Creation–Evolution at the Podium: That’s Debatable!

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I have never witnessed a creation–evolution debate. In over 35 years of following arguments and counterarguments from creationists of various sorts and the scientists who oppose them at podiums across the nation, I have never witnessed what one could accurately call a debate in the strict sense of the word: an interactive argument or disputation with a specific rhetorical structure. This description may fit the great formal debates of our cultural history, but they hardly apply to what most of us experience as “debate” in modern society, as exemplified by political campaigns or the legislative process (even less on cable television) … and, of course, creation–evolution debates.

These events often do mimic true debates: they start with a premise or a resolution. The most recent example featuring Bill Nye and Ken Ham proposed this one: “Is creation a viable model of origins in today’s modern scientific era?” So far so good. And since we know the short answer from both of them (“Yes” for Ham and “No” for Nye), what we might expect is for each debater to provide evidence about why his answer is true. Then, in rebuttal, each debater should be able to magnify the obvious weaknesses in his opponent’s position while strengthening his own arguments.

Ham, for his part, tried valiantly to show why creation was a viable model. But it was clear that he could only do so by redefining science idiosyncratically. Then he followed the standard creationist yeahbutwhatabout playbook … tossing out isolated facts and issues that appear to those unfamiliar with these examples to invalidate the naturalistic models.

Nye, on the other hand, chose not to examine directly the viability of creationism per se but to lay out a case for the current scientific approach to understanding the history and diversity of life on earth. Nye did admirably under the circumstances, but the fact that one model is true (or false) does not necessarily inform us about the validity or viability of the other.

Nye did a good job laying out what viability might mean. The examples from the history of applying scientific knowledge in diverse fields, such as medicine, agriculture, technology, and so on, are reasonable ways to measure viability of a model. The proper application of the scientific model provides us with additional knowledge to meet acknowledged goals (feed more people; protect people from diseases or cure them faster; improve communications and transportation; predict and prepare better for natural disasters; and so on).

And although Nye challenged Ham repeatedly to provide such evidence for a similar record of viability for creationism, Ham could not do much better than to say that the Bible predicted that all humans are descendants from common ancestors (Genesis 4:1 and/or
Genesis 9:1) and that the Tower of Babel (Genesis 11:9) predicted the diversity of human language. These are, of course, trivial examples. A simple “Is that all you’ve got?” after the extensive list of examples on the scientific side would have sealed the deal … with a little humor to boot.

A review of creation–evolution debates in the early 1980s (Edwords 1982) shows that the events in which the supporters of evolution came out ahead were those in which these scientists articulated the creation model, specifically compared the creation model to the modern scientific model, and then persistently focused on the errors and deficiencies of creationist models as science. In other words, they took the challenge of a true debate to heart.

For the most parts, public debate in the early 21st century is little more than carefully drafted sound bites and “gotcha” moments. These make it east to tally up points to name a “winner” but we all lose in the process for the failure of the “debaters” to engage critically and formally the arguments of their opponents and expose their weaknesses. This is perhaps the reason that Karen Bartelt (2004) called such debates “drive-by shootings of critical thinking”—this format does not provide anything to think with. In creation–evolution encounters, what happens on the podium is rarely what one can reasonably consider a debate.

This may be one of the reasons that NCSE has generally discouraged evolution supporters from participating in these events; it is stepping into the land behind the looking glass in which things do not mean what they seem to. Even if the scientist wins, science stands to lose.

We should not concede the stage, however. It is important that the case for scientific approaches to the important issues facing our species and our planet be made and understood by the general public. We need engaging presenters—people like Bill Nye—to promote that understanding in events and locations that will reach the intended audience through blogs, Twitter and RSS feeds, Facebook postings, and other outlets where information reaches people (and from which people often pass it along to others).

Perhaps the sun has set on the great age of debates. But only a naturalistic model can tell us how the sun sets … and why we can expect to see it in the morning. And that is not debatable.

References


About the Author

Andrew J Petto is a science educator who teaches anatomy and physiology in the Departments of Biological Science and Kinesiology at the University of Wisconsin, Milwaukee. He has been developing and presenting professional development programs for K–12 teachers in the sciences since 1991. He is also editor of Reports of the National Center for Science Education and a member of NCSE’s board of directors.