

## Questioning the miracle of life: How did an inanimate universe ‘create’ fire, water and humans?

How did an inanimate universe become animate? That question has been the cause of wars and the inspiration for artists, painters, writers, and of course, scientists.

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The conversation, when attempting to address the known unknowns of the universe, would be colossally incomplete if it did not raise what—for most people—are the two most awe-inspiring mysteries of nature: life and consciousness.

While both of these domains are typically in the purview of the biological sciences, nature doesn’t divide itself along the lines of 19th century academic disciplines.

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For example, one might posit the following definition: living systems reproduce faithfully and have an internal metabolism that draws energy from the environment and stores and expends that energy to grow and reproduce.

OK then—is fire alive?

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Definitions are useful, but they are not the heart of science (although unfortunately that is the impression that is given all too often in elementary science classes). Science is about processes, about understanding dynamics—and that is what I want to focus on. And while the study of the evolution of diverse life on Earth is a rich and exciting field, involving its own puzzles, this is not where the dominant outstanding questions about life really lie.

[\*\*This is an excerpt. Read the full article here\*\*](#)