

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,<sup>5</sup> 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,<sup>6</sup> but the flooded populations were destroyed.<sup>7</sup> 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

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

<sup>2</sup>*Ibid.*, 174.

<sup>3</sup>*Ibid.*, 174-5.

<sup>4</sup>The 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](http://www.utexas.edu/news/2007/11/27/biology_tree_of_life) (accessed October 23, 2008).

<sup>5</sup>Gerald 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.

<sup>6</sup>Gerald E. Aardsma, "Research in Progress," *The Biblical Chronologist* 4, no. 1 (1998): 15-6.

<sup>7</sup>Gerald 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.<sup>1</sup> 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,<sup>2</sup> 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

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coherent theory that can account for this highly detailed fossil record. They are left with a true mystery that can only be confronted with ad hoc explanations. The present understanding of conventional geology and evolutionary biology suggests that there is nothing implausible with the rapid and late diversification of angiosperms, and thus the mystery of the details of their origin is not one of inconceivability, but rather one of wonder.

## Notes

<sup>1</sup> Gerald E. Aardsma, "The Age of the Earth, Virtual History, and Hebrews 11:3," *The Biblical Chronologist* 8, no. 5 (2002): 1-3.

<sup>2</sup> Ole Seehausen, "African Cichlid Fish: A Model System in Adaptive Radiation Research," *Proceedings of the Royal Society B* 273 (2006): 1987-98.

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## Does Philosophy Justify ID?

Responding to Douglas Groothuis ("Intelligent Design and the State University: Accepting the Challenge," [*PSCF* 60, no. 4 (2008): 233-9]), Walter R. Thorson ("A Response to Douglas Groothuis" [*ibid.*, 240-7]), handles the scientific aspects. But there are still major problems with philosophical matters.

Groothuis zips past Gettier's objection to the ancient definition of knowledge as "justified, true belief" (pp. 233; 238, note 2), which unfortunately applies to his argument. Gettier presents a story of two applicants, Smith and Jones, waiting for the announcement that one has been chosen for a job.<sup>1</sup> The president of the company had told Smith that Jones would be hired and Smith has watched Jones nervously counting the coins in his pocket. On this basis, he deduces that the man who will get the job has ten coins in his pocket.

However, Smith neither knows that he also has ten coins in his pocket nor that he will actually get the job. Smith's conclusion, though true and believed with apparent justification to be true, was derived from false premises. Consequently, he cannot be said to have known it. Also, the change from specifying the individual by name to the more broadly descriptive "man who will get the job" takes away the specificity necessarily required.

Groothuis overlooks such a requirement in his statement that ID is "made up of scientists, philosophers, and others" (p. 234) who make certain claims. But what a philosopher states does not meet the requirement of strict truth justifying ID. The sole ultimate test for a philosophical system is logical consistency. Fully worked out, both philosophical systems and mathematical calculi are derived deductively from sets of axioms. Geometers may accept Euclidean, Riemannian, or Lobachevskian axioms and get some different incompatible theorems. Consequently, the truth of a theorem is conditional on the specific axioms which are assumed, not proved. Similarly, philosophers may accept axioms yielding materialistic, pantheistic, deistic, theistic, or other philosophical systems. Not all of these, as advanced by individuals, are

consistent, but I know of no demonstration that all but one are inconsistent. However, there is a strong tendency to declare one's own system right. A limitation of this approach is illustrated by the impossibility of disproving solipsism, which we all reject.

Adding an unproved philosophical view to the doing of science neither alters the practice of science nor makes its theories true. At most, ethics may proscribe some experiments, as may a lack of funding. It has been widely noted that the neo-atheistic declaration that science proves atheism is silly. The same unfortunately holds for claiming proof of a deistic, theistic or alternative designer from science. Adding philosophical assumptions or techniques to the current methodology of science does not qualify it as true. It merely makes the whole a mishmash of categories.

## Note

<sup>1</sup>Edmund L. Gettier, "Is Justified True Belief Knowledge?" *Analysis* 23 (1963): 121-3. Also at [www.ditext.com/gettier/gettier.html](http://www.ditext.com/gettier/gettier.html) (accessed December 29, 2008). I have modified the story.

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