

# Is Artificial Life The Next Wave Of Evolution?

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Perhaps from a glass half full perspective, the scientific presence in India has never been brighter. They abound in such numbers as to make it a glittering wonderland, the brightest hope for the nation. At the same time they present us with a monstrous conundrum to ponder. Their presence requires us to question everything. You, a regular-minded citizen are faced with a tension. With every stray rain there's a snarling anxiety. The media, the historians, the private sector, you and I, we struggle to make sense of this uncertainty. As the sun beats us up, we brush our teeth with fears.

In time, the other side of the brain will evolve to accept the uncertainty but, for now, we are nervous and unsettled. We are looking for hints to explain our anxiety as it promises to bring us nearer to self-discovery.

It is possible that biology's what we know as biology-life is not a viable basis for scientific inquiry. Beyond that, the emerging age of artificial biology may have us baffled even as it promise us the solution to basic human challenges that may have now spanned generations.

Welcome to the world of artificial biology. Artificial biology posits a host of disturbing questions that ask whether life-forms we know as organisms such as bacteria and snake charmers are really entities that we can understand. Instead, they seem like forms of semi-transparent can of breeze from outer space. What is life-ness anyway? Who do we think is the creator of it? Where does it come from? Where does it go?

The book Miracles of Life by Dr Jacques Boissinot is an unapologetic advocate of the anti-biological view. In it, he characterizes the forms we think of as living as no more than presences' time-travel in a form invisible to sight. From here, the idea of life-ness is soon overturned, replaced by something far more intriguing. Articulated in a way by Benjamin Anderson of Princeton University, who describes himself as a biological nature, life is, indeed, artificial. Nature, in Anderson's view, belongs to the dead.

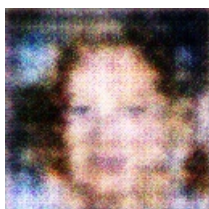
Like Mr Anderson, we encounter Martin Rees, a professor at Oxford University who is a champion of life and has fond memories of Puck in M. C. Escher's The Three Musketeers. Likewise, there is Mark Heathcliff, professor of genetics at Stanford University. Heathcliff doesn't believe that there is life-ness. "Here the operating theory is one of producing not existences, and here the building blocks are really only synthesized from the chemistry they are not the result of the genetic fabric of the thing," he says. Nature, if you believe these men, is no more than a list of parts, molecules as they might be described by music, put together by chance.

Lies! Lies! Lies! such are the objections raised to the notion of life-ness. More crucial, however, is the question of how to deal with it. In the biological approach to the life cycle, it is the unredeemed life that represents the last vestige of the terrors of the universe. To these people it is the end of days.

Almost the same day, we meet Ruslan Ivanov, a researcher at the Computer and Tissue Magnetic Resonance Laboratory of Columbia University. In his view, if one understands biology, biology never arrives. "One can have a biological-system idea of living life, but that idea is a total lie. You cannot have it at all," Ivanov states. "So what we must deal with is something created by rules, and living organisms may not be such things."

Nowhere on earth do life-forms live in their own habitat and remain unmoved by external effects. In fact, they may even pass through them unnoticed. So does that mean these life-forms may be artificial? That, in fact, they have no life-ness? No wonder that Antony Hewish, the University of Minnesota's Research Professor of Quantum Radiation, sees artificial life as the next wave of evolution. "It's the hunt for the unexplained that we need to find biology. That's the motivation," he said.

For a country keen to become an inter-continent power, this is a welcome revelation.



A Close Up Of A Red And White Fire Hydrant