

The Evolution-Creationism Debate: A Case Of Irreconcilable Differences Or Of Cyclic Dispute?

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Abstract

By media accounts, there are only two camps in the struggle between evolution and creationism and no middle ground exists. The search for a common ground in which an individual could educate him/herself about the opposing views led to a survey of the science and religion inventory of local bookstores. The book offerings of two large chain stores and one Christian specialty store were categorized by topic, extremeness of the viewpoint presented, and whether or not an understanding of the evolutionary process was assumed.

In the chain stores, the overwhelming majority of science books assumed an understanding of evolution (98% and 84%) while only a single book (of 103 surveyed) at the Christian store made the same assumption. Most books in all stores were either very gentle or very harsh in their approach to the topic, regardless of viewpoint, although more creationist texts were extreme in their harshness than were the evolutionist texts. No single book was found in all three stores and few of the more moderate authors were represented. A physical common ground will be difficult to find in bookstores, although mainstream stores provided a broader range of views than the specialty store.

“The God of the Old Testament is arguably the most unpleasant character in all fiction.”
(R. Dawkins in *The God Delusion*)

“I think it is highly important to emphasize, however, that all of the anti-Christian systems of modern times have found their quasi-scientific basis in the supposed scientific fact of evolution.”
(H.M. Morris in *Twilight of Evolution*)

Such is the language we hear in today’s conflict between those groups that advocate evolution and those that espouse creationism. The language is one of polarity – polarity so strong in its effect that members of either camp find little room to hear, much less rationally consider, the opposing viewpoint (Deaux et al. 1993). Us and Them. It is these “extreme views that often get the press and the news coverage with fuels the controversy and the debate even further that it should go.” (Martin 2006) Even as a local newspaper was describing an impending visit to a “Creation Museum” by a group of naturalists, the article related that the promotion of the museum by the local visitors bureau had been recently changed from its original statement, which had read: “This ‘walk through history’ museum will counter evolutionary natural history museums that turn countless minds against Christ and Scripture.” (Anonymous, *Daily Press*, Sept. 8, 2007)

While 60% of Americans believe in evil in the forms of devils and hell and 70% profess belief in angels, heaven and miracles (2005 Harris Poll, cited in Henig 2007), the view of the religious believers toward evolution varies tremendously. In the United States, the conflict between science and religion is usually focused on evolution and Christian creationism.

However, even Islamic fundamentalists have entered the fray (Dean 2007). Having been raised in a Christian tradition that does not take issue with evolution as an explanation for the biological, physical world, I was comfortable discussing both science and religion, and did not feel threatened by those with experience in only one of the “camps”. I was surprised the first time I taught a Biological Evolution course and a student, who had been present and involved all semester, stood up and left halfway through a class as soon as we started the chapter on human evolution.

Since that experience, I have tried to find good sources for approaching evolutionary theory in front of a reluctant – and religious – audience. It was through this search that I was introduced to Kenneth Miller’s *Finding Darwin’s God*, Francis Collins’ *The Language of God*, Michael Ruse’s *Can a Darwinian Be a Christian?*, as well as more practical pedagogical tools such as *Defending Evolution* and *Evolution vs. Creationism*. The idea that our popular perception that science and religion must be viewed as an irreparable dichotomy was not satisfying, and the thought that students felt confined by that dichotomy was troubling.

However, as a science instructor, I am teaching science, not religion, and wherever the students received their religious instruction was obviously not teaching science. So, how could students find a source of information free from the strictures of the disciplines that could inform them fully about the perceived conflict between evolution and religion? Was there an unbiased source – a common ground – available to them?

Methodology

In order to investigate this question, I decided to examine the inventory of local bookstores. In theory, at least, mainstream bookstores should not have an “Agenda” concerning the evolution-creationism controversy. Two large chain stores (Borders and Barnes & Noble) and one specialty Christian store (Agape) located in Newport News, VA were surveyed. In each shop, the books on shelves labeled “Science”, “Biology”, “Evolution”, “Genetics”, “General Religion”, “Apologetics”, “Christianity” and/or “Atheism” were visually scanned. If they discussed the topic of evolution or if the term evolution was listed in the index, the text was examined for its attitude toward the topic and scored on a one-to-five scale (1=gentle, 5=harsh). Name-calling of the opposing camp, questioning legitimacy, insinuating stupidity or damnation

were all considered “harsh”. Approaches that could facilitate discussion and avoided antagonism were deemed “gentle”. Title, author, attitude factor, and year of publication were recorded for all books that mentioned evolution. In all, 378 books were included (139 at Borders, 136 at Barnes & Noble, and 103 at Agape).

Because scientific inquiry is limited to natural explanations for natural processes or observations, and supernatural causes are not presently recognized as “scientific”, intelligent design theory (ID) could not be considered science in the classic sense. Consequently, texts in the shops that discussed ID as a viable explanation for the planet’s diversity were counted in with the creationist texts.

Findings and Conclusions

About a quarter to a third of the science books carried by the mainstream bookstores discuss evolution and creationism/ID to some degree (Table 1). In sharp contrast, nearly all the books shelved as science books in the Christian bookstore focus on anti-evolutionism. At both Borders and Agape, 86% of the religion-categorized books dealt with the evolution issue, while only 40% of those at Barnes & Noble focused on that controversy. The vast majority of science books at the chain stores assume that evolution occurs and that the reader understands the process to some level; only one of 103 books at Agape made the same assumption. Not a single title was carried by all three stores at the time the survey occurred. The fundamental assumptions of what makes “science” were not consistent between the mainstream and specialty shops.

While each viewpoint had authors that approached the subject with great generosity toward differing views, each camp also housed authors with vitriolic vocabularies (Figure 1). However, more extreme authors were more frequent among the creationist writers, threatening evolutionists with eternal damnation and blaming them for most of the ills of the world (Morris 1963). Evolutionists at the harsher end of the scale, such as Dawkins and William Provine, tend to insult the reasoning abilities of religious believers. In all three stores, voices of the moderate authors such as Kenneth Miller or Michael Ruse or Francis Collins were in short supply. Unless you already know these authors and inquire, you may not happen upon their works and discover their approaches to melding their spiritual and scientific beliefs.

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The average year of publication differed greatly between the mainstream and Christian stores. The average year of publication for books included in the survey was 1995 at Borders, 1996 at Barnes & Noble, and 1980 at Agape. However, unlike the other two shops, Agape buys back used books and those items in stock account for some of the obsolescence of the Agape books.

One qualitative observation on the language employed in the books: both viewpoints often retreated to a language of warfare and used conflict terminology such as war, struggle, confront, versus, triumph, defense, and defeat. Clearly, both camps sense an opposition that is threatening in some way. Trying to find common ground when under siege is difficult, and being open to ideas of the “enemy” is nearly impossible. From the texts in the stores, it seemed that the only two alternatives for coexistence of spirituality and classic scientism are a theistic evolutionist approach in which God is present but remote (which is still shunned by the ultra-conservatives) and the idea of Stephen Jay Gould of Non-Overlapping Magisteria in which we agree that science and religion answers different questions about the world around us and should not be interlaced. In the strictest sense, each of these approaches takes a “separate but equal” view of the problem.

Given the different inventories, the paucity of moderate voices, and the general sense of warfare, it is unlikely that any of the stores represent a truly common ground for earnest inquiry into both evolution and creationism in all their extremes. By a matter of degrees only, Barnes & Noble probably offered the greatest diversity of stock.

The perception that we live in a time of polarity in our views toward evolution and creationism is reflected in the offerings of bookstores. A sort of circular reasoning exists. Christian bookstores cater to conservative Christian shoppers; a patron of a Christian bookstore may be predisposed to an anti-evolution, anti-Darwinism viewpoint and that viewpoint is the only one presented at the shop so no exposure to the opposing view will be encountered. A non-Christian is unlikely to shop in a Christian store, and so will likely never be exposed to the more extreme conservative stances toward Darwin and evolution, although gentler versions of that stance can be found at mainstream stores.

The bottom line? No physical common ground exists in a single bookstore in Newport News for an undecided person. He/she would need to visit each type of store separately to gain access to the full spectrum of the materials available. Happily, however, there are more

moderate writers becoming available and even the America Association for the Advancement of Science (AAAS) has published *The Evolution Dialogues* as a guide for striving for the common ground between science and religion in regard to the theory of evolution.

Is this entrenched extremism toward evolution a singular sign of our times? We see the same polarity echoed in debates on abortion, the death penalty, and gay marriage. Perhaps we are living in a more extreme society that only sees the world in “us” and “them” terms. Is there evidence, at least in the evolution discussion, of any other time when the debate was undertaken in such harsh, warlike terminology? Absolutely.

Ever since the publication of the *On the Origin of Species* in 1858, the topic of evolution by natural selection has risen and fallen in the public arena. It should be remarked that the idea of evolution did not originate with Charles Darwin, nor was evolution itself the major dilemma in 1858. The idea that organisms could change over time had been observed through artificial selection and through common observations of human lineages (Bowler 2003). The unique contribution of Darwin was the mechanism – natural selection – that could lead to the observed descent with modification. Darwin himself was painfully aware that his naturalistic explanation of the origins of diversity on earth had implications for human history as well, but he carefully avoided that topic in *Origin*.

At first, his contemporaries did not buy into natural selection as a mechanism with sufficient power to give rise to the diversity of life around them. One of the strengths of Darwin’s theory of evolution by natural selection was its ability to predict. If Darwin’s theory were true, then transitional forms of organisms should be found. In 1863, *Archaeopteryx* was discovered in Germany – a fossil of a creature with feathers like a bird’s, but also with teeth and scales like those found in reptiles. By the late 1800s, Darwin and his colleagues won over many in the scientific community. Darwin was even awarded an honorary doctorate degree from Cambridge University (AboutDarwin.com). This acceptance of the premise in *Origin* sparked a renewed controversy in the religious community, specifically because of the implications for human evolution.

The 1920s saw another resurgence in the “controversy” as Gregor Mendel’s work with the genetics of garden peas was rediscovered and made available. Mendel’s theories provided answers to some of the holes in Darwin’s theory, such as how variation arises at all (via mutation) and the mechanism of inheritance of traits (one set of genes from each parent). Again,

as Darwin's theory gained support from the findings of Mendel, anti-evolutionist forces became concerned about the impact of this "Modern Synthesis" of evolutionary genetics on humanity. Present-day anti-evolutionists often reflect on the misuse of evolutionary theory by Hitler and others focused on eugenics as an example of the "evil" intrinsic in evolution and Darwinism.

The copious writings of Henry Morris in the mid-twentieth century brought the conflict between evolution and creationism to the forefront yet again. Morris and his organization, Answers in Genesis, held to a strict, literalist interpretation of biblical texts that appealed to many, more conservative Americans during the turbulence of the 1960s. Twenty to thirty years after Morris, and continuing today, the philosophy of Intelligent Design has reinvigorated the debate yet again with its homage to Paley's clockmaker analogy and its deliberate ambiguity as to the identity of the "Designer". The battles that have occurred in schools across the United States are testament to the appeal of a supernatural answer for the questions posed by the world we in which we live. With each of these resurgences of challenges to evolutionary theory, the scientific community has held firm to and promoted the idea that evolution still represents the best working model with which to understand the world and its diversity.

So as we consider the Evolution-Creationism Debate, should we conclude that it is a case of irreconcilable differences or of cyclic dispute? Given the paucity of common ground between the opposing viewpoints and the history of the debate, the only appropriate answer is: yes.

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Figure 1. “Harshness factor” (1= gentle, 5= harsh) in authors’ writing within books biased toward evolution, toward creationism, and showing a neutral attitude.

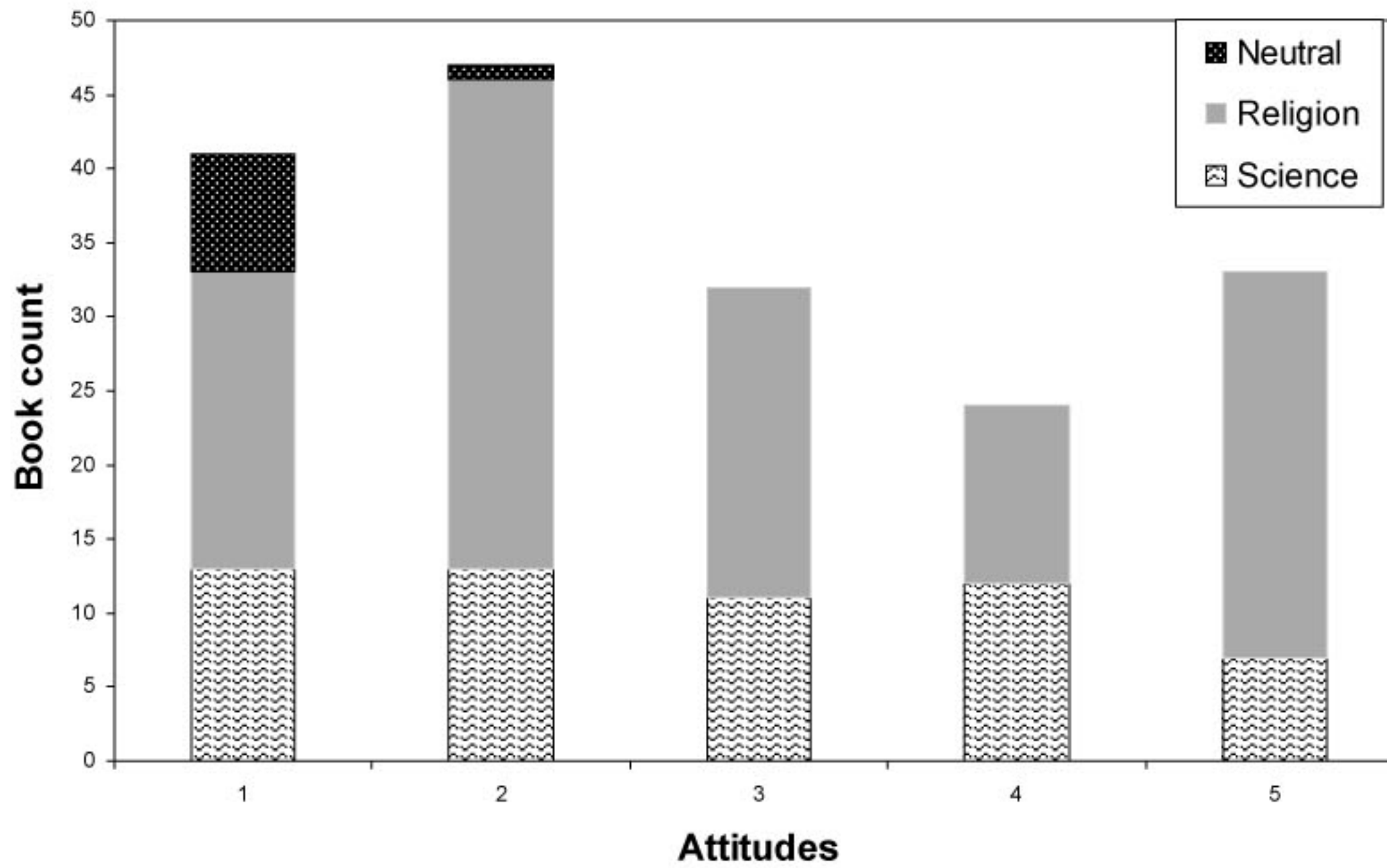


Table 1. Percentage of books at each store in each category that discuss evolution and creation at some point in the text, and the percentage of science books that assume evolution occurs.

	Borders			B&N			Agape		
	Discuss E:C	Total in category	% that Discuss	Discuss E:C	Total in category	% that Discuss	Discuss E:C	Total in category	% that Discuss
Science	25	117	21%	35	107	33%	68	74	92%
Religion	19	22	86%	12	30	40%	25	29	86%
Total	44	139	32%	46*	136*	34%	93	103	90%
Assume Evol in Science			98%			84%			0.9%

* One book was found on both the science and religion shelves at this store.