Reflections on The Challenges of Telling the Darwinian Story[*]

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What originally motivated my thinking on the challenges of teaching the Darwinian story in a theological context was an experience in 2004, just before the American Academy of Religion annual meeting in San Antonio. I had been asked to serve on a Masters committee for a student in the Environmental Sociology program at the University of Montana, because she was focusing her thesis on the range of views among Christians in Montana on environmental ethics. I was asked by the Sociology department to verify the credibility of the theological aspects of the thesis. In addition I had worked with this student in three courses, so I knew her academic work well.

The thesis itself was well done, though I had to encourage the student to expand her notion of "Christian" beyond her own conservative evangelical stance to include Roman Catholic and traditional mainline Protestant perspectives. This she did, and while she found their perspectives troubling in light of her own, she was fair to the range of views in her thesis. She concluded that a Christian environmental ethic should be centered on stewardship, as humans are created by God to be stewards of the earth. All of this seemed fairly standard in advocating for a Christian environmental ethic.

What caught me off guard was an Afterward the student included in her thesis, and a subsequent conversation we had about it. In her afterward she wrote, "I believe the earth is God's creation along with everything in it and on it, as well as the whole universe. God created everything in six days, *as we know them now,* and He created humans last as the pinnacle – the only being in His image, in which He bestowed a soul."[1] I was stunned to find out that she was a literal six-day creationist, both from my experiences with her in the classroom, and because I knew her father was a professor of ecology and botany. With my own training in geology, and thus a worldview that takes the notion of "deep time" for granted, I wanted to talk to her about her views, so I invited her out for lunch.

[1] Emphasis added.

What I found problematic about the conversation that followed was not so much her literalistic theological positions that I found at odds with modern scientific views of biology, geology, physics and astronomy – that I anticipated from what she had written. What I found problematic was that she didn't appear to understand even the basics of these fields, nor the methodologies that produced their claims about the world. I was fascinated how she and I could live in the same place – Montana – and share the same faith – Christian -- yet see the world so differently in terms of its history. I wanted to know how she could really believe in a literal 6-day creation and a young earth when surrounded by so much geological and biological evidence to the contrary. I pointed out the prominent ancient shorelines of Glacial Lake Missoula on the mountainsides above us and the 10,000+ year history they record. I showed her the fault zones on the Bitterroot Mountains to the southwest, and how the original roof zone of these mountains now lay 20-40 miles to the east following many millions of years of faulting and movement. I observed with her the stratigraphic column of sedimentary rocks in Montana that record the evolution of life forms from Precambrian stromatolites through the famous Tyrannosaurus fossils of the Mesozoic era to more recent horse and camel fossils of the Tertiary, and how geologists reconstruct the history of Montana and the earth on such evidence. To each argument I gave, she calmly replied "But God could also have done that in six days." With a predetermined theological conviction of divine supernatural intervention, there was no need to consider any evidence or ways of thinking that might contradict her literal reading of the Bible.

Clearly I was frustrated by this encounter, but beyond that I found myself deeply troubled. I was less concerned with our theological differences – I differ theologically with many people whom I nevertheless respect, and I do respect this student deeply for her faith and integrity – but rather that she was largely ignorant of and refused to consider the evidence and methods of modern science. After some reflection, I located the source of my concern in two primary areas. First, I had participated in The University of Montana conferring a graduate degree focused on environmental ethics on a student with no basic scientific understanding of how the world works. It would be one thing if she had

considered the evidence on both sides and made an informed, thoughtful decision in favor of her position, but ironically her theological convictions and certainty seemed to make this impossible: to consider naturalistic mechanisms outside God's supernatural intervention would call into question the foundations of her literalistic biblical faith. And second, while I respected her theological conviction that stewardship should be the shape of a Christian environmental ethic, what can such stewardship look like when it is based on fundamental misunderstandings and lack of understanding about how the world that it hopes to steward – to protect, care for, and nurture – actually operates? Shouldn't a Christian stewardship ethic be rooted in not only biblical principles, as she argued, but also insight into how the world actually functions? How can we care for something we don't understand?

My discomfort with having been a participant in credentialing this student in turn made me reflect on my own graduate theological education. To my dismay, I realized that it was largely as deficient in any requirements for basic scientific literacy as this student's had been. Perhaps this literacy was largely presupposed by the program – that a prerequisite of getting into graduate school was a college education that presumed basic scientific literacy, let alone literacy in the basics of evolutionary theory. But all too often this was not the case. In fact, many of my seminary colleagues had gone into the humanities in part because they didn't *like* or "get" science, and they were relieved that they no longer had to deal with scientific questions. If they did not come into graduate study with this basic understanding, they certainly did not pick it up there. And yet we saw ourselves as gaining the necessary tools of theological analysis to be able to provide theological, ethical and pastoral leadership in faith communities and the community at large on a range of public issues.

One result of this abdication of scientific literacy in theological training has been ceding much of the public discussion about the relation of religion and science in general, and religion and evolution in particular, to the Religious Right. As Michael Zimmerman points out in his excellent text, *Science, Nonscience, and Nonsense: Approaching Environmental Literacy*, scientific illiteracy is endemic in American society, with critical consequences in the realms of education, politics, and public policy.

"The problem," Zimmerman writes," is less that most Americans share no solid grasp of a body of scientific "knowledge" than that they have a complete misunderstanding of the nature, processes, and purposes of science" itself. (Zimmerman 1995: 14) This leaves the U.S. public unable to make critical distinctions between legitimate science and pseudoscience, and leaves us as a society vulnerable to cultural and political manipulation in many areas of public policy, including environmental policy.

Let me here suggest *four* areas where we could begin to address these deficiencies in theological education. I then elaborate further what addressing these deficiencies might look like by reviewing a few of the several excellent texts currently available that can help to remedy the problem.

1. *Fully reintegrate scientific literacy back into theological education*. While science and theology remain distinct ways of knowing reality, science can inform theology in several critical areas. Historically the Christian theological tradition relied on the "Two Books" tradition for knowing God. The Book of Nature revealed God's presence in the natural world, while the Book of Scripture revealed God's story of creation and redemption. (Peters and Hewlett 2003: 18) Only since the Reformation and the Enlightenment have these two sources been divorced from each other, with the Book of Nature ceded to science. Yet science can now reveal things about the Book of Nature – and indirectly about God and God's creation – that could never before have been imagined in their breath-taking beauty, complexity, and intricacies. But theologians must be scientifically literate to appreciate these insights and their implications. A basic "Science and Religion" course that explores the history, relationship, and distinctive methods of these two disciplines could add immeasurably to addressing this deficiency.

(2) *Integrate the history of science and particularly evolution into Christian and church history courses.* The encounter between modern science and evolution, with theology and faith has been no less consequential than the great theological issues that shaped the early church or the Reformation, yet a serious engagement with it typically is left out of courses in Christian and church history. An excellent source to learn about the history of evolution and its many convoluted

encounters with culture and religion is Edward Larson's book *Evolution: The Remarkable History of a Scientific Theory*. Another fine source that reviews the history and contemporary outline of debates between evolution and creationism is Eugenie Scott's text *Evolution vs. Creationism: an Introduction*.

(3) *Engage in Serious Theological Encounter with Evolution*. The primary concern here is that not only is the Christian faith *compatible* with Darwinian evolution as a science, but also that contemporary Christian theology is *inadequate* without a serious engagement with evolution and its implications for our theological view of the world. Most mainline and liberal theologians and persons of faith who accept Darwinian evolution have been content to assert their compatibility and leave it to that. In some ways conservative advocates of creationism and more recently intelligent design have been more honest in recognizing and confronting some of the more daunting aspects of Darwinian evolution than have their centrist and liberal counterparts. Darwinian evolution as understood and applied in modern biological science raises some challenging questions for traditional Christian views of teleology and divine purpose in nature, theodicy and the ubiquitous presence of suffering, violence, and death in the natural world, and notions of God's creation and providence. In addition, some scientists and philosophers have moved beyond the *science* of evolution to asserting a materialist ontology underlying it that leaves no room for God and hence *does* conflict with Christian (and other religious) convictions. Without confronting these and other theological issues head on and making a reasoned and credible case for the compatibility of Darwinian evolution and Christian faith, we risk ceding the ground to either fundamentalist supernaturalism or atheistic materialism – not coincidentally, the two dominant endpoints in the current culture wars around evolution.

(4) *Integration of Science into Christian Ethics.* A final area for integration of scientific literacy into theological education and public discourse in faith communities is more careful consideration of the role of science in formulating ethics. While there is no direct move from science to ethics – as the disastrous legacy of social Darwinism illustrates all too well – good ethics should be informed by sound science, just as good ethics should repudiate and reject unsound or pseudoscience.

This requires knowing the limits of science and scientific claims, as well as how to evaluate them – a basic part of scientific literacy. Courses in Christian ethics should include how – and how not – to draw on science in formulating ethical positions. Particular emphasis should be given to recognizing and responding to the so-called "naturalistic fallacy"—that something is "good' because it is "natural" or "bad" because it is "unnatural". Understanding evolution and its implications for life and ecological wellbeing is particularly critical for this project. Too often Christian eco-theology and ecological ethics reveal basic ignorance of Darwinian evolution in understanding biological and ecological realities. The result is theological projects divorced from the actual earth reality they seek to address.

Let me close with a quote from Ted Peters and Martinez Hewlitt about what finally is at stake in this issue: "For us," they write, "science and faith are like lunch and dinner; we don't want to go through a day without some of each. Both nourish a healthy mind. Both tantalize our taste buds for curiosity. And both build the brain "muscles" we need to exercise our thought processes about reality. Why would anyone want to diet and dine on one or the other rather than both? Intellectual malnutrition would result." (Peters and Hewlett 2003: 18) To that I say "Amen, and Bon Appetit!"

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