or being a human being. An object that has the property of being a chair or a human being (ie an object that is a chair or a human being) has that property in virtue of partaking of the relevant form. If you are wondering what it means for an object to 'partake' of the form of red, well that is a good question that Plato himself I think will struggle to answer. But the important points to bear in mind are firstly that, for Plato, the form of red is something permanently and independently existing over and above the object, and, secondly, that our recognising an object as red, or a chair or a human being is a matter of our becoming (dimly) aware of the relevant form. The forms, being permanent, are what truly exist, explaining and sustaining the world of the senses, which can only tell us about the shadows on the wall of the cave. In making this claim, Plato not only sides with Zeno of Elea against Heraclitus, but encodes this Eleatic prejudice against the transient deep into the DNA of Western thought, in ways that will continue to have relevance far into the Christian era. Indeed, it is not really until the latter half of the nineteenth century that philosophers will again explore the possibility of siding with Heraclitus over Zeno, and question the priority of being over becoming.

Now, for Plato, the most important property that an object can have is the property of being good. A chair can be a good chair, a human being can be a good human being. Since goodness is a property, according to Plato's theory of the forms, there is also a form of the good. In fact, for Plato, the form of the good is the supreme form that in some sense generates all the other forms. It is the form of the good that is represented by the sun in the simile of the cave. The wise man (and for Plato it would always I'm afraid be a wise *man*), the lover of wisdom, the philosopher, is one who has left the cave and the fire behind and is able to walk in the light of the sun, the eternal and objectively existing form of the good. Philosophers ought to be kings, says Plato, precisely because this experience of the form of the good will give them, as we might say, perspective on the affairs of man, although one might well wonder what affairs more worldly men might get up to whilst their philosopher-king was, as we also might say, away with the fairies.



It is important to recognise that Plato's forms are not physical objects – they have a non-spatiotemporal existence, which is why they are not directly apprehensible by the senses. The priority of the intellect over the senses as a route to knowledge is an important Platonic theme. As long as one relies on the senses, one will remain trapped, watching shadows on the wall of the cave, and it is only by using one's intellect, that one can free oneself to walk in the sunlight and see things as they really are.

In various guises, the battle between the senses and the intellect is one that is fought over and over again in the history of Western thought. To give a major example of this tension, there is clearly at least an implicit religious or mystical dimension to Plato's emphasis on the extra-physical nature of reality, which tells to a certain extent against a scientific approach to the world, which tends to assume that there is nothing beyond the physical world. It is telling that in *The Republic*, right after introducing the analogy of the cave, Plato goes on to talk disparagingly about astronomy, then as now the science that seems most likely to disclose the true nature of things. Plato has Socrates say, "I think that, as [astronomy] is at present handled by those who use it as an introduction to philosophy, it makes us look down, not up." The scientist Carl Sagan, who presented the television programme *Cosmos* in the 1970s, and who incidentally intrigued my eight-year-old self with his pronunciation of the word 'human', blamed Plato for a one-thousand-year delay in the development of science. One shouldn't overplay this point. Not only does this ignore the existence of Aristotle, who as we shall see in just a moment was a much more down-to-earth and scientifically minded philosopher, but it should also be pointed out that Plato talks much more positively about astronomy and other natural sciences elsewhere in his work, and that it was the Academy that Plato founded that was largely responsible, with the development of more refined mathematical techniques, for the increasing sophistication of Greek astronomy over the next three hundred years. But neither should one underplay Sagan's point. Although it was the neo-Platonism of the early centuries AD that fully developed the mystical and religious strands of Plato's thought, those strands were there already to be developed, and they have undeniably left a permanent mark on the Western mind.

V

*The gods too are fond of a joke*  
Aristotle

It is ironic that, during the scholastic era of philosophy in the Middle Ages, when religious orthodoxy dominated philosophical speculation as never before or since, it should be Aristotle and not Plato who was referred to simply as 'The Philosopher', for one would initially expect religious thought to sit much more easily with the Platonic conception of the nature of reality as I have just sketched it than with the drier and more scientific cast of Aristotle's mind. There is a question to be asked as to why it was Aristotle who gained so much prominence in the Medieval mind, but it is a question that we will postpone to next week, when we will have a clearer idea of just what it was that Aristotle thought.

It has to be said, however, that, although I unhesitatingly recommend Plato for his literary style, the same cannot be said of Aristotle, whose writing often feels cramped and awkward. Indeed, I would not be surprised if there is much truth to the suspicion of some classicists that what we have now as the works of Aristotle are often little more than lecture notes. Cicero, himself no slouch when it comes to literary elegance, describes Aristotle's style as 'a river of gold', but little of that gold appears to flow through the pages of works such as the *Nicomachean Ethics* or the *Metaphysics*.

Be that as it may, once one gets past the writing style, the intellectual rewards are glorious. As with Plato, but even more so, the full range of Aristotle's thought cannot be captured by a brief survey, and so we will have to be selective. But it is worth emphasising the breadth of his writings, which covered physics, metaphysics, poetry, theatre, music, logic, rhetoric, linguistics, politics, ethics, biology, and zoology. His surviving works are vast, and it is likely that they constitute only a small proportion of what he actually wrote. As with Aquinas, one is liable to be impressed by the sheer volume of writing, even before one gets to an appreciation of the quality.

In general terms, one will not go too far wrong in viewing Aristotle, in matters metaphysical, as the anti-Plato. As is so often the case with teachers and students, Aristotle repudiates much of the substance of what Plato teaches, whilst in many ways his thought retains an indelible, if diffuse, Platonic stamp.

To put some flesh on the bones of the previous remark, we should note straight away that Aristotle retains an interest in metaphysics, in attempting to delineate what can most truly be said to exist. But if there is something Platonic about this interest, the answer that he gives, and the way he goes about discovering that answer, could not be more different. For Aristotle is undeniably a scientist, a natural philosopher, for whom the way to gain knowledge, even of metaphysical matters, is to investigate the world as we experience it. It is not that Aristotle does not reason or use his intellect, but that for him, the use of one's intellect in reasoning must always be grounded in experience, in the very senses that Plato rejected as mere conjurers of shadows.

It is not surprising, then, to find Aristotle engaging in careful, scientific observation of the natural world. And although much of his scientific work is inevitably obsolete, there are a few remarkable discoveries that he made. It is in Aristotle, for example, that we find the first description of a pin-hole camera, or *camera obscura*, which, it seems, Aristotle used to make observations of the sun; and Aristotelean logic was viewed as essentially correct and complete for over two thousand years, until the turn of the twentieth century.

This is before the neat division of intellectual endeavour into easily categorised subjects, and Aristotle appears to have seen little fundamental difference between his work in physics and biology and his work in rhetoric, poetics, or metaphysics. He called them all 'science' (*dianoia*), although he did draw distinctions between 'practical science' (politics and ethics), 'poetical science' (the study of poetry and the fine arts), and 'theoretical science' (physics, mathematics, and metaphysics). What unites all these pursuits as science is the application of Aristotle's philosophic method in enquiry, which

entails the ascent from the study of particular phenomena to knowledge of the essence of things.

So although Aristotle arrives at metaphysical conclusions, as we shall see in just a moment, he differs from Plato in two fundamental ways. Firstly, whilst Plato says that the way to knowledge of reality is to ignore, or bypass, the world of the senses and to use pure reason, Aristotle takes it that knowledge of reality is only to be gained by using our senses. Secondly, and consequently, whilst Plato's forms have a separate existence, belong to another realm, the metaphysical categories that Aristotle discovers are the simply most abstract way we have of describing this very world that we are aware of through our senses. This slide, a detail from a fresco by Raphael, captures the contrast beautifully – Plato on the left gestures towards the heavens, symbolising his belief in the forms, whilst Aristotle, the figure on the right, gestures to the earth, symbolising his belief in the importance of observation and experience.

Even if we restrict ourselves to Aristotle's metaphysics, his scheme is so extraordinarily rich that I cannot hope to do justice to it here this evening, and all I can do is sketch his most fundamental insights. We can warm up to this by looking briefly at Aristotle's treatment of the notion of a cause.

Everything that happens in the world around us is caused by something else. So the fire is caused by the dropped cigarette, the water in the kettle is caused to boil by the heat of the filament, and so on. Aristotle takes this notion of cause and divides it into four. So we have

1. The material cause
2. The formal cause
3. The efficient cause
4. The final cause

The efficient cause is that from which the change we observe in the world first starts, so, for example, the efficient cause of the fire is the dropping of the cigarette. The final cause is the purpose or end that something serves, or the reason for something's existing, so if our fire was started for a reason, the final cause is the reason or purpose towards which the arsonist aims. The material cause is the material out of which something is composed, so the material cause of the cigarette is the tobacco, paper, and so on out of which it is made. The formal cause is the arrangement of that matter in the particular object, so the formal cause of the cigarette is the way that the matter out of which it is composed is put together.

It is the efficient cause that answers most closely to our modern, scientific notion of causation. And it is the final cause that has important implications for religious thought – if everything has a final cause, as Aristotle asserted, then it makes sense to consider the final cause of the entire universe, the end or purpose that the universe is directed towards, a concept that is given a prominent position in Christian theology, where the purpose of the universe is taken to be God. The material and the formal causes are less familiar, and

they are important here only because they point towards Aristotle's fundamental metaphysical distinction, that between matter and form.

When Aristotle talks of form, he does not mean the same as Plato, and it is unfortunate that the same English word is used for such different concepts. Aristotle's use is closer to the everyday English sense of shape or arrangement of parts. Aristotle remember, in his metaphysics, is seeking the most abstract description of the world we experience, and so his notion of form is rooted in this world, the world of chairs, tables, trees, and rivers. When we consider things, objects, in the most general way possible, we will say firstly, that they are composed of matter, that, secondly, has some kind of form. So the tree and the table are both made of wood, they have the same matter, but the way in which that matter is shaped is different, that is, the wood has a different form. We may be tempted to say that identical statues, one made of stone and the other of wood, have the same form but different matter, but that is not quite right, since for Aristotle, the very difference between stone and wood is also due to form; regardless of the fact that they are shaped in the same way, our two statues still have different form precisely because they are made of different stuff; stone and wood themselves are both matter formed in different ways.

In one sense, this idea is very simple, and once grasped seems obvious, irresistible even. Partly this is because Aristotle's ideas have permeated Western thought to such a degree that our common sense ways of thinking are often Aristotelean, although we don't usually recognise them as such. But it is also because Aristotle's purpose was to describe, albeit in abstract terms, the world of our experience, and the very obviousness of Aristotle's scheme is an argument in favour of it.

Mind you, if we take this Aristotelean framework seriously, as the scholastic philosophers of the Middle Ages did, we are quickly led into perplexities. To give just one example, this distinction between matter and form leads us inexorably to postulate the existence of prime matter, matter that has no form at all. We cannot separate matter and form in a test tube, to be sure, but unless there was some basic, unformed stuff, there would be nothing for form to mould, nothing to give form its weight and heft in the world. Although prime matter seems to be an irresistible consequence of the Aristotelean scheme, the very idea of it seems barely comprehensible. It is in many ways the bane of Aristotle's framework, a poisoned chalice handed down by him to later generations, and we shall, I'm afraid, meet it again.

## VI

It is time to draw some conclusions from our whistle-stop tour of Ancient Greek philosophy. So let me summarise the viewpoints of the thinkers we have looked at in their own terms, and then relate these viewpoints to our guiding theme of the relationship between reason and the divine.

As we have seen this evening, neither Heraclitus nor Zeno were able to see how there could be both persistence and change in the world, and saw themselves as having to

plump for one or the other. Heraclitus plumped for reality as flux, change; Zeno for permanence. In this debate, Plato sides with Zeno, his forms are eternal and immutable, and furthermore have an independent existence that we are aware of only dimly through the world of the senses. Aristotle can be viewed as dissolving this debate, by providing a framework in which we do not have to choose between persistence and change. Matter exists permanently, eternally, but it can take different forms, and because of this we are able to reconcile both change and persistence, and take them both as being equally real. There is change, but throughout all change, there is something, matter, that persists.

I have also tried this evening to bring out a contrast in the ways in which Plato and Aristotle approach the question of the fundamental nature of reality. For Plato (as indeed for Heraclitus and Zeno before him), the senses are a distraction, and reality is thus to be approached through the use of pure reason, whereas for Aristotle, all knowledge must be based in our sensory awareness; we must still use reason, to be sure, but it is always to be grounded in the senses, which are in this respect for Aristotle primary.

Finally, this contrast between Plato and Aristotle leads to an important difference in the nature of the reality that they discover. Although Aristotle's fundamental metaphysical categories of matter and form are abstract, and not to be found unmixed in the world of our experience, they apply unambiguously to this world, the world that we discover through our senses. In contrast, the ultimate reality that Plato takes himself to have discovered is separate from the world that we discover through our senses; his world of the forms is what truly exists, and the everyday world of chairs, tables, trees, rivers, and so on is at best a distorted copy of that world.

Our survey of Ancient Greek thought has covered the years from approximately 500BC to around about 300BC. If we haven't mentioned Christianity yet, it is, of course, because it doesn't yet exist. But the development of monotheism, the idea that there is one God, rather than many gods, happens most clearly in Palestine at around the same time as the period that we have covered this evening. (Biblical scholarship suggests a time of composition for the earliest books of the Old Testament of approximately 500 or 600BC.) This development towards monotheism is one strand of the emergence of human thought from its mythological childhood, another strand of which is represented by the flowering of philosophical thought in Ancient Greece that we have examined more closely.

If we wish to examine the relationship between reason and the divine, then, haven't we been looking in the wrong place? There are several reasons why I would dispute this, and maintain that our time this evening has been well-spent.

Firstly, I have for this evening been working with a concept of the divine that is wider than the common use. If we take the divine to mean that which is of special or momentous concern, then Heraclitus, Zeno, Plato, and Aristotle are all, in considering the ultimate nature of reality, investigating the divine, even if their investigations, at least as we have explored them this evening, do not include the notion of God.

Secondly, although I have been focusing on metaphysical rather than explicitly theological matters, on a wider rather than narrower notion of the divine, it is not true to say that monotheistic thought is entirely absent from Ancient Greece. Although as a social institution, Greek religion (and the Roman appropriation of it) will survive for many hundreds of years to come, the mythological Greek pantheon is under attack from the very thinkers we have been looking at, sometimes explicitly, sometimes implicitly, and their weapon of choice is reason. Furthermore, there are explicit references to monotheism in the Greek thinkers we have met this evening. Plato's description of the form of the good as the ultimate principle of reality is at least a kissing cousin of the narrow conception of the divine, and is developed more explicitly in that direction by later, neo-Platonist thinkers (as we shall see next week). And Plato at least, is also explicitly committed to the idea of a *demiourgos*, an entity that fashions and shapes the universe. This *demiourgos* is not yet the familiar creator God of Judeo-Christian thought, since he only shapes pre-existing matter, and thus does not bring the whole universe into being *ex nihilo*, from nothing, but it is a large step in that direction. It is also the case that in Plato's dialogues, Socrates often refers to 'god' in the singular rather than 'gods' in the plural, and actively rejected the Greek pantheon. Socrates was put on trial for not believing in the gods of the state, as well as corrupting the minds of the young, and famously sentenced to death by poisoning.

Thirdly, our theme for this entire series of talks is the relation between reason and the divine, and if the concept of the divine (in its narrow sense) is elucidated most strongly elsewhere, it is in Ancient Greece that the concept of reason as a tool for probing reality is developed most fully. Once again, we should not be surprised that sacred texts do not contain much abstract reasoning; they are primarily celebrations of God, rather than detailed critiques. But in the pagan Greek texts, we do find critique and investigation, and their non-sacred purpose allows them more freedom in to speculate. This freedom from orthodoxy is reason's claim against religious dogma; if we are clearly to see how religion changes things, we need to have some idea of what it was like beforehand.

Finally, and most importantly, the great systematic theological philosophies of the Middle Ages, although delimited and circumscribed most sharply by religious orthodoxy, all take place within an intellectual framework that is laid down by Plato and Aristotle. Plato and Aristotle set the tone for the whole history of Western thought that follows them; they pagans that even the most devout of Christian thinkers find it impossible to ignore. In ways that I have tried to bring out this evening, Plato and Aristotle represent opposite poles of thought, opposite ways of approaching the world, that Western culture has oscillated between ever since. The Ancient Greek way of looking at the world is both familiar and unfamiliar at the same time; unfamiliar because our contemporary Western culture, largely godless as it perhaps is, has nevertheless been shaped by Palestine as well as Greece, and the philosophies of Plato and Aristotle have entered our common understanding only as refracted through the lens of Christianity; familiar because when early Christian thinkers begin to reflect on the nature of the world bequeathed to them by their religion, on what finite and fallen human understanding can possibly know about the nature of the world, they inevitably do so within the frameworks handed down to them by previous, pagan generations, frameworks that have moulded our thought ever since. We

cannot hope fully to understand the relation between reason and the divine as played out in the Christian era without grasping the outlines of Greek thought, and it is just such an outline that I have tried to present to you this evening.