

towards ever higher forms of consciousness, culminating in an 'Omega point' of union with God, which he identified as the full presence of Christ.

Teilhard viewed this process as possible because he saw no final distinction to be drawn between inorganic matter, such as rocks (the 'lithosphere'), organic matter (the 'biosphere'), and thinking conscious matter (the 'noosphere'). All are stages of the process. All that happens in the process is the action of God, the disclosure and increasing manifestation of Spirit. No piece of matter is to be seen as merely inert, because it is pregnant, at least potentially, with life through the presence of God, and thus is to be viewed as sacred. We share in the process of development, both by furthering knowledge and consciousness, and by expressing love and drawing together our fragmented world in the love of Christ.

The mid twentieth century was a time when most thinkers were urging the total separation of science and *theology; Teilhard's attempt to merge them aroused considerable interest but comparatively few followers. As the century progressed, however, attitudes changed. Science moved away from rigid mechanism; new spiritualities showed an openness to finding God in the material world. As a result, his broad ideas, if not the details, have subsequently won a considerable following.

P. HICKS

TELEOLOGICAL ARGUMENT

One of the five classical 'proofs' for the existence of God, the teleological argument emphasizes the belief that everything was created for a purpose. It is therefore closely linked to the aetiological argument, which says that everything created has a cause, since cause and effect are two sides of the same coin. In modern times, the teleological argument is generally known as the argument from design, and it is now probably the most popular of the classical 'proofs' used to defend the existence of God.

The roots of the teleological argument may be found in the creation narrative in Genesis, where the different parts of creation serve a purpose in the overall plan of God's universe. The philosophical difficulty is knowing whether (or to what extent) it can be said that this purpose is intrinsically necessary, or

whether it is merely accidental, determined by an essentially random process and not by a preordained divine plan. In biblical times, this problem did not arise because everybody agreed that there was a divine mind behind the order of creation. Ps. 19 and Jer. 33:20-25 both emphasize what we would now call the laws of nature and tie them in very closely to God's preordained vision for his chosen people. As long as biblical *theism could be taken more or less for granted, the validity of the teleological argument was accepted as a matter of course, and little was said about it. Its development and probably also its popularity among modern theists seem to be very largely due to the widespread rejection of classical Christian theism since the Enlightenment of the eighteenth century and the corresponding need to find a credible justification for it.

The main opponent of traditional teleology was David *Hume (1711-76), who produced five arguments against it, some of which are still used today. Hume argued that even if it could be demonstrated that the world was created according to a prearranged design, it was not at all clear what caused the designer to come into existence. He also said that there is no reason why such a designer (if one exists) should correspond to the God of the Bible, because there was no intrinsic need for a designer to be perfect, omniscient or loving. There might even turn out to be more than one designer, a theory which might make it easier to explain conflicts caused by the existence of evil, for example. In Hume's mind, the existence of *evil was proof that if there were a single designer, he could not be morally perfect, and on those grounds the biblical God was excluded from consideration. Hume further rejected the use of analogies taken from the created order which are meant to show that the universe as a whole follows the same principles. It is one thing to say that the existence of a machine demands the supposition that an intelligent being created it, but this cannot be projected onto the universe because whilst there are many machines (which can be compared to one another) there is only one universe (which is therefore incomparable to anything else). Finally, Hume claimed that any coherent universe will appear to be designed as such by those who live in it, because they lack the perspective needed to imagine anything else.

Of all these arguments against design, the strongest (and the one most important in the eighteenth century) is the assertion that the supposed designer does not have to be the Christian God. There is no doubt that the God of the Bible has many characteristics which are not necessary in a designer, and it is equally certain that anyone who believes in God will be obliged to attribute the design of the universe to his all-knowing mind, whether this belief can be demonstrated by empirical evidence or not.

Hume's great opponent was William *Paley (1743-1805), whose book *Natural Theology* (1803) is often taken to be the classic expression of the teleological argument before the later nineteenth century. Paley was chiefly interested in the wonders of the interlocking mechanisms which he saw as the pillars of the universe, and to him is normally attributed the famous analogy of the watch and the watchmaker. Someone who finds a watch in a field knows that it must have been made by an intelligent being, so why does the same not apply to the even more complex mechanisms which we find in nature? Is it more plausible to believe that the wonders of this world were created by a supreme intelligence or that they emerged accidentally? To Paley the answer was obvious, and he argued that the regularity and sophistication of the natural order pointed towards a Creator who shared the same characteristics. As a Christian, Paley believed that this supreme intelligence had revealed himself in the Bible and shown that his character is great enough to embrace not only creation, but providence and redemption as well. He was untroubled by Hume's reductionism because he accepted that God must be so much more than just a cosmic designer, though of course he was that as well.

Paley's arguments held the field until 1859, when Charles Darwin published his theories of evolution which undercut them dramatically. Darwin believed in random genetic change and in natural selection, two processes which made it possible for higher forms of life to emerge out of lower ones. The mechanisms of the universe were not, therefore, an eternal given but rather an evolving process where chance was more important than design. The order and regularity of the universe as we see it could be attributed to the process of attrition which evolution involves, rather than to some foreordained divine plan. At the time, many people accepted the force of Darwin's

arguments and support for Paley faded away. But if the older form of the teleological argument was no longer as strong as it had previously been, the essential premisses of that argument remained valid and needed only to be restated to take evolution into account. For one thing, there was still the problem of the inorganic world, which was not subject to evolution, and yet which seemed to be perfectly designed to support life. Moreover, since evolution follows laws of its own which can be understood as part of an overall plan, the design argument can be recycled in a more sophisticated form.

This was actually done by F. R. *Tennant (1866-1957), and his general approach has been followed more recently by Richard Swinburne, who has moved away from the approach taken by Paley (which was based mainly on patterns of behaviour) to a time-based framework which stresses regularity of succession. According to this way of thinking, the fact that actions can be predicted with complete accuracy once the appropriate givens are known disproves the theory of purely random change and supports the idea that there is a mind governing the observed pattern. In the end he claims, the teleological argument comes out stronger for having faced the challenge of Darwinism and adapted itself accordingly. Swinburne also mentions the argument from beauty, which has seldom been put forward in recent years. To some extent, beauty is a subjective measurement, but there can be no doubt that people everywhere have found great beauty in the order of the universe, which makes it seem strange to deny the real existence of a coordinated harmony on which such notions of beauty are generally based.

Modern forms of the teleological argument are characterized by their appeal to the general order of nature rather than to the complexity of specific biological organisms. Because of this, they are seldom detailed arguments of the kind that would claim that the human ear was designed specifically for the purpose of hearing sounds produced in the natural order, and instead concentrate on the broader principle that the world is specially adapted to support forms of organic life. Analogies with things like watches tend to fall away, to be replaced by inferences which, taken together, point to intelligent design as the best explanation of *reality. Nowadays, defenders of the

teleological argument have a tendency to draw their examples from chemistry or astronomy, rather than from sciences which are affected by Darwinian theories, because the theories which underlie the inorganic sciences appear to be less open to future revision.

The arguments concerning inorganic matter are much stronger and more numerous than might be imagined. This is because they tend to concentrate on pointing out that if the constants which we observe in physics and chemistry were variable to only a slightly greater degree than they are, life as we know it would not be possible. What is particularly impressive about this is that the natural laws in question are not all related to each other, but have apparently developed independently. How likely is it that such a remarkable conjunction would have occurred at random? Objectively speaking, the chances of this happening are so small that belief in an intelligent designer is by far the most rational conclusion, even if this does not 'prove' the belief in an absolute sense.

Objections to this form of the teleological argument exist, but they tend to lack serious force. For example, it has been argued that we should not be surprised to find intelligent life on earth because we are ourselves here to find it. If it did not exist, then neither would we, and so all our observations are contingent on our actual being. This is true as far as it goes, but that is not very far, since it does nothing to explain how we came into being in the first place. Instead, this objection reduces the whole issue to the level of the obvious and then sidesteps the real question altogether. Another common argument is that there may be many universes with different ground rules, each of which is capable of producing life forms according to its own criteria. Like different computer programmes, the incompatibility of these systems does not preclude each one from producing the desired result in its own way. Such an explanation may be theoretically possible, but it suffers from the total lack of any evidence which might support it. In the end, it is harder to accept this theory than it is to believe in an intelligent designer, and so the latter option wins out on grounds of probability.

In recent years, one of the more significant aspects of the teleological argument has been the way in which it is especially suited to the delicate task of harmonizing a religious view of life with the teaching of modern *science. It is

a perspective which can be adopted by evolutionists and non-evolutionists alike, and avoids the difficulties commonly associated with so-called 'creation science' without abandoning the theistic perspective. It makes belief in the Christian God scientifically coherent without imposing belief in the details of the biblical *revelation, which both believers and unbelievers regard as a matter of faith, not of human *reasoning. It will always remain an argument open to objections of various kinds, but as its supporters maintain and hope, it is an argument which helps to make the theistic option scientifically respectable and which can therefore serve as a vehicle for introducing a Christian perspective into this important sphere of modern life.

Bibliography

S. T. Davis, *God, Reason and Theistic Proofs* (Grand Rapids, 1997); W. A. Dembski and J. M. Kushiner (eds.), *Signs of Intelligence: Understanding Intelligent Design* (Grand Rapids, 2001); R. Swinburne, *The Existence of God* (Oxford, 1991).

G. L. BRAY

TELEVISION

Television has created a media culture, which shapes the way people think, feel and behave, sometimes more than schools, families and churches. The information environment that characterizes the twenty-first century, for all of the new computer *technology is still defined by television, has grown from offering a handful of broadcast channels to making available hundreds of specialized networks and shows-on-demand, through fibre-optics, satellites, and the marriage of television and the Internet. Much of the population now gets their news, opinion and political discourse from television, rather than newspapers and books, and the way they approach issues and ideas is conditioned by the media through which they encounter them.

This means a different climate for Christian apologetics. Long, reasoned discourse tends to get tuned out by the television mind. Appeals to evidence, history or presuppositions seem to carry little weight with people used to channel-surfing through all of their options until they find something they like. Postmodernism owes less to university intellectuals and more

to television in spreading its assumptions of *relativism, subjectivity and personal constructions of meaning.

Not that the television mind is immune from Christianity or is completely unsusceptible to religious persuasion. The classic obstacles to belief, such as *rationalism and *materialism, are also casualties of television. But Christian apologists will do well to consider how their audiences tend to think, as part of the process of changing their minds.

Media scholar Neil Postman contrasts the different mental processes involved in processing information through reading, which has been the major medium for apologetics, and television. Reading, he says, demands and brings into being sustained concentration, the development of long trains of thought and abstract *reasoning. Television, in contrast, cultivates in its audience a short attention span, immediate subjective response and concrete sensation. Whereas reading is rational and logical, television is best at creating purely emotional responses. Reading, says Postman, promotes continuity, the gradual accumulation of knowledge and sustained exploration of ideas. Television, on the other hand, fosters fragmentation, anti-intellectualism and immediate gratification.

It may take weeks to read through a book. A television programme, seldom more than an hour long, must grab its audience immediately or viewers will click on to something else. The programme is itself fragmented by its editing and by its commercial interruptions, which assault the viewer with an array of completely different and unrelated information packages lasting for only seconds. A reader's own mind and imagination are engaged when working through a book, imagining the characters and the action in a novel, thinking along with the author in a nonfictional treatise. Watching television simply involves tuning in the mind to a pre-packaged experience, in which the imagination and the ideas all belong to the producers and their corporate sponsors.

Television can indeed present intellectual content. Persuasion is its stock and trade, since much of the world's television is funded by corporate advertisements. News, the *arts, comedies and dramas, are on the air primarily for the sake of the commercials, and the whole economy of television rests on its ability to persuade customers to buy the sponsor's products. The rhetoric of television, though,

is different from that of language-centred media.

Complex political positions, though based on sophisticated policy analysis and involved chains of reasoning, must be conveyed in a 'thirty-second sound-bite'. What this means in practice is that political discourse gives way to the crafting of simplistic and emotionally charged imagery. Political commercials attempt to portray the opponent as a villain (as in the American presidential ad that took issue with one of the minor nuances of a candidate's environmental policy by saying, 'He wants to poison your water!'). The candidate paying for the commercial, on the other hand, with the help of 'image consultants' and spin doctors, is presented as the god from above, exemplifying all that is good, whose policies, seldom defined in thirty seconds, will be the salvation of the country. A little reflection, of course, shows such claims to be nonsense – and the public is famously cynical of campaign ads – and yet, reflection not being encouraged by the television mind, the public still responds to them, and image manipulation and negative advertising do win elections.

The classic epistemological dilemma of the conflict between appearance and *reality, explored with such urgency in Shakespeare and Spenser, is magnified by television. We believe what we see. And yet television, as a visual medium, *constructs* what viewers see. This construction presents a highly persuasive illusion of reality, but in fact is a product of the maker's biases, agendas and ulterior motives. For example, one American documentary programme did a consumer protection story on a particular truck, whose petrol tank would reportedly explode if another vehicle crashed into its side. Unfortunately, try as they might, no matter how many crashes they engineered into the test vehicle, the documentary makers could not get the truck to blow up. Finally, they installed ignitors to set off the petrol tank at the right moment. The documentary showed the truck exploding. Viewers, of course, assumed that the car company was guilty of manufacturing an unsafe product. They saw the explosion with their own eyes. And yet, what they saw was not true.

An exploding truck makes for better television than a flame-free car wreck or a 'talking-head' safety inspector, and television, as a visual medium, must create visual images and must express any ideas that it has to convey in