



The Origins of Life: From the Birth of Life to the Origin of Language

By John Maynard Smith, Eors Szathmáry

Download now

Read Online ➔

The Origins of Life: From the Birth of Life to the Origin of Language By John Maynard Smith, Eors Szathmáry

In this fascinating book, John Maynard Smith and Eors Szathmáry present an original picture of evolution. They propose that during evolution there have been a number of major transitions in the way in which information is passed between generations. These transitions include the appearance of the first replicating molecules, the emergence of co-operative animal societies, and the unique language ability of humans. Containing many new ideas, this book is contemporary biology on the grandest scale, from the birth of life to the origin of language.

 [Download The Origins of Life: From the Birth of Life to the ...pdf](#)

 [Read Online The Origins of Life: From the Birth of Life to t ...pdf](#)

The Origins of Life: From the Birth of Life to the Origin of Language

By John Maynard Smith, Eors Szathmary

The Origins of Life: From the Birth of Life to the Origin of Language By John Maynard Smith, Eors Szathmary

In this fascinating book, John Maynard Smith and Eors Szathmary present an original picture of evolution. They propose that during evolution there have been a number of major transitions in the way in which information is passed between generations. These transitions include the appearance of the first replicating molecules, the emergence of co-operative animal societies, and the unique language ability of humans. Containing many new ideas, this book is contemporary biology on the grandest scale, from the birth of life to the origin of language.

The Origins of Life: From the Birth of Life to the Origin of Language By John Maynard Smith, Eors Szathmary Bibliography

- Sales Rank: #919551 in eBooks
- Published on: 2000-03-16
- Released on: 2000-03-16
- Format: Kindle eBook

 [Download The Origins of Life: From the Birth of Life to the ...pdf](#)

 [Read Online The Origins of Life: From the Birth of Life to t ...pdf](#)

Download and Read Free Online *The Origins of Life: From the Birth of Life to the Origin of Language* By John Maynard Smith, Eörs Szathmáry

Editorial Review

Amazon.com Review

Life is a long, strange trip, and in *The Origins of Life*, John Maynard Smith and Eörs Szathmáry blast you through its three-and-a-half-billion-year history at breathtaking pace.

Life, we learn, is information, transmitted in ever more intricate ways across the generations. Self-replicating chemicals walled themselves into cells, organized themselves into regimented communities of chromosomes, swapped notes with other populations to become sexual, cloned themselves to form multicellular colonies called organisms, got together with other colonies to form societies, and, eventually, in the case of one particular ape, developed the ability to put this whole story down on paper.

For those evolutionists brought up on the theory of "red queens" and "self genes," *Origins* provides a complementary crash course in the practical nuts-and-bolts biology behind the headlines. The authors describe the technical problems involved in the transition from one stage to another, and explain the ingenious and often fortuitous steps that natural selection took to overcome them. For example, the rigid walls of the first cells gave way to more flexible membranes that could engulf food particles and incorporate "little organs" such as mitochondria. A "cytoskeleton" of filaments and tubules was needed to maintain the cell's integrity, and--presto!--this structure was the perfect motorway for intracellular traffic, ideal for shearing the cell apart during cloning, and provided the earliest means of locomotion, such as the tail of sperm.

With this attention to detail, the book requires careful reading--but it's worth it. Maynard Smith and Szathmáry's book makes you realize just how lucky you are to be alive. --*Oliver Curry, Amazon.co.uk*

From Publishers Weekly

How did life on Earth go from individual molecules in hot carbon soup to viral spirals, to cells, to sex cells, to us? Smith and Szathmáry's *The Major Transitions in Evolution* (1995), addressed to other evolutionary biologists, responded to this question by reviewing Darwinism through the lens of information theory. The authors' new work brings nonexpert readers an "account of the evolution of complexity," of changes in the ways "genetic information... is stored, transmitted and translated." Smith and Szathmáry (professors, respectively, at the University of Sussex, England, and the Collegium Budapest, Hungary) apply their model to periods in the history of life, from the era of the first self-replicating molecules to the advent of chromosomes and thence to cells and cell walls, sexual differentiation and mating, symbiosis between species, animal societies and symbolic speech. Directing their interest in information transfer to biological processes and epochs, they cover topics ranging from the definition of life (why do we not call fire "alive"?) to the basis of tribal warfare. Moving speedily from epoch to epoch, fueled by a few important concepts (such as the division of labor) and explaining all the genetics they use, Smith and Szathmáry show "just how difficult it has been to evolve complex organisms whose genes co-operate rather than compete." A chapter on sex offers several theories of how it arose; a later chapter examines the origins of our built-in ways of understanding and generating grammatical sentences in our native languages. Compact, dense, formidable yet accessible, this book exposes readers to the cutting edge in theoretical evolutionary biology.

Copyright 1999 Reed Business Information, Inc.

From Scientific American

Maynard Smith and Szathmáry are intrigued by the complexity of organisms. "The more we know about

them--their biochemistry, their anatomy, their behavior--the more astonishing are the detailed adaptations that we discover. How could all this complexity have arisen?" Darwin's theory of evolution by natural selection cannot alone account for it; that theory predicts only that organisms will get better at surviving and reproducing in their current environment, not that they will become more complex. The answer, according to the authors, is that organisms increase in complexity as a result of "a small number of major changes in the way in which information is stored, transmitted, and translated." Maynard Smith (emeritus professor of biology at the University of Sussex) and Szathmáry (at the Institute for Advanced Study in Budapest) call these changes "the major transitions" and cite eight of them in evolutionary history, beginning with replicating molecules and ending--at least for now--with the development of human language. In explaining the transitions to a general readership, the authors provide a clear-eyed review of a large part of modern biology.

Users Review

From reader reviews:

William Boehme:

Do you have favorite book? Should you have, what is your favorite's book? Publication is very important thing for us to learn everything in the world. Each reserve has different aim or goal; it means that reserve has different type. Some people truly feel enjoy to spend their time to read a book. They are reading whatever they consider because their hobby is reading a book. Consider the person who don't like reading a book? Sometime, man or woman feel need book if they found difficult problem or even exercise. Well, probably you'll have this The Origins of Life: From the Birth of Life to the Origin of Language.

Gloria Wells:

Now a day people that Living in the era just where everything reachable by talk with the internet and the resources inside it can be true or not demand people to be aware of each info they get. How a lot more to be smart in obtaining any information nowadays? Of course the reply is reading a book. Reading through a book can help individuals out of this uncertainty Information specially this The Origins of Life: From the Birth of Life to the Origin of Language book because this book offers you rich information and knowledge. Of course the information in this book hundred per-cent guarantees there is no doubt in it you probably know this.

Julie Moore:

This The Origins of Life: From the Birth of Life to the Origin of Language are generally reliable for you who want to be a successful person, why. The reason of this The Origins of Life: From the Birth of Life to the Origin of Language can be among the great books you must have is giving you more than just simple examining food but feed you actually with information that maybe will shock your previous knowledge. This book is definitely handy, you can bring it everywhere you go and whenever your conditions in e-book and printed people. Beside that this The Origins of Life: From the Birth of Life to the Origin of Language forcing you to have an enormous of experience for instance rich vocabulary, giving you tryout of critical thinking that we know it useful in your day action. So , let's have it and revel in reading.

Ruth Mullins:

Many people spending their time frame by playing outside having friends, fun activity using family or just watching TV the whole day. You can have new activity to invest your whole day by looking at a book. Ugh, do you think reading a book can really hard because you have to bring the book everywhere? It okay you can have the e-book, getting everywhere you want in your Smart phone. Like The Origins of Life: From the Birth of Life to the Origin of Language which is having the e-book version. So , try out this book? Let's notice.

Download and Read Online The Origins of Life: From the Birth of Life to the Origin of Language By John Maynard Smith, Eors Szathmary #6UB9Z280W34

Read The Origins of Life: From the Birth of Life to the Origin of Language By John Maynard Smith, Eors Szathmary for online ebook

The Origins of Life: From the Birth of Life to the Origin of Language By John Maynard Smith, Eors Szathmary Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read The Origins of Life: From the Birth of Life to the Origin of Language By John Maynard Smith, Eors Szathmary books to read online.

Online The Origins of Life: From the Birth of Life to the Origin of Language By John Maynard Smith, Eors Szathmary ebook PDF download

The Origins of Life: From the Birth of Life to the Origin of Language By John Maynard Smith, Eors Szathmary Doc

The Origins of Life: From the Birth of Life to the Origin of Language By John Maynard Smith, Eors Szathmary Mobipocket

The Origins of Life: From the Birth of Life to the Origin of Language By John Maynard Smith, Eors Szathmary EPub

6UB9Z280W34: The Origins of Life: From the Birth of Life to the Origin of Language By John Maynard Smith, Eors Szathmary