Life Ascending: The Ten Great Inventions of Evolution

By Nick Lane

Reviewed by Michalis Hadjimarcou, Cyprus

Life Ascending: The Ten Great Inventions of Evolution gives a detailed account of the ten events that author Nick Lane considers to be the most important in establishing the direction that evolution has taken ever since the beginning of life on Earth. The list of events does not follow a strict chronological order; instead, it is a sum of events, developments and phenomena that have shaped life on the planet. The first of the 'great inventions' is, as expected, the origin of life. Of course, strictly speaking, this is not an evolutionary event, but an 'invention' necessary for evolution to take place. Nevertheless, the list would be incomplete without it.

The other nine events are not immediately obvious: DNA, photosynthesis, sex, consciousness and death, for example.

Each event is thoroughly examined. The author takes the time not only to present the well-known hypotheses to explain a certain event in evolution, but also to elaborate on less wellknown ideas, some of which might come as a surprise even to those who have studied evolution in detail.

Readers interested in the study of evolution will enjoy this book, but the casual reader will be overwhelmed by the wealth of information and detail presented and will have a hard time reading all the way to the end. Also, the richness of the language requires a good mastery of English.

One of the book's best attributes is the collection of small pieces of information and examples that are presented either to support the candidacy of any given invention for membership in the list or just to explain the invention itself more thoroughly. This collection is not a plain presentation of scientific facts and hypothesis. Instead, it is a lively and often humorous discussion that not only makes the book more interesting but also provides important information on evolution and many other aspects of science and life in general.

In the biology classroom, the teacher could make a selection of items from the collection and use it to enrich the teaching of many topics. Also, upper secondary-school biology students could use some of the information in the book for small projects to further investigate evolutionary topics. For example, they could compare contrasting theories concerning the evolution of specific phenomena. Alternatively, they could debate these theories in the classroom. The material in the book provides a plethora of opportunities for such activities; the only drawback is that the students must have a very good knowledge of the English language.

Details

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