

Remarks of John H. Calvert, Esq.
before the
Minnesota Senate Education Committee,
Steve Kelley, Chairman
January 23, 2004

Chairman Kelley, and members of the Committee. I am John Calvert. I appreciate the opportunity to speak with you about an issue that is fundamental to good education. I have handed you a copy of my remarks along with an attached memorandum that explains my suggestions more fully.

I have practiced law for the past 36 years, primarily in the area of business litigation and corporate finance. I also have a degree in geology and have practiced that science in a number of legal engagements. For the past three years I have focused my attention on constitutionally appropriate ways to teach origins science in public schools.

Although I don't reside in Minnesota, I have been asked by the parents of children enrolled in Minnesota public schools to speak on their behalf. I have also appeared in a number of venues around the country because the matter we are dealing with today is of national concern.

Will the standards accomplish their goal to inform students about evolution?

I would like to think that the issue at hand is not whether state science standards should seek to inform students of substantive scientific criticisms of evolution. That should be a given. Rather, it is whether they will be effectively designed to accomplish that goal.

There is no serious dispute over the propriety of informing students about the evolution controversy.

Clearly, it is appropriate to inform students of criticisms of evolution. The mission of public education in Minnesota is to "ensure an informed citizenry." A citizen that is truly "informed" about evolution will know both the strengths and weakness of that theory. The standards themselves state that students are to "know that scientific explanations must...be open to criticism." Surely, it is intended that this is to apply to evolution as well as to other scientific theories.

It is important to inform students because evolutionary biology is a subjective science and it unavoidably impacts religion.

Objectivity and impartiality is particularly important in teaching evolution for both scientific and religious reasons. Evolution, unlike physics and chemistry is not an experimental science. It is an historical science which seeks to explain the cause of unobserved singular events which have occurred millions and even billions of years ago. It has been acknowledged by eminent evolutionary biologists that evolutionary explanations can not be effectively tested via experiment. Instead evolutionary biology seeks to construct historical narratives by inference and a fair amount of imagination to substitute for a vast amount of missing evidence. For this reason alone, evolutionary biology is a very speculative, subjective and controversial science that can only be tested by finding evidence that not only rules in its claims, but also rules out competing claims and criticisms. If evolution can not be criticized then it loses its theoretical status, ceases to be a scientific theory and becomes a doctrine, creed or ideology. Official objectivity and impartiality

that encourages critical analyses of its historical narratives is the only way to keep evolution truly scientific.

Objectivity and impartiality is also necessary because, evolution is a naturalistic theory that has an enormous impact on religion. This is explained by Douglas Futuyma, the author of a highly regarded college level text on evolutionary biology:

“Darwin's immeasurably important contribution to science was to show how mechanistic causes could also explain all biological phenomena, despite their apparent evidence of design and purpose. By coupling undirected, purposeless variation to the blind, uncaring process of natural selection, Darwin made theological or spiritual explanations of the life processes superfluous.”

If criticisms of evolution are not permitted then students will be shown only a naturalistic perspective on this religiously charged controversial topic. Naturalism is the central tenet of the religion of Secular Humanism and other nontheistic belief systems like atheism and agnosticism. As explained in the memo which is attached to my remarks, showing only one perspective on a controversial subject that impacts religion is inconsistent with requirements of No Child Left Behind and Minnesota laws that educational services and materials be “secular, neutral and nonideological.” As explained by the National Assessment Governing Board, “neutral and nonideological” requires an approach that does not “advocate” for a “single perspective on a controversial issue.” Evolution is a scientifically controversial issue, so it would seem that criticisms of this naturalistic perspective are necessary not only to properly inform but to avoid the promotion of an ideology that is offensive to many of the patrons of science and public education.

Both the subjective historical character of evolutionary explanations and its unavoidable impact on religion reinforce the notion that to be truly “informed” about evolution requires a high degree of official objectivity with a comprehensive showing of key competing views and criticisms.

Thus, it would seem that no one should quarrel with the notion that an informed student of evolution is one who has been provided with knowledge about the theory as well as substantive scientific criticisms of the theory.

This was made clear in a panel discussion on the subject a year ago. Mike Behe, Jonathan Wells, JP Moreland and myself were on one side of the panel. On the other side were Stephen Gey, a highly regarded Constitutional Lawyer, Mano Singham, a theoretical physicist and science educator, John Staver, a Co-Chair of the Kansas science writing committee and Denis Lamoureux, an evolutionary biologist and theistic evolutionist. The one thing we all agreed upon was the proposition that it was appropriate to show students scientific criticisms of evolution.

The point I want to make, is that there seems to be a general acknowledgment that it is officially necessary and appropriate to inform students of scientific criticisms of the theory. So the question then boils down to whether the proposed standards which do not explicitly impose that requirement, will be effective to accomplish that goal?

The proposed standards will not accomplish their goal to inform without an explicit statement of that intention.

If the intention is to fully inform students about evolution, if that is the goal, then why shouldn't we make that intention explicit in the standards as proposed by the Minority Report? This was recently accomplished in Ohio and New Mexico. Why not make the intention clear? What is the downside? Given the present record, it seems almost necessary. In retrospect the record will show an effort to inform students about the scientific controversy consistent with the mission of Minnesota public education. It will also show the plea being denied. This would provide educators with a green light to promote a naturalistic world view about our origins to the exclusion of criticisms and all other legitimate scientific perspectives on that issue.

An explicit critical analysis objective also seems necessary because under present circumstances the license to criticize evolution is only given lip service and is not used in practice. In fact criticisms of evolution are routinely rejected. As a consequence the subject is taught from a single naturalistic perspective. Efforts to open the discussion to criticisms and problems with the theory are uniformly opposed by science institutions. A clear example may be found in Georgia. Due to single perspective biology textbooks, a Georgia school board directed the placement of a sticker on the textbooks that read as follows: "This textbook contains material on evolution. Evolution is a theory, not a fact, regarding the origin of living things. This material should be approached with an open mind, studied carefully, and critically considered." This call for critical analysis of evolution was uniformly opposed by all of the major science institutions in the country? Why? How do you square their opposition to this statement and their opposition to the Minority Report with the statement in the proposed standards that all scientific explanations should be open to critical examination? Why is an exception made for evolution? What is it about that "theory" that singles it out for special treatment? Why should it be protected from criticism?

The answer is that criticisms of evolution, a naturalistic theory of origins, opens up for criticism a naturalistic world view that is embraced by many in modern science. That view is technically called "methodological naturalism" or "scientific materialism." As explained by John Rennie, the editor of Scientific American, "a central tenet of modern science is methodological naturalism." It provides that in doing science, scientists must presume that the mechanistic causes described by Professor Futuyma are adequate to account for all phenomena and that design conceptions of nature are invalid. In practice methodological naturalism is an ideology and not just a "method" of science. It is the fundamental tenet of Secular Humanism, atheism and agnosticism.

Criticisms of Chemical and Darwinian evolution are suppressed because the naturalistic assumption requires a viable natural explanation for life and its diversity. If the foundations of Darwinian and Chemical evolution are found to be inadequate (and criticisms objectively considered might just lead to that conclusion), then the "central tenet" of modern origins science will itself lack support.

So the suppression of criticisms derives not from a lack of substance, but rather from an effort to promote a particular ideology, which simply is inconsistent with good education, good origins science and statutory requirements regarding the need for educational services and materials to be secular, neutral and nonideological.

If we do not explicitly incorporate in our blue print for informing students about evolution a requirement that they be shown substantive scientific criticisms of this “theory” then the students will not be so informed and our blueprint will effectively promote an ideology that impacts religion in a very significant way. It will indoctrinate students in a naturalistic world view rather than informing them about it. Accordingly, I believe we should make it crystal clear in the standards that we expect students to be truly informed about the scientific controversy over evolution. We should not subtly spoon feed them a naturalistic ideology that promotes nontheistic religion and that denigrates theistic religions. That can be accomplished very simply by embracing the modest suggestions contained in the Minority Report.

Thank you for listening.