

Cambridge University Press

0521825474 - Nature's Magic: Synergy in Evolution and the Fate of Humankind

Peter Corning

Frontmatter

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NATURE'S MAGIC

Nature's Magic presents a bold new vision of the evolutionary process – from the Big Bang to the 21st century. Synergy of various kinds is not only a ubiquitous aspect of the natural world but it has also been a well-spring of creativity and the “driver” of the broad evolutionary trend toward increased complexity, in nature and human societies alike. But in contrast with the many theories of emergence or complexity that rely on some underlying force or “law,” the “Synergism Hypothesis,” as Peter Corning calls it, is in essence an economic theory of biological complexity; it is fully consistent with mainstream evolutionary biology. Corning refers to it as Holistic Darwinism. Among the many important insights that are provided by this new paradigm, Corning presents a scenario in which the human species invented itself; synergistic behavioral and technological innovations were the “pacemakers” of our biological evolution. Synergy has also been the key to the evolution of complex modern societies, he concludes. The final chapter addresses our current challenges and future prospects.

Peter Corning's varied career has included a tour as a naval aviator, a stint in journalism as a science writer for *Newsweek*, a Ph.D. in the social sciences, post-doctoral training and research in biology and behavioral genetics, several years of teaching in Stanford University's interdisciplinary Human Biology Program, and broad private-sector experience as a senior partner in a Silicon Valley consulting firm. Currently director of the Institute for the Study of Complex Systems, Dr. Corning is a member of several scientific organizations and a past president of the International Society for the Systems Sciences. He has also published more than 150 professional articles and three previous books and is widely known for his work on the role of synergy as a causal agency in evolution.

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TO JOHN MAYNARD SMITH

A GUIDING LIGHT

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Two are better than one,
Because they have good return for their work:
If one falls down,
his friend can help him up.
But pity the man who falls
and has no one to help him up.
Also, if two lie down together,
they will keep warm.
But how can one keep warm alone?
Though one may be overpowered,
two can defend themselves.
A cord of three strands
is not quickly broken.

Ecclesiastes 4:9–12

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