

Book Notice

complete without including the perspective of a unique modern spiritual figure from India who has written extensively on the subject of creation and its purpose—Meher Baba.” She gives a rather glowing description of his work. For example, she writes, “It is hard to imagine a spiritual system more focused on the notion of directionality and divine purpose than that of Meher Baba.” Apparently no scientists have commented on Baba’s ideas, but that does not stop Boisvert from speculating on what their reactions might be. Boisvert writes that “comparison of different metaphysical systems is beyond the scope of this book,” but concludes that chapter with comparisons because of “the special interest taken by Baba in establishing unity among different religions.”

The book concludes with thirty-seven pages of excerpts from primary sources. These are provided, “so that the reader may experience firsthand the writings of major religious figures and a leading scientist.” In addition to three passages by Meher Baba, there are selections from the writings of Auroindo Ghose, a Hindu spiritual teacher, C. P. Ranasinghe, a Buddhist scholar, Albert Einstein, and Pope John Paul II.

It is refreshing to see a book that goes beyond the discussion of origins. Boisvert has done a good job of identifying an interesting set of issues. However, a much longer book would have been required to do justice to all of them, especially if they were all examined in depth from a wide variety of religious perspectives. The most disappointing thing about the book is the imbalanced emphasis on one perspective. The book’s title and introduction give no indication that this would be the case.

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THE TWO BOOKS: Historical Notes on Some Interactions between Natural Science and Theology by Olaf Pedersen (ed. George V. Coyne, S.J. and Tadeusz Sierotowicz). Vatican City: Vatican Observatory Foundation (distributed by University of Notre Dame Press), 2007. xix + 424 pages. Paperback; \$22.00. ISBN: 9788820979010.

If you have ever wondered how the metaphor of the two books entered our Western consciousness and shaped our habits of speech and reflection, this book, a series of edited lectures given by the distinguished historian of science Olaf Pedersen (1997†), should be of interest. Pedersen taught early physics and astronomy, and established the Institute for the History of Science at Aarhus University. Pedersen challenges the

authorized picture of the relations between “religion” and “science” as one long struggle between the forces of ignorance and authority against the powers of knowledge and freedom... There has not been one single struggle, but a long series of interactions from the very beginning of the scientific interest in nature, and in these interactions there has been a constant give and take (p. 311).

In the first seven chapters, Pedersen explores this “give and take” beginning with the birth of science, the early church fathers, the Carolingian Renaissance, medieval science and theology, and ending with the early modern science of Isaac Newton. This historical development is covered in fine detail, complete with extensive notes and numerous bibliographic references. The last chapter (chap. 8), “The Impact of Time,” explores the development of evolutionary thought and some of the theological reservations this engendered. The book’s appendix lists the complete works of Olaf Pedersen. A challenging, but rewarding, read.

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Letters

Facing Abominable Mysteries

In his article “Flood Geology’s Abominable Mystery,” R. Joel Duff presents “a single challenge” to all flood geology models.¹ It is to explain the evidence of fossil succession and the distribution of spores and pollen in sedimentary rocks. While Darwin found the late and abrupt appearance of flowering plants to be an abominable mystery, Duff regards pollen evidence as “an even greater abominable mystery” that flood geologists still need to solve.² Some readers may view billions of years of evolution as the only viable alternative and conclude that the flood described in Genesis was either local or mythical. As explained below, there is another alternative untroubled by this challenge, and we can question which abominable mystery is actually the greater.

The article did not include a comparable examination of Darwin’s abominable mystery. Duff dismissed it as “no longer such a mystery” and claimed, “Standard geological and evolutionary theories provide a robust explanation for the succession of fossils in the geological column.”³ We can hardly consider the older mystery solved if the reason that flowering plants appear in only the uppermost strata is that they evolved late and abruptly. Why late? Why abruptly? Why was the Cretaceous the right time for flowering plants to begin to flourish? Abruptness is the rule for all life forms, and this is abominable to those who believe in macroevolution because they need to find a glacially slow accumulation of beneficial mutations. This process is purely theoretical and has not been demonstrated through repeatable experiments. Duff did cite ongoing debate over details of angiosperm origins and evolution in his footnote 36, but this hardly explains why Darwin’s mystery can now be considered less abominable than the one that flood geologists face.⁴ If an abominable mystery left unsolved requires theory revision or even rejection, then why should evolutionists get a pass but not flood geologists?

“Minimization of the miraculous,” an axiom Duff mentions in his first footnote, raises a key question. Apart from the work of “creation scientists,” has any reputable scientific investigation of origins or any past event ever led to a conclusion that a miracle took place? If the truth is that a miracle has occurred, we can know this by having

witnessed it personally or by believing the testimony of trustworthy witnesses, but this is not science. Scientists might be able to shed some light on the nature of a miracle, but they are almost sure to report that there was no miracle, so if the true solution to the abominable mystery now challenging flood geologists involves a miracle, it may never be found through purely scientific investigation.

Nevertheless, theories about the Genesis account of a great flood and other mysteries do attract great interest. According to a theory proposed by Gerald Aardsma, the flood was due to water from the southern oceans moving north to cover most of the northern hemisphere,⁵ leaving some other areas dry (Antarctica, Australia, the southern parts of Africa and America, as well as northern lands at low latitudes or high altitudes). Aardsma believes the event was too tranquil to have deposited all the global sedimentary rock,⁶ but the flooded populations were destroyed.⁷ If he is right, the flood was neither local, nor mythical, nor quite universal. Duff's challenge to flood geologists does not apply to his theory.

Aardsma has had relatively little to say about events that might account for the thick sediments that are found worldwide. One can speculate that they are somehow related to the curse on the ground mentioned in Gen. 3:17, but the concise record of this curse in the Bible leaves much room for speculation. We rely on eyewitness testimony to study miracles. Scientific investigation can help only by suggesting limits to what may be considered a reasonable theory. Apart from the Bible, we have no way to know exactly what God did to curse the ground or what miracles may have been performed at that time.

We can all read Genesis or ignore it, but as we face these abominable mysteries, we can believe what we read there, or reject it, or invent figurative interpretations. I recommend belief.

Notes

¹R. Joel Duff, "Flood Geology's Abominable Mystery," *Perspectives on Science and Christian Faith* 60, no. 3 (2008): 168.

²*Ibid.*, 174.

³*Ibid.*, 174–5.

⁴The abruptness of the evolution of flowering plants is still recognized, and the cause of their diversification "remains mysterious," according to the news article, "Tree of Life for Flowering Plants Reveals Relationships Among Major Groups" at www.utexas.edu/news/2007/11/27/biology_tree_of_life (accessed October 23, 2008).

⁵Gerald E. Aardsma, "The Origin and Antiquity of the Biblical Text," *The Biblical Chronologist* 8, no. 6 (2002): 2–3. Nice supporting evidence is covered in an earlier article by Aardsma, "Noah's Flood: The Irish Evidence," *The Biblical Chronologist* 5, no. 3 (1999): 1–7. This flood theory was introduced to *PSCF* readers in my earlier letter, "On the Hills of Concordism and Creation Science," *Perspectives on Science and Christian Faith* 55, no. 4 (2003): 278, which was part of a longer discussion. See also, for instance, my later contribution, "Do Ice Cores Disprove Aardsma's Flood Theory?" *Perspectives on Science and Christian Faith* 56, no. 1 (2004): 76–7.

⁶Gerald E. Aardsma, "Research in Progress," *The Biblical Chronologist* 4, no. 1 (1998): 15–6.

⁷Gerald E. Aardsma, "The Depth of Noah's Flood," *The Biblical Chronologist* 3, no. 3 (1997): 9–10.

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Not All Mysteries Are Equivalent

In his letter Thomas Godfrey suggests that my article on spores and pollen in the fossil record [*PSCF* 60, no. 3 (2008): 166–77], though it may represent a mystery to conventional flood geology theories, does not challenge all young-earth theories. One such theory has been promoted by Gerald Aardsma. His theory, I agree, does represent a radically different approach to the reinterpretation of the geological history of Earth from a young-earth paradigm. His theory, as I understand it, relies on the idea that there is a pre-creation virtual history.¹ While I have some difficulty distinguishing this virtual history from what is generally referred to as creation with the appearance of age, Aardsma does manage to avoid one serious complication that often confronts global flood proponents: if the world were created with apparent age, what then were the effects of the flood? Aardsma manages to skirt this difficulty by claiming, as Godfrey points out, that the biblical flood was not quite universal. By doing so, Aardsma posits that the vast majority of geological strata and fossils, including possibly even some human archeological remains, are part of our virtual history, albeit a virtual history reflective of a world inflicted by the curse. With this approach to Earth's history, Aardsma has clearly moved far from his flood geology roots and is now claiming that the histories, including presumably that of the spore and pollen record, which have been interpreted as long ages, may actually represent accurate interpretations of time, albeit a virtual time.

But what then of the origin of angiosperms? In reference to standard evolutionary theory, the mystery of flowering plant evolution is not so much a mystery in terms of whether it could happen, but rather a mystery in not knowing the details of how it happened. Even in Aardsma's virtual history, there would be evidence of an origin of angiosperms that would include an observable first appearance of angiosperm plants and their pollen and evidence of the proliferation of flowering plant groups over some period of virtual history. What then is accomplished by suggesting that this virtual history which God has provided for us should contain evidence that would make us doubt what he has made clear in other lineages; namely, that they have changed over time? Molecular genetics and many new fossil discoveries have provided evidence that the first flowering plants diversified over a short period of time.

There is, I agree, considerable evidence of abruptness in the fossil record. However, that abruptness, even in the case of angiosperms, may still represent millions of years of real or, in the case of Aardsma, "virtual" time. Exactly how such bursts of radiation occur is not completely understood, but that they do occur is not especially surprising nor mysterious, in the sense that promising hypotheses have not been proposed. Recent studies, such as those on cichlid fish,² have shed new light on the numerous patterns and mechanisms for rapid speciation and adaptive radiation. In the end, the challenge of the spore and pollen distribution does not rely on perfect knowledge of how angiosperms may or may not have evolved, but on the fact that they represent, at a minimum, a highly coordinated set of evidences of sequential stages of the origins of different organisms on Earth. Catastrophic flood geologists have not provided any