## **Illegal Border Crossings**

## Illegal Border Crossings: Evolution and Intelligent Design

Nov. 7, 2006 Richard A. Baer

It has been almost a year since Hunter Rawlings gave his important speech on intelligent design and evolution. But the issue is still being widely discussed at Cornell

As a Christian, I believe that God is the Creator of heaven and earth, including human beings. At the same time I consider evolution to be the best scientific theory we currently have for explaining the origin of species, and I do not think intelligent design ("ID") qualifies as legitimate science.

How these two assertions fit together I shall not address here. Suffice it to say that the relationship between science and religion is complex. A legitimate border separates science as a discourse from other, broader kinds of knowledge (such as theology); however, this separation is not absolute, but more like a semi-permeable membrane.

Any discussion of intelligent design and evolution in a science curriculum must consider the basic questions (1) What subject matter constitutes legitimate science? and (2) Are some pronouncements, in effect, "illegal border crossings" between science and religion? Since I believe ID is not legitimate science, including it as an integral part of a science course appears a clear case of such an illegal border crossing.

Although it certainly is appropriate for the Arts College faculty to discuss why including ID in high school science courses is improper, this concern is highly selective and perhaps a bit hypocritical. A far more serious problem at Cornell and at most universities is the many illegal border crossings that go on in the opposite direction: claims made by scientists, speaking as scientists, that are really theological, philosophical or ethical claims, rather than scientific ones.

An egregious example from the past 20-30 years was Cornell Prof. Carl Sagan's bold declaration (the first sentence in his popular book Cosmos) that "The cosmos is all that is or ever was or ever will be." Whether Sagan's claim is true or false may be debated, but it's clear that in making it, he was not speaking properly as a scientist, but as a philosopher or theologian. Science is incompetent either to confirm or to disprove such comprehensive metaphysical or religious claims.

Modern science is "naturalistic": it deliberately ignores moral, religious and aesthetic aspects of reality and studies the world as if nothing exists but physical phenomena. However, this is a methodological, not a metaphysical naturalism; it is adopted for the limited objectives of science, not as a total world view. Science may provide evidence that makes it easier or more difficult for a person to believe in God; but strictly speaking, the question of God's existence or nonexistence, or how God relates to nature and human beings, is outside the domain of legitimate scientific inquiry.

Carl Sagan has by no means been the only illegal border crosser among prominent scientists and science teachers; many others constantly make the same mistake. Richard Dawkins, for instance, not only claims that Darwinian evolution entails the belief that there is no God, but proclaims this religious belief with evangelistic zeal. My friend and Cornell colleague Will Provine believes — if I understand him properly—that science teaches us that humans lack free will and thus are essentially robots (though I'm not sure he would approve this way of putting it).

Science gives us one very valuable and powerful kind of knowledge. But when scientists or others claim that it is the only valid or publicly appropriate kind of knowledge, this is scientism, not science.

At one time, the school of philosophers called logical positivists attempted to give such unique validity to scientific knowledge. They promoted the so-called "verification principle": the claim that only knowledge resting on empirical data or sense experience constitutes valid knowledge. Of course, these philosophers overlooked the fact that the verification principle itself could not meet its own criteria for legitimacy. It is well understood today that this philosophical project failed.

Social scientists may be even more prone to illegal border crossings than natural scientists. During my 30-plus years at Cornell, I've frequently witnessed social scientists using the design and content of courses and public lectures to press on students and colleagues various doctrines that could not be justified by their social science as such but rested on normative religious and philosophical judgments. Examples are multiculturalism; moral relativism; non-traditional views of marriage, divorce, family, male/female roles, sexual morality, homosexuality; etc. These are big-time illegal border crossings, but sadly, Cornell's academic culture shows little interest in curbing them. Instead, faculty self-righteously condemn high school science teachers and state boards of education for the slightest tendency to traffic in the opposite direction.

If we at Cornell really want to maintain disciplinary integrity, we might well focus on putting our own house in order. Rather than worrying so selectively about intelligent design and its failings, we might address flagrant illegal border crossings of all kinds.

Such discipline might well contribute to more open and honest dialogue across disciplines. It would also help us understand that Cornell founder A.D. White's famous phrase "the warfare between science and theology" is at best misleading. Most conflicts we face today are not between science and theology (or religion) but between divergent moral, religious, philosophical, and political visions of what it means to flourish as human beings.