

Are We Alone in the Universe?



SWEDENBORG'S AMAZING WORK *Life on Other Planets* has enthralled me since the 1950s. I was a dedicated amateur astronomer from the age of eight. At that time, many professional astronomers believed that the sun was probably virtually unique in having a retinue of planets. They regarded planetary formation around a star as a fluke, an outlandishly improbable occurrence. These astronomers seriously entertained the notion that human beings might very well be the only sentient creatures in the universe. All this ran counter to my own heartfelt intuitions. But, who was I, a mere youngster, to question eminent authorities?

Imagine my delight and surprise when, sometime around 1956, my father, himself a polymath, placed Swedenborg's little book about

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Painting with pencil.

extraterrestrials in my hands. I distinctly remember the joy of first reading Swedenborg's opinion that "only people of little judgment could suppose that our earth is the sole inhabited planet" (*Life on Other Planets*, paragraph 3).¹ These were my sentiments exactly, and I suddenly felt a friend reaching out to me across two centuries.

Some years later, I entered the University of Virginia and became a philosophy major. I was intrigued by Plato's description of a near-death experience in *The Republic*. I began collecting accounts of the spiritual experiences of people who survived close calls with death. By 1974, I had interviewed more than one hundred individuals who told remarkably similar stories. They said that—when they almost died—they got out of their bodies and passed into a realm of light where they met loved ones who had previously died. They experienced a panoramic vision in which they saw their lives reviewed in exquisite detail. Then, when revived, they said they learned through their other-world journeys that the purpose of life is to advance in the capacity to love and to accumulate wisdom.

In 1974, when I was writing my book *Life After Life*, one of my professors of medicine mentioned Swedenborg's spiritual adventures. He said that Swedenborg's accounts bore many points of resemblance to the near-death experiences I had collected.

Frankly, it was some time before I realized, to my astonishment, that this was the same scholar whose work on extraterrestrials I had read as a child. So, although I am not a trained Swedenborgian theologian, I have been grappling with his ideas in these two, distinct contexts for about fifty years.

Astronomy, Biology, and Intelligent Life in the Universe

IMMANUEL KANT is generally credited with launching sidereal astronomy—the study of the realm of stars and galaxies—in 1755. By then it was realized that the fixed stars are suns like our own that appear small only because they are at enormous distances from the earth. Kant formulated three main ideas pertaining to the interstellar reaches. First, he stated that the Milky Way, which was an unfathomable mystery to the ancients, was an optical effect created by the diffuse light of myriad stars too far away to be seen as discrete points. Secondly, Kant hypothesized that these stars were arranged into a gigantic disk that we now know as the Milky Way galaxy. Thirdly, Kant conjectured that the nebulae, hazy patches of light seen in the heavens through the then-existing telescopes, were other incredibly distant galaxies of stars, comparable to our own Milky Way.

These three propositions revolutionized humankind's conception of the universe. Obviously, they were truly vast in their implications. Yet they were not fully agreed to by all astronomers until the early decades of the twentieth century.

There is some debate whether Swedenborg's *Basic Principles of Nature (Principia Rerum Naturalium)*, 1734, presages the disk theory of the Milky Way and the hypothesis that the nebulae are other galaxies. My own reading of the passages at issue inclines me to believe that he was indeed struggling with emerging notions that Kant formalized in 1755. After all, there is a tendency in the history of thought whereby revolutionary ideas are first set out in a preliminary and tenuous form and then later formulated clearly and more rigorously. At any rate, it is plain that ideas analogous to Kant's were percolating in Swedenborg's mind as early as 1734.

Late in the twentieth century, enormous technological strides created a revolution in the design and construction of telescopes, including orbiting telescopes, such as the Hubble. Consequently, as of mid-2005, astronomers have detected more than 150 exoplanets, that is, planets orbiting other stars. *The New York Times* (April 5, 2005) science section (D4) featured the first photograph ever taken of a planet in another solar system. An article accompanying the photograph said, "The new planet will take its place as another landmark in an accelerating cavalcade of discoveries that have left astronomers fumbling for synonyms for 'historic.'"

As I write, the race is on to find the first earth-sized planets circling other stars. When that occurs, it will also be possible, by spectroscopy, to determine the chemical makeup of their atmospheres. In short, science has now fully confirmed what Swedenborg asserted two-and-half centuries ago. Planets circle most stars, perhaps nearly all stars.

Concurrently, developments in the science of biology have made it appear far more likely that life exists elsewhere in the universe. Formerly, scientists held that life could exist only under a very narrow range of conditions. Within the past few decades, however, exotic organisms have been found flourishing everywhere from scalding hot, salt springs to frigid Antarctic wastes. Life has been found in extremely acidic waters, in radioactive pools around nuclear reactors, and in rocks retrieved from miles underground. It has shown up on the ocean floor around high-pressure volcanic vents. It has proven hardier than anyone believed until a couple of decades ago.

It sounds like science fiction, but it is science fact. Advances are taking place so rapidly that as soon as they appear in print, they are superseded by even more incredible scientific revelations. New extra-

solar planets are currently being discovered at the rate of about three per month.

It is in the context of this remarkable and potentially explosive expansion of knowledge that Swedenborg's writings on extraterrestrials take on a new complexion. I contend that what Swedenborg said in *Life on Other Planets* contributes to the current debate about extraterrestrials in at least three important ways.

First, it suggests possibilities for investigation that today's researchers have not yet considered. Second, it suggests novel ways of applying the knowledge that would be gained from the discovery of sentient extraterrestrial beings. Third, it makes principled, theological responses possible should intelligent life be found in outer space.

Swedenborg's Insights concerning Sentient Extraterrestrials

MUCH HAS BEEN MADE OF THE FACT that Swedenborg mentions certain worlds within our solar system: Mercury, Jupiter, Mars, Saturn, Venus, and the Moon. It is not useful, however, to identify them with the heavenly bodies we know by those names. Critics typically point out that Swedenborg's descriptions do not coincide with current astronomical knowledge relating to those worlds. These critics contend, therefore, his visions were simply mistaken, and his book on other inhabited worlds can be dismissed out of hand.

Undeniably, this sort of criticism is appealing to those whose thought processes are primarily concrete and geared to the concerns of mundane reality. The trouble is that it is beside the point when addressing a work such as *Life on Other Planets*, for three main reasons. In the first place, Swedenborg himself talks throughout the book of the profound difficulties of putting experiences like his into ordinary language. He also mentions that he could not decipher the communications of some of the beings he encountered and that some of what was passing between them was ineffable. Furthermore, he says, "The earths in the spiritual world are not distant in the same way as in the natural world" (*Life on Other Planets*, §135). That is, the realms Swedenborg visited were not in the space-time continuum as we know it, nor are the categories of earthly languages directly applicable to those realms.

Literalistic criticism of Swedenborg's claims about extraterrestrials blind the critics to the fascinating theoretical sweep of the book. I find much that is valuable here, which this type of critique misses because of rash attempts at debunking.

The Historical Context of Swedenborg's Life on Other Planets

IN THE EIGHTEENTH CENTURY, lines of demarcation among astronomy, philosophy, and religion were drawn less sharply than they are today. The great thinkers who were then formulating what evolved into modern cosmology were as much spiritual visionaries as they were scientists. Integrating the physical world into the spiritual realm was a central concern of their budding cosmological theories. Through these men's works, the notion of extraterrestrial intelligence was rapidly becoming conventional wisdom. Eminent scholars felt certain that sentient creatures inhabited other planets in our solar system and planets in the solar systems of other stars.

Swedenborg's contemporaries supported their advocacy of rational extraterrestrials by two main lines of reasoning. First they argued by analogy. Since the other planets that circle the sun resemble Earth in so many other respects, they must also be like Earth in being inhabited. Similarly, distant stars are like the sun, so they, like the sun, must be accompanied by their own inhabited planets.

The second type of argument these men employed appealed to the nature of God. What purpose could God possibly have in creating innumerable worlds, they asked, unless it were to populate them with sentient beings such as ourselves? Otherwise, they implied, the infinite power and love of God would be going to waste, which would be an utterly incomprehensible state of affairs.

Logicians and philosophers point out many perplexing difficulties with analogical reasoning. So it is to Swedenborg's credit that he did not base his statements about extraterrestrials on arguments from analogy. Nor did he base them on a transcendent intuition concerning how God ought to behave. Of course, he acknowledged that the existence of intelligent life throughout the universe flowed from the infinite beneficence of God, but there is a major difference of emphasis. He begins *Life on Other Planets* by saying "because I had a desire to know whether there are other earths, and what their nature is, and the quality of their inhabitants, therefore, it has been granted me by the Lord to speak and converse with spirits and angels who are from other earths" (§1). In other words, he knows that there are extraterrestrials because of a personal experience of interacting and communicating with them. He could interact and communicate with them because he shared a spiritual bond with them, through God. It is this that distinguishes Swedenborg from the other great thinkers of his era who also asserted that intelligent creatures inhabit other worlds in outer space.

Thomas Wright (1711–1786), Johann Lambert (1728–1777), Immanuel Kant (1724–1804), and William Herschel (1738–1822)

were preeminent authorities on astronomy in the eighteenth century. All these men affirmed that there were innumerable inhabited worlds in space, although they held this belief for different and even divergent reasons. Historically, Kant overshadows the others, whose accomplishments have faded into relative obscurity. Kant's thoughts on extraterrestrial intelligence naturally invite comparison with what Swedenborg has to say in *Life on Other Planets*.

In *The Critique of Pure Reason*, 1781, Kant reaffirmed his "strong belief, on the correctness of which I would stake even many of the advantages of life, that there are inhabitants in other worlds."² It was an opinion he had maintained throughout his career. In *Universal Natural History and Theory of the Heavens*, 1755, the foundational document of sidereal astronomy, Kant asserted that the other planets of our solar system are inhabited.

In that book, Kant theorized that planets form from rotating discs of gas and other material that surround newly formed stars. The planets closer to the star condense from a cruder grade of material, while those farther away from the sun are made of a more refined sort of matter that was, by implication, more perfect. In that scheme of things, the farther a planet is from its star, the higher the intellectual level of its inhabitants. As Kant put it, "The excellence of thinking natures . . . stands under a certain rule, according to which these become more excellent and perfect in proportion to the distance of their habitats from the sun."³

Accordingly, Kant's Mercurians and Venusians have only a rudimentary intellectual faculty, one that is inferior to that of Earthlings. The inhabitants of our earth, he held, are on "exactly the middle rung" as far as rational intellect is concerned. He claimed that the inhabitants of the outer planets, such as Jupiter and Saturn, are far superior in intellect to the inhabitants of earth. They may even be so advanced, he believed, that they are relatively immune to death.

Kant kept extraterrestrials in mind when he propounded one of the most renowned tenets of his philosophy. He intended the categorical imperative, the fundamental principle of his theory of morals, to apply to all rational beings throughout the universe. So, like Swedenborg, he contended that we exist in a spiritual relationship with sentient creatures on other worlds.

Ideas similar to many of those found in *Life on Other Planets* were in the air during the eighteenth century. For instance, William Herschel, the celebrated founder of observational stellar astronomy, was convinced that the moon was inhabited, and Kant fully concurred. Herschel even asserted that the sun and stars were inhabited and offered definite descriptions of the beings who lived there. Johann Lambert wrote a book claiming that comets were inhabited.

Scientific knowledge relating to other solar systems is expanding so rapidly that it is difficult to extrapolate what will happen next. Even so, astronomers may detect extraterrestrial civilizations much sooner than most of us anticipate. Swedenborg's thoughts about sentient extraterrestrials may well appear in a startling new light in the not-too-distant future. It is reasonable to expect that the importance and influence of *Life on Other Planets* will continue to grow. It is probable, in my judgment, that unfolding events will someday add another distinction to Swedenborg's record of historic accomplishments. In the future, he may well be looked upon as the intellectual forefather of a science of communicating with intelligent extraterrestrial beings.

Notes

1. Emanuel Swedenborg, *Life on Other Planets*, translated by John Whitehead, in *Miscellaneous Theological Works* (West Chester, Pa.: Swedenborg Foundation, 1996). All quotations from *Life on Other Planets* are taken from this translation and will be cited in the text. As is customary in Swedenborgian studies, the numbers following titles refer to paragraph or section numbers, which are uniform in all editions, rather than to page numbers.
2. Immanuel Kant, *Critique of Pure Reason*, trans. J.M.D. Meiklejohn. London: The Colonial Press, 1956, p. 468.
3. Immanuel Kant, *Universal Natural History and Theory of the Heavens*, trans. William Hastie. Ann Arbor: University of Michigan Press, 1969, p. 189.

RAYMOND MOODY, M.D., began his research on near-death experience in the 1960s. He is the author of eleven books, including *Life after Life*, which has sold over thirteen million copies. The above essay summarizes Dr. Moody's introduction to *Life on Other Planets*, the 2006 reissue by the Swedenborg Foundation (West Chester, Pennsylvania) and the Swedenborg Society (London) of *The Earths in the Universe*, originally written in Latin and published by Emanuel Swedenborg in 1758. The 2006 reissue was translated by the distinguished Oxford classical scholar, John Chadwick.