

## PRAISE FOR

### *Nature's Magic: Synergy in Evolution and the Fate of Humankind*

By Peter Corning  
(Cambridge University Press, 2003)

#### *Book Description:*

In *Nature's Magic* Peter Corning advances a bold new vision of the evolutionary process - from the Big Bang to the 21st century. Corning proposes that synergy is not only a ubiquitous phenomenon in the natural world but it is also a wellspring of creativity and the "driver" of the broad evolutionary trend toward increased complexity, in nature and human societies alike. In contrast with the many theories of emergence or complexity that rely on some underlying force or "law," the "Synergism Hypothesis," as Corning calls it, is in essence an economic (or "bioeconomic") theory of biological complexity; it is fully consistent with mainstream evolutionary biology. Among the many important insights that are provided by this new paradigm is a scenario in which Corning proposes that the human species in effect invented itself; synergistic behavioral and technological innovations were the "pacemakers" of our biological evolution. Synergy has also played a key role in the evolution of complex modern societies, he concludes. The final chapter addresses our current challenges and future prospects.

#### *From the Reviews:*

"An extraordinary tour-de-force....Corning is one of the most erudite thinkers in systems biology. His original synergism hypothesis, posed in 1983, attracted little attention but had profound implications for many areas of biology and particularly evolutionary studies. Like all good systems, the context has now changed and Corning's thesis has come in from the cold. Suddenly and obviously synergism is everywhere and Corning's book expounds this crucial idea in brilliant fashion." – *Prof. Anthony Trewavas, FRS, Institute of Cell & Molecular Biology, University of Edinburgh*

"*Nature's Magic* is must reading for all who are interested in understanding the evolutionary process generally, as well as human evolution and evolutionary perspectives on human behaviour. It will stimulate, provoke, and challenge researchers in many fields and, hopefully, provide improved insights into the workings of nature and the evolutionary process...*Nature's Magic* is one of the rare books which really makes you see reality in a new way. – *Iver Mysterud, Department of Biology, University of Oslo, Norway, review for TREE.*

"Corning's new book makes for enjoyable reading, with clear, lucid, and transparent formulations, imaginative metaphors and similes, an encyclopedic scope, and a high 'convincibility factor.' There is only one thing wrong with a book like this for a reviewer like me: every page contains at least one passage or

paragraph which begs to be quoted...Far from being the umpteenth “theory of everything,” Corning’s magnificent book presents an invitation to look at ‘everything’ in a novel and fresh way” – *Prof. Johan M.G. van der Dennen, University of Groningen, the Netherlands.*

"I like this book. It's exciting, well-documented, and well-argued. It's very informative both for professional biologists and well-read lay people; it will change their minds and get them to see synergies everywhere." – *Professor Jack Cohen, Warwick University.*

"If you are under the impression that synergy is not particularly important, just try to tie your shoes with a single hand. The book will appeal to anyone interested in the place of evolutionary thinking in general intellectual culture. It will also be esteemed a particularly valuable contribution to the emerging discipline of bioeconomics." – *Professor Michael Ghiselin, California Academy of Sciences.*

“This is a marvelous book, which will change your perception of reality, of how things work and act together. Corning's central claim...is that synergy...complements our contemporary scientific world view. Moreover, the concept of synergy is more tangible than the rather fuzzy concept of 'self-organization'... Corning is able to define synergy clearly, to list the most important properties of synergistic effects, and to give numerous examples of synergy in the living and non-living world...I believe this book has the potential of becoming a classic in complexity-studies.” – *Taede Smedes, Groningen, the Netherlands (review for Amazon.com).*

“Corning's goal is to explain complexity, the most basic weakness of orthodox Darwinism. The way he does it is essentially to change the way we see nature, particularly the way we assume things interact with each other....Corning supplies a fresh way of looking at the whole puzzle of complexity, one complementary to but more precise than 'self-organization.' He does this by reversing the usual logic about cooperation in living things...The clarity and scholarship of Corning's writing are extremely impressive, and he makes his case with a massive amount of data drawn from a wide variety of fields. There is quite obviously decades worth of research behind this book, and it covers a lot of ground and has links to a number of other theories in both economics and biology...Corning indeed bolsters aspects of the case made by some of the 'heretics' of classical evolutionary theory...but with the power of his new framework, he ties many of their best ideas together in an ingenious way that preserves the central insight of biology since Darwin, the role of natural selection in the history of living things.

“Peter Corning is one of those at the very forefront of the new model of systems thinking in biology, and *Nature's Magic* is sure to be one of its cornerstones. Because it is so lucid and well-written, I can recommend it not only to academics in a wide range of fields but also to those with no academic background in biology who want to keep up with what will most likely be a significant part of the future of biological science.” – *Todd Stark, Philadelphia (review for Amazon.com)*

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