

lar, etc. At the end of her book, she writes that she hopes to encourage more studies of how modern interpretations of Christianity are racialized and how contemporary Christian claims to universality may encode racism or ethnocentrism. She has given us a worthy starting point. *Why This New Race* is set to challenge many of our assumptions about the intersection of race and religion, both in ancient and modern times. It is one of those books that serve to inform us, in clear and uncompromising language, just how it is that we arrived at this point in history; it will undoubtedly shape future studies of the subject for years to come.

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DARK AGES: The Case for a Science of Human Behavior by Lee McIntyre. Cambridge, MA: MIT Press, 2006. 121 pages, index. Hardcover; \$24.95. ISBN: 0262134691.

I obtained this book with the hope that it would build on the themes I encountered in another book that I am reading (*Destructive Trends in Mental Health*). As a practicing experimental psychologist, I have observed firsthand the strengths and weaknesses of the field of psychology. Unfortunately, McIntyre is prone to overstatement. He argues that social scientists often answer questions without data, their attempts are biased by political and perhaps religious ideology, and the field is not adequately scientific because social scientists avoid reducing the human condition to deterministic relations. As much as I might agree with some of these points, he overstates them and caricatures social scientists as ignorant ideologues uninterested in data.

While he idealizes the natural sciences as the model child, he fails to recognize some of the best scientific analogies for the condition of the social sciences: weather prediction, earthquake prediction, fluid dynamics, or population growth. For example, our inability to make anything more than general predictions about the weather more than a week in advance parallels our inability to predict with any degree of accuracy the behavior of an individual or group, and trying to predict a rare phenomenon like an earthquake is like predicting another Columbine. To ascribe these failures to a resistance to knowledge, a disdain for the scientific method, or ideological bias is as unfair for social scientists as it is for natural scientists.

McIntyre underestimates the challenges that are unique to the social sciences. First, if I had as much control over humans as physicists and chemists have over their subject matter, the application of the scientific method would be much easier. Social scientists have to obtain approval by review boards to insure that their experiments are ethical. Second, many of the social sciences (especially sociology and psychology) are heavily biased by a liberal ideology (e.g., see Redding's March 2001 article in the *American Psychologist*). McIntyre was more likely to use religious ideology as the scapegoat and seems to idolize Galileo and Darwin, but liberal political ideology is much more likely to be the problem in certain social scientific fields (e.g., studies of gun control, sexual orientation, race, and immigration) but less so in ones that are not so value-laden (e.g., studies of perception, basic learning phenomena, or

decision making). Third, I have encountered too much faddishness that results in the quick dispensing of old theories instead of building on them. These fads are often due to a lack of precision in theory development that makes it difficult to disprove the theory. The best theoretical "story," no matter how vague, is the one that wins out.

Despite McIntyre's diatribe against bias, he failed to recognize the log in his own eye. When he makes statements like "religion has been offered as a substitute for reason and has retreated only after suffering the most crushing defeats" (p. 52) and wonders how a rational person can "believe in a concept so patently implausible as God" (p. 53), his own ideological biases are manifest. In his concerns about a resistance to knowledge holding back the social sciences, I was left wondering whether the author would be willing to consider answers that would suggest that religious beliefs have positive consequences? McIntyre envisions a future utopia in which a properly conducted social science has eliminated poverty, crime, and war. This Heaven on Earth may or may not be possible, but he argues that we will never know until we try. I worry that McIntyre has not considered that this ideal may require that his utilitarian ethics would lead us to justify genocide (to eliminate war), parental licenses (to reduce poverty by preventing overpopulation), or a police state (to reduce crime) among other questionable solutions.

In sum, I believe that McIntyre failed to consider many of the real problems with the behavioral sciences, showed many of the biases that he fears might influence our judgment, demonstrated a disdain for the Christian worldview, and deified humankind. There are real problems in the social sciences, but the author provides caricatures that are of little practical utility. Unfortunately, despite its promising premise, I cannot recommend this book.

Reviewed by Michael Young, Associate Professor of Psychology, Southern Illinois University, Carbondale, IL 62901. ■

Amplification on Two Evolutionary Claims: A Response to Pattle Pun

Some of the points made in Pattle Pun's article (*PSCF* 59, no. 2 [June 2007]: 102-9) are contentious and widely debated in the context of the debate over ID. Rather than deal with those, I would like to point out two claims that can also be found in sources from a conventional evolutionary perspective, yet are incorrect.

The first is the claim that "the fossil [record] shows unicellular organisms such as cyanobacteria around three and one-half billion years ago and then suddenly the Cambrian explosion 530 million years ago, with nothing much appearing in-between." Older rocks have generally suffered greater alteration and are less common than younger rocks, and bacteria often have few distinctive fossilizable features. Nevertheless, there seems to be an increase in the diversity of bacterial forms over time.

Eukaryotes are typically more complex in structure and thus are easier to study in the fossil record. The first eukaryotes appear about two billion years ago or so. Algae and other protistan eukaryotes diversified through the Precambrian; there are also fossils of uncertain taxonomic affinity that show appreciable evolutionary turnover through this time interval.

In the latest Precambrian, beginning about 570 million years ago, the earliest animals appear. These include such simple animals as sponges and cnidarians, as well as probable very primitive representatives of other phyla. Exact affinities of many of them are uncertain; this reflects the preservation (often relatively coarse) but may also indicate that the species have not yet differentiated into the familiar post-Cambrian phyla. Within the Cambrian itself (beginning about 544 million years ago), there are forms transitional between phyla as well as the earliest clear representatives of many phyla. Although assignable to modern phyla, these typically are relatively primitive, as expected evolutionarily. The Cambrian is neither as explosive nor as exceptional as commonly claimed, though there remains much to do in areas such as testing competing evolutionary hypotheses by better documenting the exact patterns.

Secondly, although "survival of the fittest" is a well-established popular description of evolution, often depicted (especially in nature TV shows) as fierce competition, in reality it only takes being fit enough to survive. Cooperation and competition both are possible paths to adequate fitness. Thus, symbioses such as that envisioned in the endosymbiosis model of organelle origination fit within a normal evolutionary paradigm. It does not increase one's fitness to kill a handy supply of food, shelter, transportation, etc.

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What the "Big Bang" Really Was!

The June 2005 issue of *Perspectives on Science and Christian Faith* contains an excellent article entitled "The Thrice Supported Big Bang" by Perry G. Phillips (PSCF 57, no. 2 [2005]: 82-96). It is a scholarly presentation covering fifteen pages, including references. In his opening paragraph, Phillips states: "One cannot dismiss ... the 'hot Big Bang' as the best model for the origin of the universe."

I found Phillip's article most interesting but his positive assumption that the universe came into being as the result of an unparalleled cosmic explosion troubled my finite mind. All explosions since then have been chaotic or destructive. How could anyone with any degree of intelligence come to a conclusion that this is the way the universe began? Yet the vast majority of scientists (astronomers, cosmologists, and astrophysicists) are in general agreement with this theory for its origin. I am one that does not accept it, although I do accept the theory that a "Big Bang" did occur—but not as the beginning or the

origin of the universe. Being a Christian, amateur astronomer, biochemist, nutritionist, food technologist and logician, I just could not accept the event called the "Big Bang" as a plausible explanation for anything as awesome as the origin of our magnificent universe!

On my office wall I have a picture taken with the Hubble Telescope in 1995 entitled "Hubble Deep Field." The inscription at the bottom is:

Nearly every object in this image is an entire galaxy, each composed of billions and billions of suns taken by the Hubble Space Telescope. It is a random patch of sky near the Big Dipper, less than 100th the area of the full moon. The telescope, above the blurring effects of the Earth's atmosphere, reveals colors, shapes and structures of galaxies to nearly 90% of the distance to the edge of the Universe.

I made a count of the galaxies within a one-inch width of several places on the picture and then computed from the average the number of galaxies on the picture and came up with 750. Thus, when extrapolated to cover the entire sky, the number of galaxies in existence at a relatively short time after the "Big Bang" was astronomical if I can choose a word to describe the number. How could this be? To me, a scientist who thinks scientifically, there is only one explanation—the universe was already in existence at the time of the "Big Bang" and that event was merely God's way of announcing that the work was finished and that now the curtain could be opened and the marvel of his creation could be viewed for the first time!

I am so excited about this revelation that was given to me just shortly after the turn of the year that I want to share it with other scientists, especially those who believe in God as the Creator, to see how they react to my theory which, to me, is far more plausible and believable than the one that is so widely accepted by the vast majority of scientists today.

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Errata

The cover of the June 2007 was inadvertently printed with the list of articles in the December 2006 issue. Replacement covers with the correct titles were mailed to everyone who received the June issue.

In the manuscript guidelines and on p. 167, the incoming editor's email address was published incorrectly. Please note Arie's correct email address below.

We apologize for the errors and confusion.

Change in Manuscript Submission

Please submit all manuscripts (except book reviews) to:

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