

Scientific study, faith, not so far apart

By C.A. Bowers

EUGENE, ORE. - The current debate over whether intelligent design should be taught alongside the theory of evolution in science class often includes the claim that what is grounded in faith should be kept separate from what is empirically based. While I agree with those who recommend that intelligent design should not be taught in a science class, the argument that knowledge based on faith is radically different from the knowledge gained from the scientist's mode of inquiry is based on a simplistic understanding of the many expressions of faith in the modern world.

If we use one of the dictionary's definitions of faith as "a belief that does not rest on logical proof or material evidence," which is the definition often relied upon for making the sharp distinction between faith and science, it is possible to see that the scientist's mode of inquiry is driven by taken-for-granted cultural assumptions that are themselves not scientifically based. That is, even some of our most eminent scientists have pursued research and made claims that were based on the nonlogical and non-empirically based "truths" of their era.

In the early 1900s scientists claimed that they could scientifically measure human intelligence. This was followed by the embrace of another nonlogical and nonempirical assumption that led to the eugenics movement.

More recently, the claims of scientists (again based on the faith that is part of the modern mythos) now include the fact that we are entering the postbiological phase of evolution; that the human body should be understood as a "survival machine"; that the brain is a machine and that natural selection will determine which brains are better adapted for passing on their genes to future generations; and that scientists should try to genetically engineer a new "gene-rich" class of people who will govern the rest of us. And it is this nontraditional, religiously based faith that led Francis Crick to claim that science will shortly be able to explain the nature of intuition, creativity, and even why some people become great musicians and artists.

It also should be recognized that the creation and release into the environment of thousands of synthetic chemicals without prior understanding of their impact on the reproductive capacity of other forms of life was based on a form of faith - that is, taking for granted the Western assumption that equates innovations with a linear form of progress.

Both religious fundamentalists and many scientists are guilty of the same

conceptual error - namely, the failure to recognize how the assumptions and values of previous generations within a culture are reproduced as they learn the language of their cultural group. In effect, religious fundamentalists and even scientists cannot know a reality that has not been influenced by the taken-for-granted assumptions of their culture (which is not to say that they always share the same assumptions).

The problem for the religious fundamentalists who claim that reading the Bible is accessing God's Word is that they are overlooking the fundamental changes that occurred as Christianity was transformed from an oral tradition into a text-based religion. They are also overlooking the changes in God's Word that resulted from the taken-for-granted assumptions of the men who, from various cultures and under pressure from different political regimes, translated the Bible. For example, the words "God he..." clearly represents the patriarchal assumptions of the translator.

The same indifference to the influence of the assumptions of the dominant culture can be seen in how the metaphors derived from the Industrial Revolution are now used by scientists to describe the metabolic processes in a plant cell - and in the current effort by some scientists to explain cultural patterns and process (which have their origins in the culture's symbolic systems) as "memes" that function like "genes" and thus are subject to the same process of natural selection. By extending the theory of natural selection to account for the better adapted cultural "memes," scientists are transforming the theory of evolution into an ideological justification for the spread of Wal-Mart and other corporations that drive small and culturally diverse producers out of business.

The argument that future scientific advances may make "faith" a moot issue diverts attention from the real issue that separates the two camps. The issue that neither the religious fundamentalists nor the proponents of natural selection are addressing is whether their respective sources of authority can be the source of moral values that will help Americans resist the various forms of cultural domination - among ourselves, of other cultures, and of the environment.

E.O. Wilson, a mainstream interpreter of evolution, tells us that "science for its part will test relentlessly every assumption about the human condition and in time uncover the bedrock of moral and religious sentiments."

And the same hubris is expressed by various groups within the fundamentalist camp who promote a friend/enemy approach to politics, and are imposing their culturally mediated "Word of God" on the rest of us - and on our foreign policy.

Those in both camps ignore the differences in the knowledge systems of different cultures, with the result that both are engaged in competing approaches to

cultural imperialism.

The cultural assumptions that members of both camps take for granted should not, in light of the environmental crisis and the scope of poverty in the world, be the ones that are passed on to future generations. Unfortunately, the double bind is that neither the scientific method nor the "truths" revealed to the proponents of intelligent design are adequate for making explicit the cultural assumptions that are the sources of today's many problems.

- *C.A. Bowers is a retired professor and author. His latest book is 'Mindful Conservatism: Rethinking the Ideological and Educational Basis of an Ecologically Sustainable Future.'*