

ON THE TERMS 'BIOGENESIS' AND 'ABIOTENESIS'

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In recent papers on the origin of life, there has been an increasing misuse of the word 'biogenesis'. This misuse can be found, for example, in Kenyon (1973), and in the titles and abstracts of several papers at the Barcelona 4th International Conference of ISSOL. 'Biogenesis' is being used as its own antonym: 'Biogenesis' is the origin of life from life; 'abiogenesis', the origin of life from non-living matter. The distinction should be preserved. A contemporary biochemical pathway is biogenic; a prebiological pathway to the synthesis of a particular compound is abiogenic. It is important that this confusion of terms be avoided now when studies of the origin of life, to which this new journal is devoted, are gaining increasing attention.

The distinction goes back at least as far as Huxley (1870), who wrote in a work entitled 'Biogenesis and Abiogenesis':

Looking back through the prodigious vista of the past, I find no record of the commencement of life, and therefore I am devoid of any means of forming a definite conclusion as to the conditions of its appearance. Belief, in the scientific sense of the word, is a serious matter, and needs strong foundations. To say, therefore, in the admitted absence of evidence, that I have any belief as to the mode in which existing forms of life originated, would be using words in a wrong sense. But expectation is permissible where belief is not; and if it were given to me to look beyond the abyss of geologically recorded time to the still more remote period when the Earth was passing through physical and chemical conditions which it can no more see again than a man can recall his infancy, I should expect to be a witness of the evolution of living protoplasm from not living matter.

References

- Huxley, T. H.: 1870, *Collected Essays* 8, 229–271, D. Appleton, New York.
Kenyon, D. H.: 1973, *Science* 179, 789
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