

Evolutionary science

As part of a wider debate on natural selection, there may be no harm in introduc

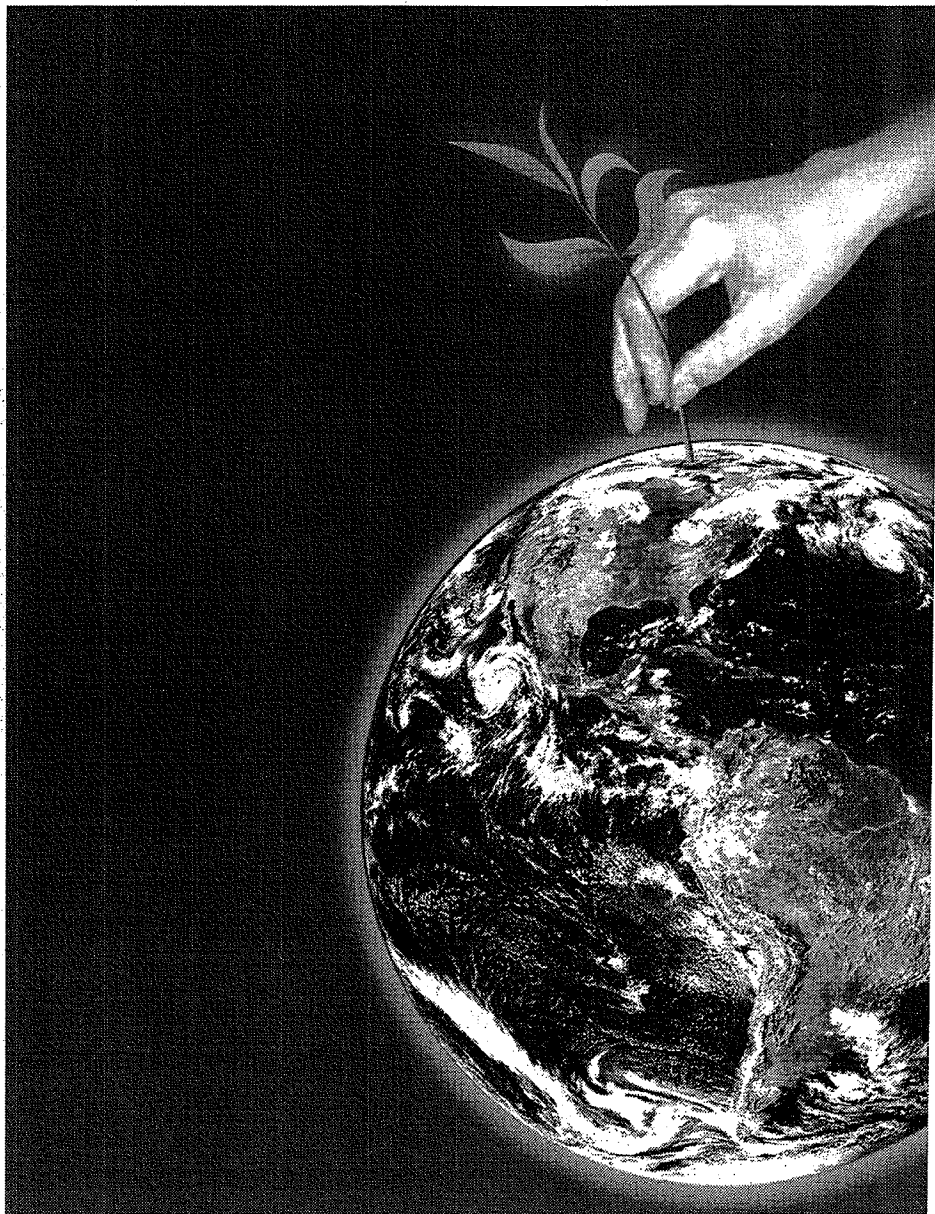
PRESIDENT George W. Bush's offhand recommendation that intelligent design be taught in high-school biology courses ignited an enormous reaction, including a *Time* magazine cover story. Bush doesn't know much about evolution or theology, but in these times, when the weird and the grotesque are fashionable, his comment was news because it seemed to endorse the long struggle of Christian anti-evolutionists to challenge the standard science version of the history of life on Earth.

Scarcely a week after the Bush story broke, federal Education Minister Brendan Nelson made a similar recommendation at the National Press Club. Nelson had talked with Bill Hodgson, national director of the Campus Crusade for Christ Australia, who showed him a DVD, *Unlocking the Mystery of Life*. Nelson was impressed and apparently supports the CCCA's aim to distribute the DVD to public schools and universities. Nelson also endorsed the Bush position that ID supplements, rather than replaces, standard evolutionary biology.

These commotions were relevant to me, for I was in email conference with colleagues about whether anything positive for high school biology education can be extracted from the seemingly endless row. Our focus was the round table on the issue at this week's annual conference of the US-based Association of Politics and the Life Sciences, which focuses on issues involving politics, public policy and the life sciences. In the US, the ID movement has involved school boards or state legislatures in 24 states.

The battle lines are rigid. The US science establishment is adamant that ID casts doubt on well-established science, using specious evidence and faulty logic. The attempted incursion into the classroom is not to be tolerated. End of story. Add to this the legal campaign to maintain an iron wall of separation between church and state, and you have a belligerent "them" and "us".

For their part, the ID leaders are a different breed from evangelical creationists who insist on a literal interpretation of the Book of Genesis and Bible Belt morality. They hold PhDs in biology and mathematics from leading universities; some are tenured professors. Their organisational base, the Discovery Institute, located in Seattle, Washington, makes effective use of online, print and DVD promotion. By such means the institute reaches any teacher or student curious enough to run a Google search. Those who look discover telling points scored against the standard position, at least for those at the beginner level, and this embarrassment partly accounts



for the science establishment's anger.

Is there anything to be said in favour of the ID proposal to "teach the controversy"? If the answer is yes, should it be taught in biology classes or under some other subject heading? As a historian of evolutionary thought, it is for me a truism that teaching the controversy is central to telling the story of the rise of the evolution outlook to a dominant public belief system. There are

some facts about that history that ID advocates should know but never mention if they do.

For example, Charles Darwin's famous book was not the main source of the assault on theology and religious belief. A key source was theology. Specifically, the German historical school had by 1830 discarded the divinity of Christ, the sacred origin of scripture, belief in miracles and Christian moral teaching,

It isn't a closed book

Managing intelligent design at the tertiary level, argues **Hiram Caton**

establishment, *Vestiges* was an engaging book whose admirers ranged from Queen Victoria to the working class. It substituted an eloquently argued naturalism, including human evolution from primates, for creationist doctrine.

The same line of argument was taken by philosopher Herbert Spencer, who in 1852 launched the idea that progressive social change was an expression of evolution. He coined the phrase that his contemporaries came to cherish as the dynamic of the times, "survival of the fittest".

Thus, Darwin's celebrated book did not deliver an earth-shaking new vision of nature, as creationists believe. *The Origin of Species* came nowhere close to the bestseller list. It sold about one-third as many copies as did *Vestiges*. Darwin's main claim to novelty, the discovery of natural selection as the mechanism of evolution, was implicit in Spencer's theory and indeed had been clearly stated three decades previously by the Scot Patrick Matthew, who aptly styled it "the natural law of selection".

From the point of view of public uptake, Darwin's most important contribution was his high social status, for it meant that an outlook that previously lacked the necessary social credentials had acquired them.

The science establishment's horror at the thought of the pollution of biology teaching by pseudo-science is certainly sincere but of doubtful consistency, with its many compromises with social currents too strong to resist. Not only science but all subjects have been made over to be supportive of multiculturalism, equality of the sexes, identity politics, environmentalism and other preferred beliefs. The postmodernist catchphrase critical thinking has been adopted in the titles of biology teaching texts and teacher aids.

Not even mathematics escapes the drive to conformity: there is a multicultural rendition of mathematics. All of which proves to postmodernists that not even science escapes the power of indoctrination.

This is nowhere more obvious than in the mighty suppression of evidence in the textbook rendition of human origins. In Darwin's day as well as our own, the naturalistic account means that our behaviour is in many ways heritable and accordingly cannot be shaped indefinitely by culture. We are not blank slates upon which social norms can be written at will. To some it's doubtful that we even have free will.

This view is offensive to prevailing opinion and, in the case of race and sex, can stir explosive emotions. Managing this high-risk area is a delicate exercise requiring that students be shielded from contemporary

genetic evidence of ethnic affinity, racial differences and innate sexual differences, while extolling the power of science to identify and treat heritable diseases.

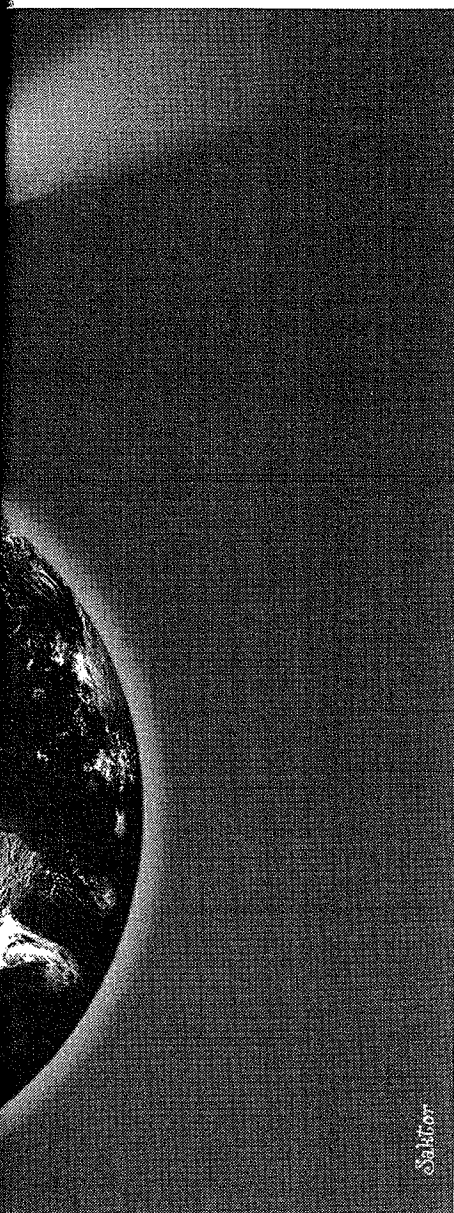
Darwin, too, must be rescued from the taint of evolution's deplorable racist, sexist and eugenic past. This is a neat trick because Darwin shared the Victorian view that arranged races on a scale of evolutionary advance, with Caucasians at the peak, and he did not doubt that many so-called inferior races would be extinguished in the struggle for existence. His vision of man through the scientific lens confirmed the Victorian self-evidence that women were the weaker sex.

As for eugenics, Darwin worried a great deal about congenital illness that he passed to his offspring and he was favourably disposed to the eugenic aspiration invented by his first cousin Francis Galton.

How do textbooks cope with this great jeopardy? Mainly by pretending that it doesn't exist. Students are told, for example, that biologists overwhelmingly endorse natural selection as the main mechanism of evolution, as they do. But there is usually no hint at the vigorous debates among them about its interpretation and evidence. Similarly with the cardinal sins of racism, sexism and eugenics. It is enough merely to express strong disapproval in the name of the latest scientific evidence and pass in silence the active debate on racial and sexual differences in IQ.

In the light of these considerations, what are we to make of the proposal to teach the controversy? As a teacher who attempts to encourage student engagement and critical thinking, I was cautiously favourable. Many prominent biologists ignore the supposedly sacred boundary between empirical science and speculation to talk about the still unknown origin of life and the meaning of evolution in the cosmic context. This includes evolutionists who say bluntly that evolution has no human meaning. If such speculations were introduced into biology courses, the inclusion of ID would be natural. This I have done in tertiary-level history of science with reasonably good results. But at secondary-level biology? I don't think so. However, the APLS round table may see other possibilities.

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including sin, repentance, and eternal life: a thorough demolition. This perspective was imported into England in 1846 with the translation of David Strauss's *The Life of Jesus Critically Examined*. It did not stir the controversy that it had in Germany because attention was occupied by a sensational, locally produced evolution bestseller, *Vestiges of the Natural History of Creation*. Despite its condemnation by the science-ecclesiastical