

# Book Reviews

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Collins, Francis S. *The Language of God: A Scientist Presents Evidence for Belief*. New York: Free Press, 2006. 305 pages. ISBN-13: 978-1-4165-4274-2. Reviewed by Tony Jelsma, Professor of Biology, Dordt College, Iowa.

As arguably the world's leading molecular geneticist and an outspoken evangelical Christian, Francis Collins is on a mission to dispel the mistaken notion that good science and religious commitment are incompatible. Collins is eminently qualified to make his case and has publicly debated Oxford biologist Richard Dawkins, who has made a career of using evolutionary biology to promote atheism. Upon identifying gene mutations responsible for cystic fibrosis, neurofibromatosis, and breast cancer, Collins was asked to take over the directorship of the Human Genome sequencing project. It is a credit to his leadership that the project finished well ahead of schedule despite the daunting task of determining the sequence of the three billion letters in the human DNA sequence, racing against a private company (Celera) that wanted to obtain and patent the sequence in order to sell this information. This accomplishment demonstrated that Christians can succeed in competitive scientific environments.

I had the opportunity to meet and chat briefly with Collins a couple of years ago. He is quite affable, sincerely interested in the views and positions of others while firmly presenting his own views. This book does just that in the same personable style. Collins makes several arguments that are not original, but he presents them in an accessible way. He first describes his own journey (via C.S. Lewis) from atheism to Christianity, arguing that not only is religious belief plausible, but atheism is incompatible with human experience. Collins attributes this incompatibility to the existence of the Moral Law, which cannot be accounted for by atheism. After addressing and refuting some common arguments against religious belief, he then describes how his faith is not only compatible with science but is strengthened by science. He is careful not to claim that science can *prove* the existence of God but argues that the findings of science implicate a guiding hand behind the origin of the universe. As Collins puts it, the origin of the universe in the Big Bang (which he accepts) "cries out for a divine explanation" (67). Similarly, the Anthropic Principle, which outlines the extraordinary fine tuning of physical constants like the force of gravity and the speed of light that are necessary for us to exist, argue for a Creator.

In the next section, Collins' arguments become more controversial because he argues that evolution was the means by which God created the living world; Collins renames this process "BioLogos" to avoid the baggage associated with the term "theistic evolution." Unlike most theistic evolutionists I have read, Collins does not deny God's providence in creation or lapse into a sort of deism. He argues that God, who knows all things, foreknew the evolutionary process and how it would end with humans,

who can have a relationship with their Creator. The evidence he uses in support of evolution (or, to be more precise, common ancestry, the idea that all living things are descended from a primordial ancestor) are derived from the Human Genome and other DNA-sequencing projects. First, he notes the relative similarities of DNA sequences from different animals, which correlate with their placement on the evolutionary "tree," or phylogeny. When compared to human sequences, other primate sequences are most similar (often identical), other mammal sequences are less similar, chicken sequences even less so, and so on. Secondly, Collins points out parallel *mutated* DNA sequences in mice and humans that share exactly the same mutation. Because these sequences are no longer functional, there is no obvious reason why they should share the exact mutation unless it occurred in a common ancestor of mice and humans. The third line of evidence Collins uses to support common ancestry is the order of the genes on the chromosomes of different species. When you line up human and chimpanzee chromosomes, the relative positions of their genes match almost perfectly except for human chromosome 2, for which chimpanzees have two smaller chromosomes, 2A and 2B. A detailed examination of human chromosome 2 sequences strongly suggests that human chromosome 2 arose by a joining of the two smaller chromosomes in a human ancestor. I would like to point out that this evidence argues for common ancestry but says nothing about why the two very similar genomes encode two dramatically different species.

What can Christians make of all this? I do not have a ready rebuttal for Collins' arguments, but allow me to make some comments. First, we need to distinguish between *pattern* and *process* in the evolutionary scenario. Collins' arguments for common ancestry are compelling, but they only support the *pattern* of evolution. His arguments for the *process* of evolution (*how* one species would have evolved into another) are considerably weaker and are limited to microevolutionary changes that cause drug resistance and minor differences between closely related species. A closer examination of the mechanisms of evolutionary change (such as population genetics) reveals the arguments about *process* to be much less convincing than the *pattern*. Second, Collins' use of data is somewhat selective and limited to vertebrates. The evolutionary relationships are considerably murkier when the sequences of invertebrates like fruit flies, mollusks, and tapeworms are examined. Third, Collins acknowledges that there is no plausible scenario for the formation of the chemical constituents of cells nor their assembly to form the first living cells, but he warns us not to conclude that this is where God must have acted to

create life. This warning is fair enough, as the “God of the Gaps” argument is unsound and relegates God to areas of our ignorance, which makes God increasingly superfluous as ignorance is replaced by new knowledge. But the lack of a plausible mechanism for the origin of life is due not just to ignorance but to our knowledge of the physics and chemistry of cells, which indicate that spontaneous life is impossible.

The final section of the book addresses perceived conflicts between Scripture and science, particularly evolution. Clearly, an evolutionary scenario conflicts with a literal interpretation of the first chapters of Genesis. Collins responds by describing these chapters as poetic and by appealing to Augustine, who himself questioned whether the creation happened in literal days (but I’m sure he would not have argued for billions of years!). Although I can sympathize with Collins’ warning that we not take the Genesis chapters as a scientific treatise, a “poetic” label does not mean we can dismiss the content of the text. I am also not comfortable with Collins’ argument from the genetic evidence that there was no literal Adam (or Eve) but that humans began as a population of around 10,000 individuals (206). I have difficulty reconciling such a scenario with the Fall, described in Genesis 3. In my conversation with Collins, he readily conceded such difficulties but chooses to put them “on the shelf for now.”

Space limitations prevent me from commenting on all parts of the book, but I do want to address his critique of Intelligent Design (ID), with which I have some sympathies. In this tumultuous debate about human origins, it is often difficult to represent a position accurately, and Collins’ description, although sympathetic, is not helpful. He incorrectly portrays ID as a primarily religious movement, although it does have religious implications. ID merely claims to be able to identify design but says nothing about the designer. Collins also portrays ID as a “God of the Gaps” argument, claiming that our gaps in knowledge are starting to be filled by further research. I beg to differ on that point. Further research has only made us more

aware of the inadequacy of random mutation and natural selection to account for all of life’s features. For example, his explanation for the evolution of the bacterial flagellum, a well-known ID argument, does not fit with the evidence (the interested reader may refer to Michael Behe’s *The Edge of Evolution* for more details on this). Returning to the pattern vs. process distinction made earlier, ID’s arguments focus primarily on the process, and these “gaps” have only widened, despite Collins’ claims.

Collins also displays some inconsistencies in his arguments. Earlier in the book Collins supports the Anthropic Principle, but in his criticism of ID he ignores the fact that the Anthropic Principle is commonly used to support ID (an important theme in *The Privileged Planet* by ID proponents Guillermo Gonzalez and Jay Richards). Collins also claims that “ID portrays the Almighty as a clumsy Creator, having to intervene at regular intervals to fix the inadequacies of His own initial plan for generating the complexity of life” (193, 194). Yet earlier in the book Collins acknowledges the existence of miracles, particularly Christ’s rising from the dead (48). By this same logic, do Christ’s birth and resurrection then portray the Almighty as a clumsy Redeemer, having to intervene to fix the inadequacies of His own initial plan for his people? It is a risky proposition to dictate how God *should* act in creation and whether supernatural actions are permitted, required, or unacceptable. ID merely argues that if natural processes are shown to be inadequate in explaining phenomena, then design is an acceptable inference.

Do not let my criticisms of the book deter the interested lay reader. Collins writes accessibly, lays out his arguments carefully, and is gracious to those with whom he disagrees. Collins is open about his faith and in that sense is a model for us to follow. Finally, he attempts to reconcile his understanding of science with his understanding of Scripture, although we may not always agree with his conclusions. There is much food for thought here for people who would like to learn more about the Human Genome Project and how one scientist sees his faith strengthened by his science.

Williams, Rowan. *Why Study the Past? The Quest for the Historical Church*. Grand Rapids: Eerdmans Publishers, 2005. 129 pp. ISBN 0-8028-2990-2. Reviewed by Jonathan Warner, Professor of Economics at Dordt College (and communicant member of the Church of England).

In this book, Rowan Williams, the Archbishop of Canterbury, seeks to make three points. First, he sees history as a set of stories that helps us better understand the world we are in; second, he traces how the Church has demonstrated its divine origin through the ages; and third, he tries to show how the Christian today can be nourished and informed by what has gone before. The argument is rich and carefully nuanced, as one would expect, given the nature of the Archbishop’s role as head of the Anglican Communion. It is the book’s richness and careful argumentation that comprise its greatest strengths; its greatest flaw is the failure of the Archbishop to apply

the framework he produces in any detailed way to the current crisis (the ordination of practicing homosexuals) that could splinter the Anglican Communion.

The Anglican Church has a long history of accommodating very disparate beliefs within one ecclesiastical structure. The book would have been much more relevant had the Archbishop chosen to apply the message of the book to difficult cases such as gay ordination. Instead, he briefly addresses the contemporary, but rather arcane, difficulty of the participation of lay people in the administration of the sacraments and ways of examining the question of Christian participation in