
ASTROTHEROLOGY: Science and Theology Meet Extraterrestrial Life

Long-time friend of WesleyNexus, Dr. Ted Peters, who co-edits with Robert John Russell the journal Theology and Science at the Francisco J. Ayala Center for Theology and the Natural Sciences at the Graduate Theological Union in Berkeley, California, sent us a galley of his newest book, ASTROTHEROLOGY: Science and Theology Meet Extraterrestrial Life (Cascade Books, an Imprint of Wipf and Stock Publishers, Eugene, Oregon, ISBN: 978-1-5326-0639-7 paperback). As it happens, it fits right in with our theme for this month, cosmology and biblical faith. Actually, Dr. Peters, while being the lead author, serves as editor of this volume, that includes more than a dozen scientists and theologians. It is a massive volume – more than 450 pages – but one can predict that if and when NASA and other space probes do turn up evidence of life elsewhere in the solar system, when the debate manifests itself in the public arena as to the “meaning of it all,” this may well serve as the definitive treatment of the subject. Each chapter – all 24 of them – provides extensive documentation of sources that have framed the discussion up to this point in our history.

In the Foreword to the book, astrophysicist and Templeton Laureate Paul Davies says, “Whether or not we are alone in the universe is one of the oldest and biggest of the big questions of existence. For most of human history the puzzle was confined to theology and philosophy, but in recent decades science has made contributions too....The identification of a sterile universe (beyond Earth that is) with atheism and the lack of any cosmic purpose or direction, carries with it the flip-side that the discovery of a fecund universe would provide ammunition for those arguing just the opposite. And indeed, today the pendulum has swung very far the other way regarding the prospects for extraterrestrial life. The conventional wisdom among scientists is that life is widespread in the universe.” The entire book is based on the premise that Davies’ assessment is valid, and, if it is, what meaning will this fact have for us?

Robert John Russell sharpens the questions addressed in the book: “What is our role in the universe? What is the future of our universe? Are we alone in the universe? Whether there are many other forms of intelligent life in our universe or if we are alone, what does this imply about the meaning of life as such in the universe? What will the discovery of extraterrestrial intelligent life tell us about being human that we could not otherwise discover? And do the answers to these questions speak to the issue of how we should live our lives in an ethical and faith-filled way? This book is dedicated to questions like these and more, questions which I believe we all ask in our own way.” The subsequent chapters address all of these questions, and the last section deals with the rationale for a space policy.

Most importantly, Dr. Peters provides the framework for the entire discussion in the initial two chapters. He begins with a definitive treatment of the notion of “astrotheology” itself, and then goes on to lay out the specific tasks of the “astrotheologian.” He identifies four basic sources for a theology of nature; he identifies the four immediate tasks of the astrotheologian; and he outlines squarely the opportunities and difficulties posed by the creative mutual interaction between science and theology.

Peters orients the treatment of the subject by referencing NASA’s Astrobiology Roadmap of 2003 and 2008, structuring the field around three fundamental questions: (1) How does life begin and evolve? (2) Does life exist elsewhere in the universe? and (3) What is the future of life on Earth and beyond? (page 8). He remembers the statement from Carl Sagan: “Space exploration leads directly to

religious and philosophical questions,” and argues that “Natural observations, scientific definitions, and spiritual connotations warrant a theological analysis and perhaps even a theological construction.” (p. 11). In this context he establishes some basic criteria for our theological reflections: “First, for us, knowledge of the skies is not esoteric. Rather, it is scientific. In principle, scientific knowledge is open and available to all. Second, our knowledge derives from astronomy and related sciences, which replaced astrology and rendered astrology a pre-modern form of pseudo-knowledge. Third, we work from within the circle of theological discourse, not outside. Like other scholars, we subject our theological foundations to critical analysis.” (p. 13).

So, what is astrotheology? Peters provides this definition: “Astrotheology is that branch of theology which provides a critical analysis of the contemporary space sciences combined with an explication of classic doctrines such as creation and Christology for the purpose of constructing a comprehensive and meaningful understanding of our human situation within an astonishingly immense cosmos.” (pp.11-12). Thus, the goal before us is nothing less than “theological engagement with the possibility of extraterrestrial life, either microbial or technologically advanced life.” (p.12).

In Chapter 2 Peters identifies four sources that enable our task, and does so by a specific reference to John Wesley’s quadrilateral: “The theologian thinks about matters of faith, and in so doing appeals to four sources: Scripture, history (tradition), reason, and experience. What the Bible says will be important in what follows. It always is when thinking theologically. In addition, secondly, we will look at the history of astrotheology or, better, the role of the many-worlds debate within theology. Believe it or not, this concern with extraterrestrial life goes back to three centuries before Jesus; and it has been on the minds of theologians intermittently ever since. Thirdly, with the term reason here, we must confess that theologians like philosophical reasoning as much as toddlers like ice cream. After admitting this, we will give additional attention to reason as exercised in the natural sciences, especially those sciences that deal with space and the search for extraterrestrial life. Finally, with the term experience we will examine the modern secular experience broadly along with specific claims some people make of contact with extraterrestrials.” (p. 28). Referencing emeritus Princeton professor Wentzel van Huyssteen, Peters says “Science is reason reflecting on experience (experience in the form of data); and theology reflects on science as reason along with Scripture and tradition....Experience and reason are universal. Experience interpreted by reason in light of Scripture and tradition: that is what the astrotheologian is about.” (p.29).

This being said, Peters then projects (pages 41 ff) four basic tasks for the astrotheologian: 1. The Scope of Creation – to reflect on the scope of creation and settle the pesky issue of geocentrism.... “The misleading demotion [of] myth with the alleged need for de-centering must be dealt with by the astrotheologian so he or she can get on to the bigger issue, namely, the scope of God’s creation.” 2. Second, the astrotheologian should set the parameters within which the ongoing debates over Christology (Person of Christ) and soteriology (Work of Christ) are carried on.... Peters asks, “Must this incarnate activity be repeated on every planet for every intelligent species? Does Christian theology require a planet-hopping Christ?” 3. Third, “theologians should analyze and critique astrobiology and related space sciences from within, exposing extra-scientific assumptions and interpreting the larger value of the scientific enterprise.... The issue is not whether extraterrestrial neighbors exist.... What is at issue is whether scientists ought to engage in extra-scientific speculation exempt from theological criticism.” Peters’ answer is no – that results is scientism. 4. Fourth, theologians and religious intellectuals “should cooperate with leaders of multiple religious traditions and scientists to address ethical issues associated with space exploration and to prepare the public for the eventuality of extraterrestrial contact.”

The next two substantive sections of the book address the project known as “The Search for Extraterrestrial Intelligence” – SETI for short. This series of chapters provides the reader with a comprehensive treatment of the history of the project, the rationale behind it, and progress to date as to what we have learned from the various space probes. One of the chapters is written by Dr. Jennifer Wiseman, senior astrophysicist at NASA’s Goddard Space Flight Center, and a member of the WesleyNexus Advisory Board. She provides a succinct overview of the NASA exploration of Exoplanets, a subject on which she has presented findings in a WesleyNexus dialogue. Additional chapters address the challenges of meaning from a Jewish perspective as well as a Muslim perspective. And Dr. Stephen J. Dick, former NASA historian, provides a very thoughtful chapter entitled Constructive Naturalistic Cosmotheology.

An important section of the book toward the end addresses the policy question, and, although no international comprehensive policy has yet emerged, we learn what some of the aspects of such a policy must include. Peters sums up this discussion by concluding “It appears obvious that challenges to the future of all life on Earth—actually, all life in the galactic commons—lead to the prospect of planetization. All peoples of Earth in cooperation need to deliberate over what is best for our planet as a whole, and our cosmic commons as a whole. Can the peoples of Earth think of themselves as a single planetary society shouldering responsibility for all *biota* and even *abiotic* factors in our solar ghetto?” (p. 413).

And in his Concluding Scientific Postscript, Peters says: “In this volume, we have given focal attention to SETI Institute research and NASA astrobiology, two overlapping fields concerned with life in the universe—its origins, evolution, and future. We have introduced a new field, a deliberative discipline to be called Astrotheology. We have proposed a working definition: Astrotheology is that branch of theology which provides a critical analysis of the contemporary space sciences combined with an explication of classic doctrines such as creation and Christology for the purpose of constructing a comprehensive and meaningful understanding of our human situation within an astonishingly immense cosmos.... Unfortunately, in our judgment, this SETI version of evolution is over embellished with optimism and disguised ideology. In fact, the concept of evolution through which SETI scientists view their subject matter looks like a secularized myth of gnostic redemption. The task of the astrotheologian is to point this out and to argue for a cleaner science, a science that recognizes the limits imposed by confirmable empirical knowledge.” (pp.447-448)

Let us be engaged in the task to make certain that this view prevails.

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