

which life was created. It does not, claiming instead that it is impossible to speculate as to what that mechanism might be (but making it clear nevertheless that divine intervention is strongly suspected).

Proponents of ID also claim that evolution is 'just a theory'. Wrong. Evolution is fact. The evidence for evolution from palaeontology, biology, genetics, and a myriad of other scientific disciplines is overwhelming. In the words of the US National Academy of Sciences, "Evolution is as well established as any other body of knowledge in science".

The theory of evolution, however, is a scientific theory, originated by Charles Darwin in 1856, that all complex living organisms evolved by a process of mutation and natural selection from earlier, simpler forms. Since Darwin's day this theory has been constantly revised as our knowledge of the processes of evolution has grown. It was above all the discovery of DNA that brilliantly vindicated Darwin's insight by showing the mechanism by which life is transmitted from generation to generation, and by which evolution occurs.

We should no more confuse the theory of evolution – the explanation of how evolution occurs – with the irrefutable evidence that it does occur, than we should confuse the theory of gravity with gravity itself. Evolution, like gravity, is a fact.

Objections to the theory of evolution are based on a misunderstanding (deliberate or otherwise) of the nature of both evolution and scientific discovery.

For example 'gaps in the fossil record' have been cited as 'proving' that evolution has not happened, rather than being understood to be exactly what one would expect when searching for evidence of events that occurred tens, or even hundreds of millions of years ago. The ID cupboard is full of such red herrings. Another is so-called 'irreducible complexity'. The eye, we are told, is so complex that removing any single feature from the eye will render it useless, so it must have arisen as a whole – and therefore required a designer. Yet the biological evidence shows that eyes have arisen independently dozens of times in widely different creatures, because the survival value of sensitivity to light is so great that even some sensitivity is better than none at all.

ID clearly has appeal among the

scientifically uninformed because it seems intuitively obvious. Yet common sense also tells us that the Sun goes round the Earth. We can see it with our own eyes. For centuries this was so obvious to the Church that our ancestors would have been risking their lives to suggest otherwise. Common sense also tells us that the Earth is flat. But neither common sense nor theology discovered that the Earth is round, or that it orbits the Sun; we owe these discoveries to science. Just as it was science that discovered that all living creatures have evolved through a process of variation and natural selection.

Yet what does ID offer as an alternative explanation to evolution? Nothing at all. ID presents no evidence for its claims and proposes no process to explain how life arose, other than 'the intelligent designer did it'. Don't ask how he did it because 'we have insufficient evidence to speculate'. Yet a perfectly natural explanation exists that requires no designer other than natural processes. Wouldn't it actually be simpler to accept the natural, scientific explanation?

IDers have also argued on grounds of fairness and freedom of expression, that schools should 'teach the controversy'. Perhaps, but not in science class. There is no controversy regarding the facts of evolution among scientists. The facts are established beyond all reasonable doubt. But by all means teach the controversy in Current Affairs or Social Science – as a case study of the way in which well-funded, politically motivated pressure groups can cloud the issues and confuse the public about scientific facts.

Belief in God adds nothing to our knowledge of the Universe. There can be no room in the science classroom for theology, however subtly packaged. Intelligent design? As Laplace might have said: "We have no need of that hypothesis".

Unfortunately simply explaining the overwhelming evidence of evolution will not win the debate – the debate isn't actually about science. The agenda of the IDers is political, and they are using political means to achieve their ends. All they need are a few superficially plausible arguments, endlessly repeated, to persuade a majority of voters that there is something wrong with evolution. And herein lies another problem. In a society where scientific facts are at the mercy of political opinion (as we see in the United States and increasingly in Blair's Britain), that is enough to undermine science itself. The success of Creationism and the ID campaign can be judged by the fact that more American's believe that the Earth has

been visited by aliens, or that the 'rapture' is near, than believe in evolution.

Homophobia

THOSE of us whose physical form aligns with our genetic, hormonal and emotional dispositions are the lucky ones. As Jim Herrick, former editor of the *New Humanist* has said: "Do you think anyone would willingly choose to be gay, given the vicious treatment homosexuals receive from much of society?"

The overwhelming weight of medical evidence points to the fact that there is no 'normal' sexual orientation. Human sexuality covers a spectrum from the extreme feminine to the extreme masculine with somewhere in between those of either physical type those who have no interest in sex at all.

Homosexuality is not confined to human beings but is common throughout the animal kingdom. All mammals are known to exhibit homosexual behaviour. Yet so far out of touch with reality is most religious opinion that we have even seen claims that 'No Sikh could possibly be a homosexual' or that 'Homosexuals should repent'.

Within most Christian and Muslim communities homosexuals are still treated with contempt and abuse – even death, because for the devout, holy texts trump scientific knowledge every time.

Unfortunately homophobia is not confined to the devoutly religious. Tabloid journalism – ever ready to exploit the yuk factor – thrives on demonising those who are in any way different. Sadly, we have seen this lack of understanding even among some Humanists. A new website has just published a 'Humanist' manifesto which calls, inter-alia, for denial of equal treatment for homosexuals.

No doubt many 'straight' individuals find the idea of homosexuality unpleasant. Some might even have doubts about the idea of 'gay rights' if it meant special rights rather than simply equality for gays. But all Humanists surely accept that homosexuals are human, not 'subhuman' or 'animals', and are fully entitled to respect for their human rights. And Humanists must surely have greater respect for homosexuals than for religious bigots. Religious bigotry, unlike homosexuality, is a matter of choice.

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