A Brief History of Intelligent Design

There is an acrimonious debate going on in this country over whether or not the theory of 'Intelligent Design' should be taught, alongside Darwin's theory of evolution, in the science classrooms of our public schools. The theory of ID states, briefly, that the complexity of plants and animals is so great that it is in fact impossible that it could have arisen by blind chance and natural selection, and must have been engineered by a thinking mind who carefully planned the finished product. In November 2004, a school board in Dover Pennsylvania decided that teachers should inform their students that the theory of evolution is 'not a fact' and contains 'gaps for which there is no evidence', and make them aware of the of the rival theory of Intelligent Design, and direct them to a specific textbook which strongly promoted that theory and against Darwinian evolution. The teachers at the school refused to carry out these instructions, on the grounds that it was a violation of their responsibilities as professional educators. So the short message was delivered to the students by the board members themselves. Later, a group of parents sued the board on the grounds that they were promoting a religious agenda within a public institution, in breach of the first amendment which asserts the separation of church and state. The judge presiding over the case, John Jones, decided for the plaintiffs and dealt the proponents of Intelligent Design a long and stinging rebuke. He determined that the theory of Intelligent Design was not a scientific theory at all, since its chief explanatory device — an unnamed and mysterious designer — was beyond the reach of any form of scientific investigation; also, that the unnamed designer was in fact perfectly well understood by all advocates of theory to be identical with the God of the Bible; that attempts to conceal that part of theory were disingenuous; also, that the advocates of ID had systematically misrepresented the scientific case, twisting the evidence in their own favor and against the theory of evolution; and that ID was a repackaged version of 'creation science' which had already been banished from

public schools in earlier trials because it was manifestly not a science but an inference from the book of Genesis.

I think we should be fairly pleased by this result, if we support science, and if we support the separation of church and state. We should also watch the next stage of this debate with great interest. The proponents of Intelligent Design will devise new and strategies for getting around the legal obstacles so far placed in their path. What's more, more than two thirds of Americans endorse their thesis, that human beings were either miraculously created at a single moment in the past or evolved under the guidance of a higher power (as do the vast majority of people throughout the rest of the world). Two thirds of citizens believe that creationism should indeed be taught in schools alongside evolutionary theory, and nearly forty percent think that creationism should be taught in our schools *instead of* evolutionary theory. So there is not the slightest chance that this civic debate will end any time soon, even if history suggests that the creationists are slowly losing the battle, and can only win it by somehow changing the rules. But one good reason for keeping a close eye on things is that they may well try to change the rules, and the rules are worth fighting for.

In the light of these polls one might think that the position of those who oppose the teaching of creationism was anti-democratic and elitist. Perhaps the academic establishment is imposing its godless will on the majority. If most people are in favor of bringing religion into education, who are we to say that the people's will should be thwarted? But that way of seeing things would be a serious confusion. The issue here is the separation of church and state, which is itself one of clearest foundations of this democracy and its civil liberty. Proponents of ID do not see it that way, and some of them openly declare that the separation of church and state is something that they wish to demolish. Others support that demolition by default. That is because people who believe in the absolute truth of the Bible automatically feel that it would be very a good thing if the government strongly encouraged more people to share their faith, and if the government's policies

were explicitly based on what the Bible instructs. They may not notice that that their wishes could only come true over the dead body of the constitution. Whether deliberate or accidental, these theocratic tendencies — which I the proponets of ID clearly exhibit — represent a serious threat to our democracy. Like freedom of speech, and freedom of the press, freedom from being bullied by other people's religious faith must trump even the clear will of the majority. To see that this is so, just imagine that ninety percent of the population had voted for an explicitly theocratic political party, and the resulting theocracy introduced massive restrictions on scientific, artistic and personal freedom. Suppose that they banned the teaching the theory of evolution, for example, along with homosexuality, atheism, and the films of Woody Allen. We should not say that in that case the theocracy must be democratic since it expressed the will of the majority; rather we should say that the majority had decided to destroy democracy, just as they might easily do by voting for a king, or by voting to abolish their own right to vote. Theocracy and democracy are necessarily opposed. Once God is our king, democracy is finished. There is no chance of voting Him out of office, and not much opportunity to modify with His policies.

My aim here is not to discuss these questions directly, important as they are. Instead I am going to examine the equivalent debate over ID that we find in ancient philosophy, which in many ways is similar to the modern debate and in other ways informatively different.All through thr ancient period, some version of ID was the othodox view of most philosophers and scientists, and I will concentrate on the much rarer philosophical and physical theories that *opposed* ID; those ancient mechanistic explanations of biological complexity — proto-Darwinian views, so to speak — and try to trace the influence of those early theories from the ancient world down to the modern. These ancient materialist accounts of biology are an interesting little detail in the history of philosophy and of science, and they may also shed some light on the battle that we now find ourselves embroiled in, especially if we pay close attention to the way that people responded

to those theories at the time.

Before that it might be useful to tease apart some of the different questions involved in the modern debate, so as to give ourselves things to look out for. There are at least three or four quite different questions layered on top of one another, and not all of them are particularly important. First there is the question of whether or not ID *is a science*. That debate occupied most of the recent trial in Dover, and the immediate aim of the school board was to establish that ID is a science and deserves to be taught or at least mentioned in the science classroom. The best-known advocates of ID, such as Philip Johnson and Michael Behe, concentrate on arguing for its scientific credentials. Most scientists, on the other hand, say that ID is not a science, because it departs from the usual conventions of prediction, testability, and confirmation, and becauase it is an entirely negative thesis: it tries to point to problems in the Darwinian story, without proposing any *detailed* alternative. But this whole question is quite clearly secondary. Modern science has so much prestige as a gatherer of *truth* that to admit that a theory is not scientific is virtually to admit that it is false, or that people have no very good reason to accept it, period. So advocates of ID are whether or not they are or were interested in science, are forced to try to give it a scientific basis. They can see that they must use *other people's* respect for science even though they do not respect it themselves. What's more, I'm not sure that the distinction really makes any sense in the first place, even though both sides agree it on. The only distinction that matters is between *good* theories and *bad* ones; between conclusions that are plausible and those that are not. When we say that ID is 'unscientific', we actually just mean that it is false, as far as we can tell.

So lets very briefly consider this other question of whether the theory of ID is true or false. In so far as ID directly opposes Darwin — for example, when it tries to deny that we are descended from apes, and to ignore the evidence that comes from geology and paleontology and genetics — it does very poorly indeed and is hardly even worth engaging with except for purely political reasons. But some

versions of it concentrate only on areas that Darwin left unexamined and that have still not been solved and are at least not obviously absurd. For example, we really don't yet know how life first arose. We don't understand how inanimate matter first became able to replicate itself, although there are various guesses that people are working on. The advocates of ID insist that this initial step was most probably brought about by the intervention of a conscious bio-engineer. God, that is. The complexity even of a unicellular organism, they say, is so mind-boggling, that no purely mechanistic story could possibly account for how it arose. The argument is weak. It looks exactly like their earlier universal confidence that no mechanism could possibly get us from simple life forms to vastly more complex plants and animals. Theists proved to be wrong about that, and they're probably wrong about the origins of life as well. Right now, in the light of the history of modern science, it seems far more reasonable to suppose that there a mechanistic story of some kind to be told about the origins of life, and that we should work to figure out that story, rathert than hastily reach for God to plug the gap. Another argument that theists sometimes employ concerns the nature of the entire cosmos. It turns out that the physical constants of the universe, the speed of light, the gravitational constant, and so on, are perfectly suited, as if by some literally astronomical fluke, to the eventual emergence of life. This is no fluke, they say: the constants have surely been set *so as to make the emergence of life possible*. Perhaps that is so, perhaps not. The real problem is that if we do hypothesize that a conscious designer was responsible for the laws of the cosmos, there is absolutely nothing we can do to test our theory; there is also nothing we can do to solve the new and vastly greater mystery of who this designer is and how he did his designing, and where he came from. From a scientist's point of view, the theory simply makes no difference to how we should proceed, and instead invites us to pack up the telescopes and go home.

Of course, for the proponents of ID, these are not problems at all. For them, there is no mystery about the identity of the designer. The bible, or the

Koran, as the case may be, tells them a great deal about who he is and what his intentions are, and they see the inexplicable perfection of the cosmos, or the first cell, just as a kind of corroboration of what they've known in their hearts all along, even though in court they have to conceal that element of their thinking. It also doesn't matter that we have nothing further to do, *scientifically*, once we have invoked miraculous conscious design. What really matters is what will follow *ethically* once some version of the creationist view is accepted. That is what the debate is really all about, and that is the question that forms the real core of the argument, however much people dance around it. What follows *ethically* from accepting Darwin's view?

Here is the case in brief. Darwinism denies that God took any interest in the creation of humanity. Hence, he must be saying that God has no plan for us, and no ethical instructions. Opponents of Darwinism call this view 'metaphysical materialism' and think that according to such a view there can be no ultimate right or wrong, no way of giving reasons for acting one way rather than another. *If we did not come into being for a reason, then obviously we have no reason for being.* Even if we have ethical instincts, evolved by natural selection — love for our children, for instance, or a willingness to cooperate and form friendships — those instincts, according to Darwinism, are merely devices imposed on us by our mindless genes that happen to increase the overall likelihood of our successful reproduction, and thus have no ultimate meaning and no real claim to our obedience or respect. Thus Darwinism, if it is accepted, must lead to amoralism or madness. If humanity is the accidental product of mindless matter, acted upon by purely mechanistic, algorithmic processes, then nothing has any real importance — so the argument goes.

The school board at Dover did not mention these meta-ethical anxieties as an argument in its favor of ID. They knew that they had no bearing on the scientific debate and kept it hidden from view, just as they concealed their religious faith. Nevertheless, fear of ethical collapse is a driving force behind the

movement, and it appears that many people think that the proponents of ID might be right to be worried. The same poll that I quoted earlier reports that 30 percent of people who believe in evolution still think that creationism should be taught in schools *in place of* evolutionary theory. This might at first seem inexplicable. Why would people who accept Darwin's theory want to see it suppressed? Obviously they must think a creation story, even if it is false, will improve their children ethically, and that Darwinism, even if it is true, will do them some kind of harm. These same worries are shared by those philosophers and scientists who, while not wishing to renounce the theory of evolution altogether, are dead set against allowing it into the explanation of the human mind. That is, they oppose the growing science of evolutionary psychology, which looks for Darwinian explanations for our behavioral instincts, invoking natural selection. Let me give an example of what I'm talking about. Suppose we ask why we should act with a regard for justice. Christians will answer, roughly, that justice is God's will and that he has implanted a respect for it in our nature and talked about it in his book. Kantians will say that fair treatment of others is an inescapable dictate of rationality itself. Utilitarians will say that we should act justly if it will increase overall happiness, which reason commands us to maximize. Others argue that whatever the reason, it had better have something to do with our interest in justice and our conscious thoughts about it. But the neo-Darwinians apparently say something like this: that we act justly because we happen to have evolved an instinctive attachment to that kind of behavior, since it happens to have generally assisted the self-replication of the genes that now hard-wire it into our brains. Justice is, roughly, an accidental instrument of slick gene transmission. Most people still find that explanation deeply unsatisfying, or at least bizarre, and any number of secular philosophers can be found who will denounce it with the same fervor the creationists show in arguing against the other parts of the Darwinian view. So in fact there is a very broad consensus against Darwinism on this point — its ethical implication — and the ID people are only a small and rather extreme part

of that coalition.

The official position of the *state,* even as it bans ID from public schools, is that religion and science do not contradict each other. That view seems to be politcally required by the state's commitment not to endorse or oppose any religion. It also does not make any sense. Consider this part of the concluding section of Judge Jones' decision:

[M]any of the leading proponents of ID make a bedrock assumption which is utterly false. Their presupposition is that *evolutionary theory is antithetical to a belief in the existence of a supreme being and to religion in general.* Repeatedly in this trial, ⋯ scientific experts testified that the theory of evolution represents good science, is overwhelmingly accepted by the scientific community, *and that it in no way conflicts with, nor does it deny, the existence of a divine creator.*

So the Dover school board says that Darwinism conflicts with the view that we have been designed by God and have a special place in his concerns. The judge calls that assumption of conflict 'utterly false'. But on the contrary, it is utterly reasonable and probably true. Darwin's theory does indeed cause serious problems for the traditional belief in a creator; and that means for a creator *of any kind*. It explains how living things, including human beings, and their morality, could have arisen without the intervention of any divine agent. The absence of the divine agent is *the whole point*. That's what makes it such an elegant theory. It therefore clearly undermines the best reason that we used to have for imagining that there must have been such an agent, and since we don't need two separate explanations for the same phenomena, it also gives us a pretty good reason for guessing that there never was any such agent. But Judge Jones stuck closely to the compatibilist view because he knows it is not the business of the courts or the government to declare religious theories false.

Certainly there are many areas where religion and science are not in any

conflict, and perhaps there are areas where religion offers insights that science does not. But creation is just not one of those areas. It does not make any historical or philosophical sense to pretend that Darwin's discoveries have no bearing on whether or not there is a creator. The compatibilist view tries to dodge the issue altogether, as follows. It states that even if the theory of evolution is entirely correct, that has no bearing on the matter of whether there was a divine creator; for it may simply be that natural selection is *the mechanism that God chose for his creation*. We might call such a view *weak* ID, since it still proposes divine creation, within science and with Darwin, as opposed to *strong* ID, which seeks to overthrow Darwin. But weak ID hardly seems any more reasonable. Imagine that a group of children discovered that the presents that they thought were brought to them by Santa Claus had been bought at the local mall and given to them by their parents. Surely this gives them pretty good reason to think that Santa Claus was not involved in any way. Not so, according to this kind of compatibilism. After all, it could be that the choices and actions of the parents were just the mechanism that Santa Claus used for delivering the presents. The parental theory, on this view, in no way conflicts with, nor does it deny, the Santa Claus theory. Indeed, Santa's ability to manipulate parents might just serve as even greater evidence of his amazing powers. Likewise, Kenneth Miller, who spoke at the trial, and has written an excellent demolition of strong ID, but who supoprts weak ID, argues that the complete self-sufficiency of the material world just goes to show how good God was at designing it; if he had had to intervene miraculously at any stage to make up for the inability of matter to generate life on its own, that would suggest he had botched the job, like a mechanic having to get out and push his car because the engine has stalled. There is surely something fishy about this. Notice that on this view the evidence for God's total absence from the scene is somehow turned into the strongest demonstration of his matchless skill. Miller even argues that the old argument from design, which saw God's hand directly at work in the complexity of plants and animals, is nothing less than an insult to God! Strange

that nobody saw it that way in the twenty-five centuries before Darwin destroyed it. Obviously Miller has reasons for the hands-off designer that don't come from his excellent scientific work or his observation of nature, but from his strong catholic faith. He can point out that Darwinism does not prove that there was no divine Creator; it only rules out certain modes of creation. The more general thesis of cosmic design, supported by faith, still remains, even if in a weakened form. If we are convinced on grounds of faith that God somehow created us, *and* we are committed Darwinians, then it follows as a matter of course that natural selection must be the tool of God. Perhaps that makes sense. But I don't think so. I will return to it after my brief history tour.

In the sixth century B.C. Anaximander of Miletus proposed that fish or fish-creature had spontaneously emerged from hot pools of mud at some time in the distant past, and that human beings had first developed as offspring of the spontaneous fish. Their fish parents had gestated the proto-humans until puberty, at which point they emerged already able to feed themselves. This bizarre hypothesis shows a clear desire to remove the miraculous and the divine from human origins. You might well object that it would be fairly miraculous for a fish to give birth to teenager, but clearly Anaximander is trying to get around the following problem: if human beings arose just by nature's own workings, organically, then the first human beings must have been infants before they grew into adults. You can't get an adult except from a child, unless by some miracle. How could the very *first* human beings have survived as infants, without adults to look after them? Hence the fish theory. Notice that there is a far easier theory that avoids the fish: why not just say that the gods placed human beings on the earth in adult form? Well, that's the response that Anaximander is trying to find an alternative to. And at the very least he succeeded in showing that divine creation is not a logical necessity — as it must have seemed to many, in pre-scientific times, when they pondered the mystery of where the first person came from. He showed

that there were conceivable alternatives. His particular theory was dismissed; but the project that Anaximander had inititated, the search for a natural account of biological origin, was taken up by others. It's a nice irony that the very first scientific biological theory was also crudely correct: we *are* the offspring of fish.

Xenophanes of Colophon, also of the sixth century BC, left us no theory as to the origin of life. Even so, he deserves to be mentioned on account of his extremely important idea that human beings imagine their creators as human in body and in mind only because of their tendency to project themselves onto the universe. We assume that the universe is just like us. He thought that if cows had gods, their gods would look like cows, and think like cows. In reality, he said, we have no real idea about what the forces that govern the universe are like, and no reason to think that they resemble us in any way whatsoever. This insight is powerful. The traditional 'argument from design' involves a key assumption that since the universe is a very complicated structure, it must have come into being in exactly the way that we human beings would bring such a structure into being; that is, by conscious design, by the operation of a mind. But as David Hume pointed out many centuries later, that seems a rather conceited assumption. *We* have minds, and we use them to design things; but why should we assume that the universe is the product of that very *human* thing: a mind. Perhaps it has some non-human non-intelligent way of generating complexity; for all we know, perhaps it came from the bowels of a giant spider, rather than from a quasi-human mind, and he adds that such a theory may seem utterly riduculous to us, but would probably seem rather plausible on a planet inhabited by spiders. That's pretty much the same argument as the one made by Xenophanes.

A very imnportant aspect of this anthropomorphic side to ID is the fact that it always assumes that the designer resembles us *ethically*. The deisgner is good, and he is fair; and he created the world for some kind of reasonable and admirable purpose. Once a conscious mind in in the story of our origin we generally find it impossible to imagine that that mind might have been *inhuman* or

inhumane; we find it hard to believe that it could have been a cruel, or unfair designer, or that it only created the world to amuse itself, or to cause us pain, or for no reason at all. But we have no reason beyond our own ethical convictions for assuming that the designer is good. Even those religions that insist that God does not have human form and may not be represented by any image still very clearly asume that his *mind* has human form and shares all of our ethical interests to the tiniest detail. But Xenophanes' insight was that those two tendencies are really just the same. If we're going to say that God cares about human mistakes and has human passions, we may just as well say that he is bearded and has brown eyes.

Perhaps the most important of all the early mechanistic accounts of origins was proposed by Empedocles of Acragas, in the fith century BC. His theory like all the others I am examining, only survives in fragments, and what's more in the form a rather difficult hexameter poem; but we can reconstruct it with some confidence. Like other presocratic philosphers, Empedocles seemed to have an interest in explaining the world in material and naturalistic terms; he proposed that there are four elements, earth, air, fire and water, and that everything else comes into being out of those elements and eventually passes back into them again, by natural processes involving 'love' and 'strife' which seem to stand metaphorically for all the various processes of material organisation and of destruction respectively. But the part of his theory that interests is what he has to say about the origin of animals, which always presenst by far the greatest challenge to the materialist. It is one thing to imagine that a rock, or a cloud or an ocean might somehow form by the natural processes that we can still see around us; but quite another to imagine that mindless forces might somehow produce a frog or a fish. Conversely, the ancient advocates of divine creation always centered their arguments on biology and assumed that that part of their argument was impregnable.

Empedocles imagined that the there was originally some kind of chaotic mix of the four elements, which gradually began to organise itself into the non-

biological world. Then a kind of soup of weird biological fragments arose spontaneously in this early fluid mixture of matter.

> many headless necks sprang up⋯
> naked arms wandered around, lacking shoulders,
> and eyes bobbed around, bereft of faces⋯

These grisly fragments then began to coalesce, and Empedocles is very clear that they did so randomly, and that the arrangements that they ended up in arose purely by chance. He also emphasizes that there a very large number of total combinations:

> these things began to merge together,
> in whatever manner they happened to bump into each other,
> these and many more besides,
> continuously coming into being⋯

The parts coalesced into animlas. But as you might expect from this process of entirely aimless and undirected blending, the results were rather chaotic:

> many animals grew from the mix
> that were double-faced, or double-chested,
> there were cows with human heads,
> and human bodies with the heads of cows,
> ⋯creatures mixed from male and female parts⋯
> ⋯oxen with countless hands⋯

The next part of the story is lost, but the basic idea is recorded by Aristotle's *Physics*, and by various commentators on that text, one of whom explains what

hapenned next:

> In cases where parts happened to come together in such a way that the resulting combination was capable of surviving, the result was an animal that persisted, because the different parts served each others needs, the teeth cutting or pulping the food, the stomach digesting it, the liver making the blood, and so on. If a human head happened to come together with a human torso, the resulting whole survived, but if it attached itself to a cow's body, it wouldn't fit, and it perished.

So a tiny minority of the parts luckily coalesced into larger organisms that happened to be capable of survival and of reproducing themselves, which is what they did from then on. The other monsters vanished. This story is at least intellgible, even if it is rather strange. Aristotle correctly summarises it as implying that animals and their parts have come about by chance, and it is quite clear that is indeed Empedocles' main aim: to devise a workable theory that avoids the intervention, at any stage, of a conscious designer, or indeed of any pre-existing pattern, whether natural or in the mind of a creator, according to which animals were formed. He can see that it is hugely improbable that a cow or a man could spontaneously emerge from inert matter, and he is doing his best to narrow the odds. First he breaks the improbable organisims down into smaller parts which might more plausibly form on their own. Next, and much more importantly, he massively increases the number of attempts at mindless cow-building: if countless smaller parts come together in countless ways, then it isn't so unlikely that somewhere you'll get a cow. You have to be very lucky to win the cow-lottery: but you don't have to be so lucky if you buy 60 billion tickets. Next he imagines that a still visible constraint, the demands of life and the difficulty of survival, might have pruned out the failures: the almost-cows. In all three respects these strategies were later taken up by Darwin, and we can easily see here a rough analogy with the

principal of natural selection, as well the idea of moving from simpler to more complex structures, and the crucial idea that astronomically improbable organisms can arise without design as long as the forces that create them are blundering a billion times for every fraction of success. In Darwin's theory, that problem is solved by the idea of random mutation. The vast majority of mutations do nothing or cause harm; but one in a million happens to have some beneficial effect, and the result, when acumulated over vast expanse of time, is the illusion of design.

The next philosopher of note to take up the materialist challenge was Democritus of Abdera, in the later fifth century; a contemporary of Socrates. He is best known as one of the founders of the atomic theory, according to which the whole universe is made of atoms — tiny, indivisible particles of matter of various shapes and sizes — and nothing but atoms. He was a prolific writer of philosophical teratises expressing his materialist theories, not one of which has survived. But it seems highly-likely that he is the originator of many of the theories later taken up by Epicurus, whom we will discuss shortly. For our purposes, it is important to note three apsects of his theories in passing. First, he is said to have believed that human beings were generated out of water and mud — rather like the fish of Anaximander, and it seems likely, on balance, that he rejected the Empedoclean move towards random mixing and monstrous failures, preferring the simpler idea that the earth, in some earlier period of its history, had the power to give birth to animals, which it subsequently lost. Second, he appears to have been a hedonist inethics, in the sense that he believed the ultimate arbiter of good and evil was our own feeling of pleasure and pain. As we shall see when we consider Epicurus, that ethical stance became firmly connected with the materialsist view. Third, he is said to have believed that there were many different worlds, and may have been the first person to make that proposal. This is of very great importance for the argument against the consciously designed universe:

He said there was an infinite number of worlds of various sizes. Some of

> them do not have a sun or a moon···and others have more suns and moons than we do. Some worlds are growing, while others are at their peek, and others are getting smaller; in some places worlds are arising, in others they are being destroyed. *Some worlds are uninhabited by living creatures, and have no plants or water*.

Let me explain why this innovation matters so much. One of the strongest traditional arguments for design of the cosmos is the fact that the world that we inhabit — that is, this *planet* — seems to be so nicely suited to life in general and to us in particular. As long as we believed that the Earth was the center of the universe, and the only one of its kind, then it was easy to assume that the cosiness and beauty of the Earth is the result of the world's designer making sure that we would be comfortable. But this argument collapses if it turns out that there are large numbers of other worlds that are *not* suited to life, as Democritus apparently guessed, correctly, by sheer force of imagination. If there are billions of worlds of every imaginable kind, with all manner of possible physical conditions, then the fact that this one is able to sustain life turns out to perfectly consistent with the operations of blind chance. Notice that this is exactly parallel to Empedocles' idea applied to animals; with enough random tries, a world is bound to arise that suits life, even if nobody planned for one. The fact that Democritus arrived at this idea without any astronomical theory to support him strongly suggests that he was deliberately looking to overthrow the ID view, and knew that this would defeat one of its strongest supports.

An anecdote told by Diogenes Laertius records that Plato, perhaps the greatest of all ancient philosphers, wanted to see the entire works of Democritus burned; but a friend persuaded him their was no point trying to destroy them, because they were simply too popular and too widely published. Strangely, his friend didn't point out that burning the works of philosophical opponent is not exactly within the spirit of philosophy. But why did Plato want to destroy

Democritus' writings? The answer appears to be that he thought that any arguments against the view that human beings have been created by benevolent gods would corrupt anyone who was exposed to them. Plato believed that moral ideas are eternally implanted in our immortal and immaterial souls which maintain a connection with the divine, and that coming to grasp the goodness of the universe was the only route to moral perfection; he believed that the universe is fundamentally just; that the good prosper and their souls are a matter of concern to the gods, while the souls of the wicked face an inescapable punishment. He was convinced, exactly like the modern advocates of ID, that we would abandon all commitment to morality if we believed in a purely material world, in which right and wrong is only determined by human desires, and in which good people can suffer terrible harm without any compensation, while wicked men frequently prevail and prosper. I think Plato's resistance to his contemporary materialists can help us in our examination of then modern debate, so lets briefly look at some of the details of that resistance.

In the tenth book of the *Laws*, in which Plato sets out the full legal code of an ideal state, Plato draws up a rather strict blasphemy code. He explains that there are certain people who believe that the whole world, including plants and animals, arose purely by nature and by chance, rather than by the active mind of divine creators. Some of these people, he says, think there are no gods at all; other thinks that there are gods but that they have no interest in humanity, or worst of all, believe that they have arisen only as a result of social conventions as a support for ethics. Consequently these people also think that they are entitled to argue about right and wrong, and to alter their ethical and legal conventions as they see fit. He is referring, in the first place, to materialists like Democritus and Empedocles, and in the second place, somewhat obliquely, to the practices of democracy, which as a matter of principle does not acknowledge any absolute ethical authority, but instead allows ongoing ethical debate and constant revisions of the law. He next takes his time to demonstrate that these people are hopelessly

wrong, using the argument that throughout the universe the mind of god is obviously the driving force behind all the complex operations of matter. He then says that in his ideal city all materialists shall be punished by five years imprisonment in the *sophronisterion* — the ministry for good-behavior — throughout which they will be kept in solitary confinement, except that they will be visisted by special officers trained to use platonic arguments on them in favor of ID in the hope of saving their souls. After the five years are up, if they *still* believe that animals arose through nature and chance, they will be put to death.

To be continued⋯