

A Science and Faith Bibliography

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The aim with this bibliography is to discuss some of the books that I have found helpful in looking at how we understand the human person in the light of modern science. This requires, first of all, a background in the general area of science-faith dialog.

A: Theory and Current Practice: here are some books on the overall theory and current state-of-play in the science and faith dialogue. I have found the following to be helpful.

McGrath, Alister E. *The Foundations of Dialogue in Science and Religion*. Malden, Mass.: Blackwell Publishers, 1998. This is a straightforward introduction by one of the best-known theological writers (a physicist turned theologian) of today. It discusses the science-religion debate; the significance of the doctrine of creation for science; the use of the bible and the nature of the world.

McGrath, Alister E. *A Scientific Theology* Edinburgh: T&T Clark, In three volumes *Nature, Reality* and *Theory* (2001-2003). If you want a much more in-depth treatment of the issues involved then try this three volume series. McGrath is considering the way in which theology can be seen as a genuine science. He discusses the significance of the doctrine of creation, natural theology, the nature of knowledge and the reality of the world, the way we explain things and the validity of the concept of theory.

Ward, Keith. *The Big Questions in Science and Religion* Templeton Foundation Press, 2008 is not only a useful overview of 10 major questions currently being debated but is also a significant contribution to the debate. Note that, given Ward's interests, this is a discussion between science and *religion* and not simply between science and Christian faith. I read this with some apprehension because there is a common, and mistaken perception that "religion" can be dealt with as a whole, an approach which negates the radical differences between them. But Ward deals with the distinctives, majors on Christianity and provides a book that is well worth reading. He deals with creation, the fate of the universe, evolution, miracles, space and time, the possibility of the soul, and the overall relationship between science, reason, morality, and God.

Davis, John F. *The Frontiers of Science & Faith: Examining Questions from the Big Bang to the End of the Universe*. Downers Grove, Ill.: InterVarsity Press, 2002. This is another overview of 10 questions in the science-faith area. A very readable and helpful presentation which clearly relates various issues to theological principles. It deals with big bang cosmology, quantum indeterminacy, chaos theory, artificial intelligence, evolution, the anthropic principle, extraterrestrial intelligence and the ultimate fate of the universe.

Jeeves, Malcolm A., and Berry, R. J., *Science, Life, and Christian Belief: A Survey of Contemporary Issues*. Grand Rapids, Mich.: Baker Books, 1998. Jeeves (a neuroscientist) and Berry (an ecological geneticist) discuss generally the rise of modern science in relation to Hebrew-Christian faith, the laws of nature and of the scientific enterprise and, more specifically, creation, evolution, human nature, the brain and psychology and the future of humanity. Whereas Ward and Davis are primarily theologians Jeeves and Berry are scientists which puts a somewhat different perspective on the book. It also has a focus upon the nature of the person, body, mind and soul.

Pfunder, Michael, and Lucas, Ernest, *Think God, Think Science: conversations on life, the universe and faith*. Lucas is a chemist turned theologian who responds to questions put to him by Michael Pfunder. This is a relatively slender volume (112 pages) written at a more popular level covering various issues under the headings of "The Sky", "The Cell" and "The Faith".

B: The History of Modern Science: Now I would like to turn our attention to three books which represent the importance of understanding the history of how we got to the situation we are in at the present day.

Gribbin, John. *Science: A History: 1534-2001*. Penguin Books Ltd, 2003. This is one of my favourite science books, simply because it is such a good read. There are 650 pages describing the origin of modern science and making many helpful observations on people from Copernicus to Brahe, and Galileo, Boyle, Hooke, Halley, Watt, Newton, Lyell, Dalton, Maxwell, Einstein, Faraday, de Charpentier, Rutherford, Bohr, Darwin, Crick and Watson and many, many more. Gribbin is an astrophysicist and a distinguished science writer.

Brooke, John Hedley. *Science and Religion: Some Historical Perspectives* Cambridge ; Cambridge University Press, 1991. Brooke deals with the scientific revolution from the 16th to the 20th centuries - the same period covered by Gribbin but located more within the context of religion.

Lindberg, David C. *The Beginnings of Western Science: The European Scientific Tradition in Philosophical, Religious, and Institutional Context, 600 B. C. to A. D. 1450*. Chicago: University of Chicago Press, 1992. Obviously, this is a little more detail and it deals with the philosophical and religious background of an earlier period. Only suitable for those with a specific interest in this area. It covers Greek, Roman, Islamic and Medieval philosophy and religion.

C: Human Nature in the Modern Era: at this point the focus turns towards understanding the implications of science for our concept of the human person in the modern era. The traditional understanding of the person as body and soul is re-examined.

Porter, Roy. *Flesh in the Age of Reason: how the Enlightenment transformed the way we see our bodies and souls*. New York: W.W. Norton & Co., 2004. This is an illuminating study of the development in thought concerning the human person in the modern era. Porter is a fine historian and while overtly Christian studies frequently focus upon the spiritual/soul

dimension of the person (see the books immediately below) this approach reminds us that the body is just as important a partner in understanding the human person.

Brown, Warren S., Nancey C. Murphy, and H. Newton Malony. *Whatever Happened to the Soul? Scientific and Theological Portraits of Human Nature*. Minneapolis: Fortress Press, 1998. This has become an influential book in the discussion about monistic and dualistic understandings of the person. It argues for a non-reductionistic monism which sees the person as an integrated whole. There are discussions of biblical, historical and theological issues, evolutionary theory, the implications of genetics, and the relationship of mind, brain, soul and spirit.

Barrett, William Edmund. *Death of the Soul: From Descartes to the Computer*. Garden City, N.Y.: Anchor Press, 1986. This is written by a significant philosopher and he discusses, extremely lucidly, the way that consciousness and the soul have been perceived (and, to a significant extent) lost in modern thought. An extremely interesting read.

Green, Joel. *In search of the soul: four views of the mind-body problem*. Downers Grove Ill.: InterVarsity Press, 2005. The soul is missing, (Green), dead (Barrett), changed (Brown) and, in addition to this, is also fractured, disintegrated, being fought over and in need of care and healing, according to the titles of current books on this topic. There must be a message in this. This book is of the 'four views' variety. It compares substance dualism (the person comprises two separable, though interacting parts – body and soul) with emergent dualism (the soul emerges from a suitable complex being – the whole is greater than the sum of the parts), non-reductive physicalism (that mental and spiritual capacities are capacities of the complex physical structure that is a person, and not capacities of a separable substance such as 'a soul') and the Constitution view of persons (the capacities the body produces actually constitute a personal entity – something more than a collection of capacities as per non-reductive physicalism– but not as a separable entity – thus contra emergent dualism).

D: Specific issues concerning the human person: this section discusses four books which deal with various aspects of being human.

Alexander, Denis. *Creation and Evolution: do we have to choose?* Monarch Books, 2008. The short answer to the question in the title is "no". Biblically, theologically and logically an orthodox belief in the Christian understanding of creation and scripture can coexist with contemporary evolutionary thought. This book is suitable for people who are not highly trained in either science or theology but that does not mean it is simplistic or lightweight. It is a detailed, but well explained interpretation of evolutionary theory which explores in depth the significant shift in emphasis away from fossils towards the analysis of DNA as evidence of evolutionary change. Anyone interested in this topic really should read this book and understand the significance of the work that has been undertaken in the past few years. In the DNA of people and all other living entities there is a complete history of biological development. Alexander also discusses Adam and Eve, the fall, evil, and intelligent design.

Southgate, Christopher,. *God, Humanity and the Cosmos: A Textbook in Science and Religion*. Harrisburg, Pa.: Trinity Press International, 1999. This is a comprehensive text book which

has been widely used. It covers, in a very logical fashion, the present situation with regard to the debate between science and religion, theology and the new physics (including time, quantum theory, complexity and modern cosmology), theology and evolutionary biology, ecology and biotechnology.

Rolston, Holmes. *Genes, Genesis, and God: Values and their Origins in Natural and Human History: The Gifford Lectures, University of Edinburgh, 1997-1998* Cambridge, U.K. ; Cambridge University Press, 1999. Rolston discusses the way that the science of genetics has changed our understanding of the person and the development of culture. The processes which led to the human person and then to human culture are not value free. Values, meaning, relationships and faith have biological connections – but this is not pure materialism, it involves a series of dynamic interactions in which God can be detected. A more complex book.

Hefner, Philip. *The Human Factor : Evolution, Culture, and Religion*. Minneapolis: Fortress Press, 1993. As with Rolston's work this is a bold attempt to comprehend the complex nature of interactions between biological and spiritual persons, culture and God. Hefner argues that humanity has reached a new point in history whereby humanity has become co-creators with God – able (indeed, called) to exercise judgment in order to re-form human life and nature. Personally, I much prefer the imagery of being 'pro-creators' rather than 'co-creators' but the book is a great challenge which calls us to be aware of the possibilities for the future. A rich but advanced level book.