

Viking Continues Man's Search *The Frontier of Life*

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The question, "Is Mars inhabited?", has been persistently asked since the evolution of telescopes displayed any observable disk of the red planet, an abysmal symbol of the War God in the pagan pantheon. Now as the unmanned Viking Lander touches down on the surface of our untrodden planetary neighbor, the delicate electronic system by three biology tests will scrutinize the soil samples in search of carbon-based life forms. In the course of the forthcoming decades and centuries this event will totally outshine the ephemeral scenes of any recent political campaigns.

Whether or not Viking Lander's more than a billion-dollar experiment yields any evidence of life on Mars, it should still be considered a stepping stone in the exploration of the supreme mystery of life in our universe with its myriad suns and galaxies. The question itself "Are we alone in this universe?" is simply overwhelming. As we ponder over this riddle, we are inevitably projecting into this inquiry the enduring man-centered, anthropomorphic illusion that life elsewhere must resemble our own. This delusion garbles and still continues to hamper man's realization of wider horizons.

The story of Mars is in itself a fascinating example of man's struggle in his search for signs of life outside the world in which we live. First it was the moon which stirred up man's imagination as we read in Kepler's "Dream" in which he mobilized whatever physics was available in the first half of the 17th century. When Sir William Herschel constructed what was in his time the world's largest telescope in England, a story in 1835 of a certain Richard Locke reached the New York Sun and the Edinburgh Journal of Science. It was built up in a world sweeping sensation that "palm trees can be seen and a vast human population living on the moon." This moon-hoax brought great disillusionment to the generation.

Natural Excitement

The moon naturally excited the observer's curiosity even in a small telescope but Mars had to wait for a much larger optical instrument to produce an impression. This occurred in 1877 when Schiaparelli at Brera Observatory in Milan felt he had observed some peculiar markings on the red planet while in a favorable opposition and he gave those markings the Italian name "canali." This did it. It produced a stunning impression on man's insatiable thirst for the mysterious. The world was swept by another sensation. Famous astronomers like Camille Flammarion in France and Percival Lowell in America became the most ardent proponents of life on Mars.

Only a few days ago in the library of the historical Dearborn Observatory in Evanston, Ill., I re-examined both volumes on Mars by Flammarion and wondered how much he could tell about this planet when its disk in Flammarion's telescope in Juvisy was only a little larger than a quarter of an inch. Except for good seeing, the condition was not much better in the 28-inch refrac-

tor at the Lowell Observatory in Arizona. Yet Lowell's "Mars and Its Canals" and "Mars as Abode of Life" were best sellers in the first decade of our century.

Then a short half century after Lowell, our man-centered illusion of the advanced Martian engineering civilization together with its canals vanished. The revealing and surprising Mariner's photographs flashed back to earth not only failed totally to show any straight lines of imaginary canals but instead showed that Mars is not too dissimilar to our moon, littered with a profusion of craters, relatively very high peaks and irregular mountain ranges.

Extending Knowledge

Even before Viking Lander sends — hopefully — additional data, it is known to astrophysicists today that atmospheric pressure on Mars is only 0.005 (five-thousandth) of that on our earth. It means that a mercury barometer, indicating 30 inches of normal barometric pressure, would hardly show any readable amount on its scale. This fact in turn explains the tremendous variation in the daily temperature of a Martian 24-hours and 36 minutes rotation period. The variation is from plus 85 degrees of Fahrenheit in early afternoon on the Martian equator to some 140 degrees below zero just before sunrise. This variation causes daily occurrences of fantastic dust raising winds reaching half of the Martian velocity of sound.

Now Viking Lander is about to extend man's knowledge of Mars even if it be a confirmation that the physical conditions on our neighboring planet are too severe for any advanced form of terrestrial life. Thus, there is no promised land in our earth's vicinity. However, it does not mean that we are alone amidst some 200 billions of suns in our galaxy. It is now estimated that out of that number at least 100 million suns may be the center of our planetary family. Whatever we consider to be life, it is of extreme rarity, and our boundless universe does include life even if it took five or more billion years to produce the miracle of man. Against the materialistic dogma of Marxism-Leninism, the imposition of the limiting frame of space and time upon us will never allow man to find the ultimate mystery of creation. Yet we are in a position to perceive that in the midst of darkness light persists, in the midst of death life persists, hence light and life are as universal as the universe itself.

Changes Due

When man will find out factually — and that is not impossible — that life, less or more advanced than ours, does exist in other worlds, he will be compelled to radically change his views, his life, his philosophy, in order to encompass the universe in which no form of life as we witness it on this earth is anywhere duplicated. Then we will have to utterly abandon those illusions of man-centered mythology that still dominate our individual, national and international activity.

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