

# Abiogenesis

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## 0.1 Context

It is interesting to ponder on how we, as human, have arisen from non-living matter such as organic compounds. One of the reasons it is of interest is that it may teach us lessons that may apply to how intelligence arose from non-intelligent being or how something of one type can transform into something of another type.

## 0.2 Learned in this study

- Intelligence as a tree of life

## 0.3 Things to explore

# 1 Overview

Abiogenesis is based on the concept of emergence, that is, up until a certain degree of complexity, things aren't considered "biological". But once a threshold is reached, something that was once considered non-biological becomes biological. A simple example of this idea is how a bike chain is composed of multiple smaller units, and alone, they themselves are not a chain.

Biology defines "life" as having the following characteristics:

- Homeostatis
- Organization
- Metabolism
- Growth
- Adaptation
- Response to stimuli
- Reproduction

# 2 Programming of Life

Be careful, as the following quotes have been taken from videos that have been claimed to be propaganda from creationists. In this article, I take these claims as facts, but do not consider them as arguments for creationism.

What is the probability of a simple cell, evolving by undirected natural processes? 1 in  $10^{64}$ <sup>1</sup>,

The probability of life, a simple cell, evolving by undirected natural process is 1 in  $10^{340,000,000}$ , which is known as operationally impossible<sup>2 3</sup>.

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<sup>1</sup>Programming of Life: <https://www.youtube.com/watch?v=00vBqYDBW5s>

<sup>2</sup>Programming of Life: <https://www.youtube.com/watch?v=00vBqYDBW5s>

<sup>3</sup>Programming of Life 2: EARTH <https://www.youtube.com/watch?v=WPkBEYsG6EQ>

Abiogenesis assumes that meaningful prescriptive information can be created from a purely physical mechanism, which completely violates the laws of information<sup>4 5</sup>.

### 3 Biopoiesis

Bernal coined the term biopoiesis in 1949 to refer to the origin of life. In 1967, he suggested that it occurred in three “stages”:<sup>6</sup>

1. the origin of biological monomers;
2. the origin of biological polymers;
3. the evolution from molecules to cells.

### 4 See also

- [https://en.wikipedia.org/wiki/Neural\\_development](https://en.wikipedia.org/wiki/Neural_development)

### 5 References

- <https://en.wikipedia.org/wiki/Abiogenesis>
- [https://en.wikipedia.org/wiki/Primordial\\_soup](https://en.wikipedia.org/wiki/Primordial_soup)
- [https://en.wikipedia.org/wiki/Miller%E2%80%93Urey\\_experiment](https://en.wikipedia.org/wiki/Miller%E2%80%93Urey_experiment)

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<sup>4</sup>Programming of Life: <https://www.youtube.com/watch?v=00vBqYDBW5s>

<sup>5</sup>Programming of Life 2: EARTH <https://www.youtube.com/watch?v=WPkBEYsG6EQ>

<sup>6</sup><https://en.wikipedia.org/wiki/Abiogenesis>