

## Reviews

**Sir J. William Dawson.**  
**MODERN IDEAS OF EVOLUTION.**  
New York: Prodist, 1977.  
240 pp. \$4.95.

*Modern Ideas of Evolution* is probably one of the more deceptive titles to appear on the shelves of our bookstores this year. The ideas in this book were not modern when it was first published almost 90 years ago. Today they seem antediluvian. Another sense in which the title is deceptive is that it suggests, to me at least, that the book is a scientific account of evolutionary theory. It is not: it is an agonized cry from the soul of a deeply religious man who happened also to be a geologist and paleontologist; Sir William Dawson, despite his distinguished position in the academic, scientific community, simply could not reconcile his religious beliefs with the theory of evolution. *Modern Ideas of Evolution* is his attempt to convince the world that evolutionary theory as it was in the 1880's was untenable.

Dawson was neither the first nor the last theologian to be motivated by his religious beliefs to attack evolutionary theory. Many of his eminent contemporaries, including scholars such as Noah Porter of Yale and Rev. Hodge of Princeton, also saw Darwinism as a threat to our faith in God and to the credibility of the Bible. Darwinism had to be defeated because it was irreconcilable with religion. Dawson joined this school of theology, which in Darwinian terms was already threatened with extinction. He rejected as being dangerous to theology the attempts of theologians such as James McCosh, the president of Princeton University, to reconcile theory and theology; McCosh's approach, however, was the one that survived, and that has been most productive, although McCosh would probably be no less horrified than Dawson by the ideas of Bergson and Teilhard de Chardin. Time has shown us that, scientifically and theologically, Dawson picked a loser.

Ninety years later it is easy to understand why Dawson reacted as he did. Most of us, regardless of our religious beliefs, feel that science and religion can be reconciled. But to achieve this reconciliation theology was forced to abandon to science the last category of material subject matter remaining within its sphere. Originally it was theology, not science, that made authoritative statements about the material world. Then the revolutions in physics and astronomy established the right to

make such statements, and at the beginning of the nineteenth century Dalton established chemistry as a science that could deal with transformations of matter. All that now remained within the sphere of theology was living nature. This alone was ruled by vital forces. The study of living things was still the most respected method of glorifying God and gaining some insight into His unfathomable intelligence.

Then science started taking over this last material preserve of theology. The battle began quietly within the laboratory of physiologists. Whereas previous physiologists had been content with explanations that invoked the soul and vital forces, the new breed began to behave as if the behaviour of living things could be explained in purely physical and chemical terms. The respiration and vital heat of an animal were compared quantitatively with the CO<sub>2</sub> and heat produced by burning charcoal. Blood, the most vital of fluids, was removed from an animal and studied as if it were merely a physical fluid. Finally Claude Bernard drew conclusions about the workings of living things from experiments involving the severing and stimulation of nerves, or the removal and perfusion of an entire organ such as the liver. Although there was theological opposition to the direction being taken by physiology, the main battle was not to be fought on these grounds. When evolutionists began to present theories to account for origins of life, the response of theologians was violent; and Dawson's emotional opposition to Darwinism is easily understood.

Having explained how *Modern Ideas of Evolution* came to be written in 1890, I am left with the problem of evaluating the relevance to readers today. This is a more difficult problem because there is nothing unique about it. It was neither the first nor the last emotional attack on Darwin. Neither was it the best. Even earlier, Louis Agassiz at Harvard had marshalled an impressive number of scientific objections to Darwin's theory and suggested an alternative derived from Curvier's theory of multiple creations. A few years after Dawson, Henri Bergson presented a new class of objections to Darwinism and yet another theory, that was an elaboration of Lamarck's idea of a Creator-given evolutionary drive.

In *Modern Ideas of Evolution* we find neither new arguments nor new theory. Furthermore we do not even find acknowledgement of the superior arguments of Louis Agassiz. Not only was Dawson out of date and uncreative, but also he was superficial. Yet on every page he gives evidence of his outstanding intellect, knowledge, and faith in God. Perhaps here we discover the value of reading his book today. It reminds those of us who live in a time when scholars and scientists are reproducing themselves faster even than the world's population, how incredibly difficult it is, even on an issue that is as important as any we could imagine, to be creative, let alone up-to-date on the creations of our colleagues.

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