Intelligent Design Theory is the claim that some features of organisms are so complex – “irreducibly complex” – that they could not possibly have come into existence through normal causes, through processes of blind law, and hence demand the supposition of a designer who thought them up and put them into place (Ruse, 2005; Forrest and Gross, 2004). The key work is that of Lehigh University biochemist Michael Behe (1996), who argues in Darwin’s Black Box that things like the clotting process of blood are so intricate that they cannot possibly have evolved, and certainly not evolved through Charles Darwin’s mechanism of natural selection. There must have been an intelligence behind such a process. Behe and his fellows try deliberately not to say what this intelligence might be, but truly no one thinks that it is an extraterrestrial. No one thinks that there is some graduate student on Andromeda who is running life on Earth as an experiment and who intervenes in the course of nature every now and then to see what will happen. The intelligence is the God of Christianity. Intelligent Designers are much given to quoting the first verse of the Gospel according to Saint John – “In the beginning was the word, and the word was with God, and the word was God.”

I need hardly say that for regular scientists, Intelligent Design Theory is anathema. They argue that it simply cannot be supported by the evidence. A favorite example of Behe to illustrate the notion of irreducible complexity is that of a mousetrap. It has five parts – spring, base, and so forth – and each part is essential. Remove one part and the trap fails. Behe argues that this mechanism cannot have come about naturally, but must have been designed and been put together by an intelligence. But regular scientists point out that in fact the trap can be made to work with fewer than five parts – remove the base for example and it still functions (Ruse, 2003). Likewise with something like blood clotting. In humans, it is indeed a very complex mechanism, with something like twenty-eight different processes in a row. (For this reason, it is known as the blood clotting “cascade”.) But there exist in other animals far more simple cascades that function very well, and significantly the processes in humans have the marks of having been adapted from one more basic process and then extended through time in search of greater efficiency.

The point is that Behe (and his fellows) quite misunderstand the way in which evolution works. You cannot just look at something functioning today and reason that it must always have functioned in this precise manner or not at all. Life is put together in bits and pieces by a process that the French Nobel Prize Jacob Monod winner called a bricolage. You start with one process, then extend it, then modify it, and so forth, until you reach the state of things today (Miller, 1999). The even greater point is that Behe (and his fellows) violate the very rules of modern science. You simply cannot appeal to forces outside nature in the quest for understanding. It is often said, truly, that a scientist is a methodological atheist. This does not mean that a scientist cannot believe in the existence of God. Some of the greatest evolutionists in the twentieth century were sincere Christians, the Russian-born American population geneticist Theodosius Dobzhansky and the English theoretical biologist Ronald A. Fisher, to name but two (Ruse, 1999). The point is that in the pursuit...
of science one puts one’s faith to one side, and one works
with the conviction that law-bound causal processes can
be found. For the religious believer, in fact, the belief that
such processes exist is part of the respect for God, rather
than a denial.

Why does Intelligent Design Theory exist and why do
its proponents refuse to see its problems? The answer is
part theological and part political. Theologically, it is not
just that Intelligent Design theorists want to support the
existence of God – we have just seen that regular evolution-
ists can do this too if they want – but that they see nor-
mal science, evolutionary biology in particular, as having
a positive force for atheism, whatever its proponents may
say. They point to the ways in which biologists like the
English writer Richard Dawkins (2003, 2006) and philoso-
phers like the American thinker Daniel Dennett (1995)
actively trumpet their non-belief in God’s existence and
how they do link evolution and atheism. Even if the God
of Evolution does exist, argue the Intelligent Design sup-
porters, He is much more remote than the conventional
God of Christianity. Politically, the reason for Intelligent
Design Theory is that the United States constitution sep-
arates Church and State, and today this is interpreted as
meaning that there can be no teaching of religion in state
supported schools, especially no teaching of religion in
the biology classes of state supported schools. Intelligent
Design Theory is a Trojan horse, intended to get religion
into the schools by stealth, pretending to be science even
though truly it is not.

In other words, Intelligent Design Theory is only the
latest salvo in the ongoing fight between American
biblical literalists and students of the life sciences, a fight
that has been going on at least since the publication of
Charles Darwin’s On the Origin of Species in 1859 and
that has been marked by such events as the Scopes
trial in 1925, when a young school teacher in Tennessee
was prosecuted for (and found guilty of) teaching
that humans are descended from monkeys (Larson, 1997).
This does not mean that there have been no changes
through time. The classic Creationist book of the twentieth century was Genesis Flood (1961) by biblical
scholar John Whitcomb and hydraulic engineer
Henry M. Morris (who died recently). This argued that
the world is only six thousand years old and that all
kinds of organisms were made miraculously in the first
week. (There was always scope for change after the
Flood, paradoxically more rapidly than conventional
evolutionists would allow.) Most Intelligent Design
theorists argue for a conventionally aged universe of
fifteen billion years old, and some (including Michael
Behe) agree that generally the picture was one of evo-
lution. It is just that every now and then there were major
interventions by God, something denied by conventional
evolutionists. But what connects all kind of creationists,
including the Intelligent Design supporters (leading me
to call them “Creationism lite”) is that they see the main
threat of evolution lying in the general godless universe
it supposedly supports, up to and very much including
a lack of moral standards. The éminence grise of the
Intelligent Design movement is retired University of Cal-
ifornia at Berkeley law professor Phillip Johnson, and he
harps on continually about the decline in moral stan-
dards today, something in major part he lays at the feet

As a committed evolutionist, an enthusiast for
Charles Darwin’s mechanism of natural selection, I dis-
like and deplore Intelligent Design Theory. But I do
not underestimate its attraction, especially in the United
States of America. This is a fight for the long haul, and
those of us who think that science is the true testament
to the fact that we are little lower than the angels and
not just modified monkeys must be prepared to battle for
many years to come.

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