The Truth About Science and Religion: From the Big Bang to Neuroscience

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Recommended Citation
Since language is so important, we need a common vocabulary and understanding of the challenge. Therefore the early chapters carefully clarify the terminology (cultural, cross-cultural, intercultural and so on) needed for meaningful communication. After that, some practical steps toward the creation of intercultural communities are proposed. Good will is assumed to be present but alone is inadequate for the task and process of intercultural living. Consequently various skills and virtues are described and encouraged.

Intercultural living is not for everyone, but everyone with a missionary heart and soul, whatever their age or state of health, has a vital part to play in the community enterprise, and every community needs to generate a “critical mass” of energy and focus if intercultural living is to become a reality. Without this, a community will fragment or resolve itself into its constituent cultural parts, and its mission will be thereby compromised.

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Strong emotions arise when science and religion intersect because the topics impinge on core beliefs. Religious explanations at the popular level can lack the careful rationalization and logic required for reconciliation with scientifically proven reality, while scientific explanations of the world often fail to satisfy the human longing for purpose and meaning. While many books are available, few encourage the reader to engage in a personal journey to answer questions about purpose, meaning, good and evil, and free will that arise from competitive scientific and religious views of reality. The Truth About Science and Religion is designed to coax the reader into a process of self-discovery beginning with the more distant issue of divine interaction in creation before moving to more personal issues such as what being human really means. Here is a book for people struggling to make sense of complex issues around science and religion.

Fraser Fleming is an organic chemist who conducts research in support of developing pharmaceuticals and has served as a program director in the Division of Chemistry at the National Science Foundation. The book developed from two Duquesne University study abroad courses, “Big Bang to Modern Man: A History of Science and the Influence of Religion.” Fraser is a founding member of the Christian Academic Fellowship at Duquesne University, an independent
organization integrating spiritual beliefs and values into various roles in the university community.

*The Truth About Science and Religion* is designed to encourage readers to explore their own views through personal reflection. Metaphors, analogies, and comparisons are used to simplify complex topics and to allow educated, non-scientific readers to engage with the key concepts. The book provides the historical and scientific background and the philosophical insight needed to think through issues of science and religion and their influences on personal beliefs.

The first chapter, “Is There Purpose to Life? Implications from the Big Bang,” examines the exquisite timing and precision of the Big Bang which makes the formation of the universe seem highly orchestrated. The book compares the scientific origin of the universe with Genesis 1-3 in order to distinguish the ‘how’ questions of science with the ‘why’ questions of religion.

Chapter 2, “The Origin of Life: Who or What Creates Life?” scrutinizes Genesis 1 and what it meant for the early Hebrews while also examining biological science in order to understand both divine creation and prebiotic evolution. Central questions to emerge are what is God’s role in directing evolution, how did life begin, and is all of nature described by natural processes. These questions relate to whether life arises by chance or may involve divine assistance.

The third chapter “Evolution: From Amoeba to Zebra” moves from the evolution of the universe to the evolutionary progression from simple organisms to complex animals and the religious implications of this progression. Are death and suffering compatible with divinely guided evolution, and if so what is God’s role in the process? Exploring these questions requires understanding Intelligent Design and theistic evolution and examining them in light of the dramatic advances in biological science over the last two decades.

At the core of many Christians’ aversion to evolution is the idea that humans are uniquely and individually made in God’s image. Chapter 4, “Primates, Hominids and Humans. What Makes People Human?” explores the differences between humans, prehumans, and animals, examining how good, evil, and morality are tied to the human-divine relationship. Using this foundation, the chapter evaluates different interpretations of the biblical story of Adam and Eve.

Unlike most books on science and religion, this book includes a chapter on “Jesus Christ: Miracles, Prayer, and Resurrection.” Examining Jesus’ prayer life and miracles provides insight into the ways an intangible God might tangibly interact with the lives of religious believers. Woven throughout is an
understanding of Jesus’ central message of the divine relationship intended between individuals and God and the resurrection that is the ultimate goal of that relationship.

The next chapter, “A Brief History of Science: From Prehistory to Particle Science,” explores the beginning of science by examining key cultures and people in science’s history. The survey follows the development of astronomy and the way that discoveries in astronomy refined the scientific method. The lives of influential astronomers, physicists, and cosmologists, including Kepler, Galileo, and Einstein, illustrate different types of interactions with religious authorities and help to understand how science and religion influence personal belief and behavior.

Arriving at the 21st century, chapter 7 focuses on issues in neuroscience. “The Real Me: Mind, Brain, Soul, and Spiritual Experience” argues that advances in neuroscience have the potential to create as much religious tension as Galileo’s and Darwin's theories. Several models of the brain, the mind, and consciousness are examined in order to help readers understand free will, death, the soul, and the nature of religious experience.

The final chapter, “Understanding Reality: Answers from Science and Religion,” explores past interactions between science and religion as a way to develop a holistic understanding. After comparing approaches to science and religion, including both separate spheres and integration, the chapter asks readers to think about whether religion makes any difference. This last chapter concludes by reviewing common themes from the earlier chapters, asking if there is subtle evidence of a divine presence woven through the fabric of the universe.

This book follows a uniquely chronological development of the universe alongside religious views of the world. The book’s Christian author shows that there is a deep harmony in the universe that reflects the benevolence of the divine architect, but he is not afraid to examine the difficulties created by scientific advancements and by new religious ideas.

Each section ends with a series of questions designed for personal reflection or small group discussion. The balanced topical examination and focused questions make the book ideal for undergraduate or seminary courses in science and religion.


Dr. Fraser Fleming