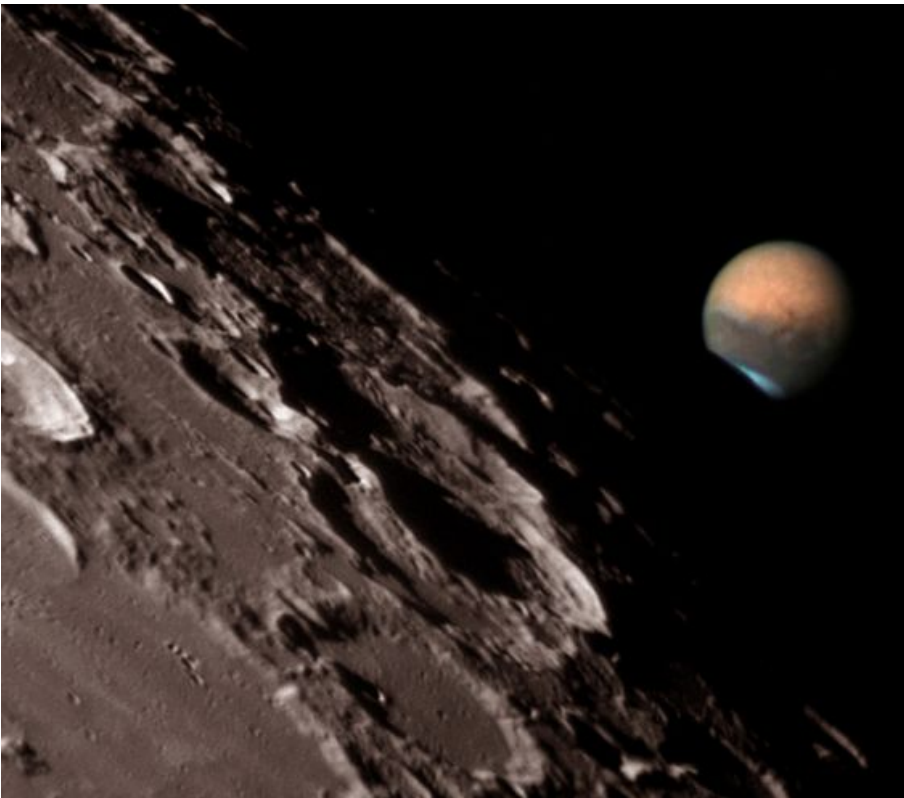


Martian Theology: God's Place in Extraterrestrial Life

A Theological Analysis by Jan R. Flaska



“Who are we? We find that we inhabit an insignificant planet of a humdrum star lost in a galaxy tucked away in some forgotten corner of a universe in which there are far more galaxies than people.”ⁱ So begins the effort to reconcile the theological anthropocentric hubris we humans allow to define most of our religions. Carl Sagan offered the previous thought in an effort to not only appeal to the logic of humanity in support of a geopolitical commitment to space exploration, but also in a way to

reassure us that the powers of nations and individuals were only so relevant as to affect a granule of solidified mass – our Earth - in the largest playground of existence one could never imagine – our universe. Carl Sagan, one of the premier cosmologists, astronomers, scientists, conspicuous theologiansⁱⁱ and interminably curious human beings our modern world has known, adamantly believed in other advanced civilizations in our universe. In his perspective, the fact that life ‘happened’ here on earth could only lead to the conclusion that life must have ‘happened’ somewhere else in our universe as well. The years of cosmological and evolutionary research our human species have undertaken have only gone to add credence to his convictions. It is from this simple fact that we now ask the question of where a monotheistic religion fits into this self-demystifying vision of humanity (attached picture: “Mars at the Moon’s Edge,” Credit and Copyright . Ron Dantowitz, Clay Center Observatory at Dexter and Southfield Schools).



Recently, three missions – one from England and one from the United States – were launched to visit our nearest planetary neighbor, Mars. These probes were sent to land on the surface of this historically captivating planet in an effort to better understand the origins of all heliocentric satellites in our galaxy. Additionally, these missions were intended to continue searching for clues of organic viability on Mars, primarily in the hopes of discovering evidence of past water on the surface.

Though the British Lander, Beagle, is believed to

have been lost upon landing, both of the American Landers, Spirit and Opportunity, have sent back pictures and results that are both awe-inspiring and significant in our quest for understanding the impetus of life on Earth. The conclusive discovery of Hematiteⁱⁱⁱ and channels carved by water within the Martian soil are our clearest indicators to date that the Martian surface once had the ability to sustain living organisms. In so many words, with these discoveries on Mars, Spirit and Opportunity have proven that water in fact did flow or collect on the planet some time ago. The question of when it was there, and why it is no longer present, cannot be answered conclusively without another mission to Mars that actually brings back Martian soil samples. Even more ambitious would be to put an astronaut on the planet itself, allowing for first-hand scientific discovery (attached photo: “Windtails Show Direction of Marian Winds,” Taken by Mars Exploration Rover Spirit <http://marsrovers.jpl.nasa.gov/gallery/press/spirit>, downloaded on 03.12.0

h4).



In preparation for this, many international organizations are searching for any signs of a distant civilization. Most notably, the SETI Institute^{iv} located in California has spent nearly twenty years scanning the surrounding skies of Earth in an effort to detect an abnormal signal coming towards our planet. These scientists share the commitment that it is not a question of whether we will find life on another planet in our universe, but rather when we will find signs of extraterrestrial life. These are the intentions that

motivate international space programs towards exploring Mars and searching for the potential of past life. Cumulatively, there have been no less than 30 missions to Mars^v, many of which did not make it, or did not

send back any useful results. Thankfully, we are at a time in history when traveling to Mars and retrieving information about it seems technologically feasible and scientifically important. The intrigue of Mars comes not only from the similarities it shares with Earth, but also from the late 1800's and early 1900's, when it was believed that there were unnaturally created canals on Mars. Together with its social mystique, its scientific relevance, and its planetary proximity, Mars is of great interest to many different organizations and people, and until it is understood completely it will remain as the red mystery in the sky (attached photo: Maritan Rover "Spirit," <http://marsrovers.jpl.nasa.gov/gallery/artworks/rover1>).

The inevitable consequence of the thundering hooves of this scientific stampede and cultural inquisitiveness has been a theological conversation concerning where God fits into the picture of a universe in which humankind cannot be the sole creaturely focus of God's concerns. We can begin to understand this discussion from a pedagogical philosophical inquiry. If God, symbolically, had a hand in the creation and evolution of humankind, then God clearly has something invested in this species. This would lead us to a *process theism*, one that describes the results of God's actions being discovered in what we know of as our cosmological creation. However, if there is found to be another living species of organisms on another planet like Mars, it is important to recognize that this God must have some inclination to be involved in this species' cognitive reality as well. To deny this would be to either deny God's cosmic creation and to affirm God's discretionary actions towards one species and not another, or to accept the fact that this God is only an earthly, anthropocentric God, and not a God who has involved God's self with the creative matter beyond our earthly atmosphere. Either choice diminishes God



The Hubble Ultra Deep Field - HUDF

Galaxies, galaxies everywhere - as far as NASA's Hubble Space Telescope can see. This view of nearly 10,000 galaxies is the deepest portrait of the visible universe ever achieved by humankind. Called the Hubble Ultra Deep Field, this galaxy-studded view represents a "deep" core sample of the universe, cutting across billions of light-years.

The snapshot includes galaxies of various ages, sizes, shapes, and colors. The smallest, reddest galaxies, about 100, may be among the most distant known, existing when the universe was just 800 million years old. The nearest galaxies - the larger, brighter, well-defined spirals and ellipticals - thrived about 1 billion years ago, when the cosmos was 13 billion years old.

In vibrant contrast to the rich harvest of classic spiral and elliptical galaxies, there is a zoo of oddball galaxies littering the field. Some look like toothpicks; others like links on a bracelet. A few appear to be interacting. These oddball galaxies chronicle a period when the universe was younger and more chaotic. Order and structure were just beginning to emerge.

The Ultra Deep Field represents a narrow, deep view of the cosmos, like looking through an eight-foot-long soda straw.

in some way, and our religious convictions may have a difficult time with this. It is from this conclusion that I am arguing that finding signs of past civilizations on Mars will not deny the relevance of God to us as a human, earthly species (Image Credit: NASA/EAS/S. Beckwith (STScI) and the HUDF Team, http://www.nasa.gov/multimedia/imagegallery/image_feature_142.html, download 03.12.04).

In the precursory book to his landmark *Systematic Theology*, Paul Tillich began to lay the foundation for the manner in which he explored theology from an empirical, expository process. Much as the mason is relegated only the option of building on the bricks that he has previously laid, Tillich takes nothing for granted in crafting the bridge between theological disorder and clarity. “We can agree entirely with Einstein when he warns theologians not to build their doctrines in the dark spots of scientific research.”^{vi} This guidance would save humanity the many difficult moments when theology and science – faith and reason – have confronted each other in a less than amicable manner. One of the first ‘martyrs’ for science was Giordano Bruno, burned at the stake in Rome in 1600 C.E. for the religious implications of his cosmological beliefs.^{vii} Bruno found the geocentric, Ptolemaic model of the universe difficult to maintain in light of scientific discoveries and advances, and he advocated the heliocentric, Copernican model instead. Primarily, though we know now that one model is clearly more accurate than the other, the reason why Bruno was killed was because his diatribe on the earth-centered model of our universe relegated humankind to a place that it had not yet been in the minds of those faithful to God: Humanity was not literally the center of God’s universe and efforts. Though difficult at the time, this argument clearly lies at the center of the rationale I give for recognizing and accepting God’s presence in the potential of extraterrestrial life. The fact that humanity can be important to God, yet not central to God, must be reassuring in our view of God’s commitment to the universe as a whole, and not only to our world and to us.

In his 1698 publication *Cosmotheoros*, Dutch astronomer Christian Huygens argued that an observer placed in the heavens would have trouble discerning the difference between the sun and other fixed stars in the sky.^{viii} It is from this view that Huygens fashioned an argument towards the potential for extraterrestrial life in the surrounding worlds. His comparison of the Sun to many other stars could be traced as part of the inspiration towards the period of Enlightenment, when much of Western Europe challenged Church doctrine because it could not sufficiently be explained in the context of rational experience and documented observation. Huygens benefited from improvements in telescopes, which allowed him to see light emitted from stars that the naked eye would have difficulty identifying. It follows then that Huygens’ scientific efforts and the technological advances of that era *revealed* ideas about the universe that may have previously been hidden. Logically, I’d like to argue that this is just one of many examples of when troubling and mysterious natural phenomena have been understood as religious revelations previous to their scientific expounding. The



parting of seas, or tides; rainbows; earthquakes; eclipses; finding additional planets near us; genetics; all of these different events and phenomena have had their fifteen minutes of revelatory fame in the annals of religion, yet we now better understand why they occur, and even when or how they will occur again. What was once religious mystery has evolved into historical curiosity. If, then, past religious revelation has come unearthed through science, can it not be said that these revelations are playing their part in exposing us to God? Revelation provides humanity with clues about God's intentions, and each of the above revelations, in their present day understanding,

tell us more about God's intricate puzzle called creation. The fact that there is so much mystery out there can be reassuring to anyone who thinks that this argument is a denial of God in our world. The mystery is what entices humanity to search for understanding, and from this search we can continually perceive a path to God (Photo Credit: NASA and the Hubble Heritage Team; photo of M64 ("Black Eye Galaxy") <http://imgsrc.hubblesite.org/hu/db/2004/04/images/a/formates/web.jpg> (download 03.12.04).

Our current setting is perfectly situated in a time where we can begin to deny any sort of geological^{ix} or anthropological theology to answer the question of our place in this world. So much experimental and observational information is directing us to the unavoidable conclusion that if life formed on this planet in this solar system in this part of the universe, then there is an incredibly high probability that life also formed on some other(s) planet(s) in some other corner(s) of our universe. In a thorough effort to present an argument true to both religion and science, author Wesley Wildman contends, "[the] possibility of retaining a central place for the human species appears to evaporate when the spatial challenge to anthropocentrism is brought into the picture. In that case, the human species is but one stream of historical development, alongside of possibly infinitely other such planetary streams, many of which include religious creatures such as ourselves, and interaction with which is decidedly not out of the question."^x To be clear, Wildman concurs with the facts of cosmological exploration and research, and allows a place for the faith of humanity within the context of a universal faith. Conservative religious opinion would argue against this notion, and provide the simple fact

that life has not been discovered anywhere else, reassuring humanity of her special place in God's universe. This notion can be safely contradicted with the idea that our ever-improving technology currently lacks the ability to support our interests in research, and time is the primary impediment we face to appeasing all of our curiosities surrounding this question. Assuming Earth's common origins as a glob of attractive matter, it is vital that we have a cosmological, pluralistic and invitational theology when it comes to cosmic questions to be answered through religion.

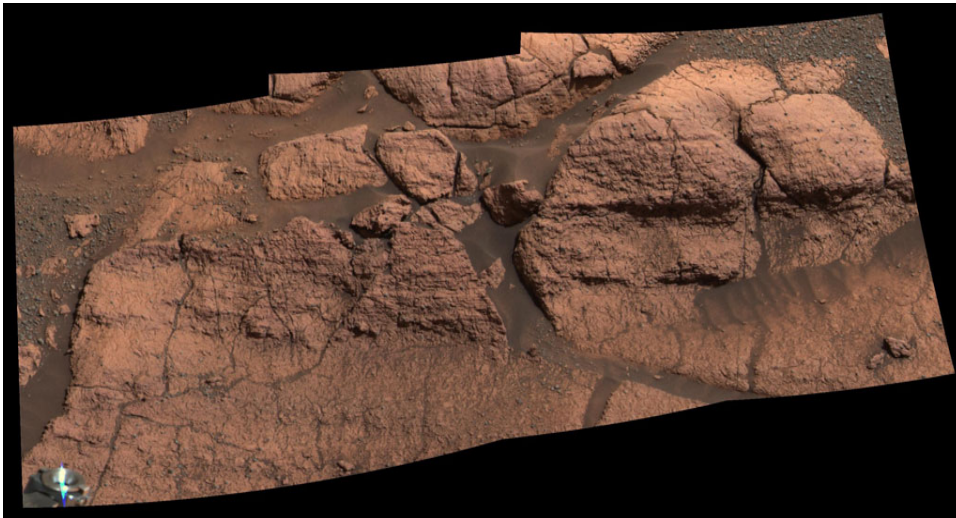
Poet and occasional scientist Alfred Lord Tennyson convincingly quipped that "it is inconceivable that the whole universe was merely created for us who live in this third rate planet of a third rate sun."^{xi} Though a statement that would clearly draw the attention and ire of the Church in earlier days, this thought in the Victorian Age of Europe seems to set the stage for the Darwinian revolution that would soon follow. Much like Darwin's quest for understanding the evolution of species occurred in the Galapagos Islands, our current situation has humanity following that same path by exploring Space in order to



understand more about our lives and our place in all of creation. Because space exploration is a necessary and inevitable human pursuit, our religious convictions must reflect those human conditions of the scientific assumptions of our place in the universe (Attached picture: "Twp Galaxies Colliding," <http://hubblesite.org/gallery/showcase/galaxies/g10.shtml>, download 03.12.04).

Just recently, the National Aeronautics and Space Administration (NASA) reported that there was indisputable evidence that Mars once had water on its surface. This clue should be the best indicator yet that we are very close to discovering that Mars – in some previous time – had the potential to sustain life as we know it. If this is the research to be received, is it not time to embrace a pluralistic theology that invites the fullness of cosmic creation into that perspective that was conceived from the minds of a human species? There are so many stars and so many galaxies comparable to our own. If we are indeed so common, could it not then be that this commonality is the fulcrum that elevates extraterrestrial life to a position nearly as high as our own? The empirically explained facts that we are organic, living creatures, and that our planet and universes formed from processes that we can observe in any astronomical direction we choose, require science to be the footstool of any God we choose to worship. God still has a place in those things that make each of us unique, such as personalities and the final revelation of this planet upon which we live; God is in our midst in this

sense. However, the cosmological creative similarities are too obvious to discard and too significant to allow science the final, and only, word.



A final perspective necessarily needs to celebrate the humanity of God in order to further expose the fallacy of anthropocentric theological tendencies. God is a human-derived presence. Before there were humans, there was no recorded – or possible – conception of God, even though the theological assumption is that God participated. As human minds have formed, so has God and so

has the human understanding of God. This leads to the conclusion that everything about God is instinctively and innately human. This is not to deny the divinity of God, but rather to identify a divinely cooperative venture, called human religion. God’s participation analogically can be seen as the rudder on the Ark of Humanity, directing our efforts to understand God but allowing the seas of creation to set us off course at varying points in history. If we can mutually agree that any understanding of God shares human origins, and if the argument documenting the possibility of extraterrestrial life has been sufficient, then we can only conclude that any non-earthly rational species has a form of understanding God that may be comparable to our own: If there was such a thing, then past Martian life knew God much in the same way that we know God. Again we hear from Wildman that “it is prima facie inconceivable that life could not have developed in any other places in our own galaxy, let alone in the unimaginably large number of other galaxies.”^{xii} Scientific convictions are altogether completely and indisputably constructed to identify this as a sufficiently plausible proposal. Now, if there is some global understanding we can accept that relates a God to humanity, the connection leading to an invitational, pluralistic, extraterrestrial theology is not such a daring leap to make (attached photo: “El Capitan,” photographed by Opportunity, http://marsrovers.jpl.nasa.gov/gallery/press/opportunity/20040302a/03-ss-03-outcrop-mosaic-B033R1_br2.jpg, downloaded 03.12.04)

A recurring cycle of Christian theological discourse revolves around the question of what to do about those who were not offered the doctrine of Christian salvation, either because they were present in a time before this message came to Earth, or because these people were in a setting where the revelation and understanding of this message was not a possibility. Relating this uncertainty to that of life existing outside of the planetary system we know, the question comparably becomes one of what can be done in a religious perspective with life that is not grounded to Earth. Religious thinkers Pierre Courbet^{xiii} and, later, Karl Rahner both proposed the notion of God’s actions ‘working at a distance’, without requiring anyone to actually profess that they are Christian in order to receive heavenly rewards. For both Courbet and Rahner, God’s salvific act through Christ was offered to anyone, no matter their setting. Extending this argument to our question of whether past Martian life had a God, it would seem sensible to allow room for God to love and embrace the full grace of creation, no matter where it is located or who is asked to interpret it. Even our

cosmologically trivial human existence has evolved into having a clearer perception of our earthly creation. Take, for example, the impact that the acquisition of fire and the mastery of language had on humans at that time. These extended



moments in history have given human beings dominance over other living creatures on earth. In the modern world, ideas proposed by Nicolas Copernicus, Charles Darwin, and Albert Einstein arguably have had a comparably profound effect on the direction of human existence, and our understanding of God's place amongst and beyond us. In some coming day, our human world will receive news from beyond our world that past or present extraterrestrial life has been discovered, and we will have to come to terms with what this means to us and to our understanding of our purpose. It is therefore critical that this crevasse be conquered immediately rather than when it becomes a necessity, and that the theological implications of this discovery are resolved. I would like to think that any theology that limits God's concern to one

insignificant conglomerate of matter flying around an average star is a theology that in fact denies God's complete existence and place in our universe. We are therefore left with one question, to be answered recognizing the divergent consequences the responses suggest: Should we bother considering the theology of a God that is confined to an insignificant part of the known universe, a God that places a priority on the minority instead of the majority, whose anthropocentric tendencies are reassuring but scientifically troubling? Or, should we rather consider the theology of a God who considers human species only a part of full creation, no more important than any other part, in spite of the rational minds we have been provided? When our history confronts the fact that a Martian Lander has irrefutable evidence of past life, it will be critical that our faith is not sacrificed, or drastically altered, in the process (attached photo: Mars, http://www.space.com/php/multimedia/imagdisplay/img_display.php, downloaded 03.12.04)

ⁱ Carl Sagan; 1983

ⁱⁱ I am using the term 'theologian' literally here, in the sense that Carl Sagan did not so much argue for the existence of God, as he explored the 'word/idea of God' as it has manifested itself in the understanding humanity had of its place in the universe. Clearly, a first, reflexive and irresponsible reaction to his work is that it denied God. However, my paper will indirectly argue otherwise.

ⁱⁱⁱ On Earth, Hematite, which is also called Iron Oxide, is a mineral that often forms in the presence of standing water. This information was compiled from <http://mineral.galleries.com/minerals/oxides/hematite/hematite.htm> (visit on 03.11.04) and from <http://www.cnn.com/2004/TECH/space/03/12/mars.earth/index.html> (visit on 03.12.04).

^{iv} SETI is an acronym for the Search for Extraterrestrial Life Institute. Much information about this project can be found at www.seti.org.

^v For additional information on these missions, please see www.marsprogram.jpl.nasa.gov/missions.

^{vi} Tillich, Paul. **Theology and Culture**. Kimball, Robert C., Editor. Oxford University Press. New York, New York, USA. 1959. Page 129.

^{vii} Crowe, Michael J. **The Extraterrestrial Life Debate**. Cambridge University Press. Cambridge, England. 1986. Page 10.

^{viii} Dick, Steven J. **Plurality of Worlds: The Extraterrestrial Life Debate from Democritus to Kant**. Cambridge University Press. Cambridge, England. 1982. Page 154.

^{ix} A geological theology is one that puts our earth above all others known planets in our universe. In a sense, this denies God's creation of, and love towards, all other planets with life sustaining potential (or those that currently do have living organisms on them).

^x Wildman, Wesley J. **Fidelity with Plausibility: Modest Christologies in the Twentieth Century**. State University of New York Press. Albany, NY, USA. 1998. Page 305.

^{xi} Crowe. Page 335.

^{xii} Wildman. Page 314.

^{xiii} Crowe. Page 416.