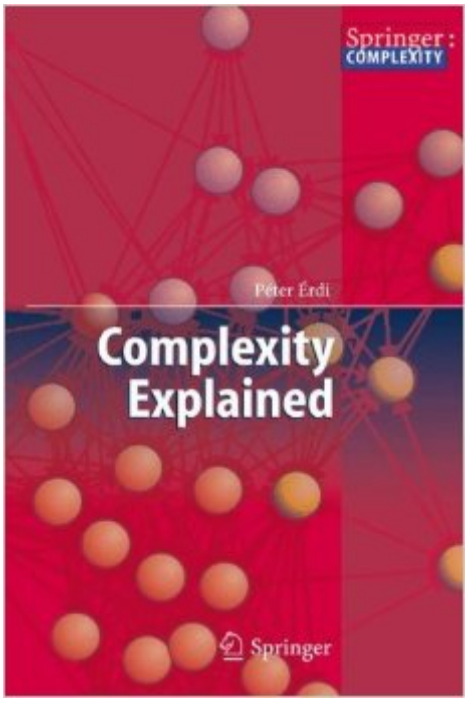
Complexity Explained (Springer Complexity)



Synopsis

This book explains why complex systems research is important in understanding the structure, function and dynamics of complex natural and social phenomena. It illuminates how complex collective behavior emerges from the parts of a system, due to the interaction between the system and its environment. Readers will learn the basic concepts and methods of complex system research. The book is not highly technical mathematically, but teaches and uses the basic mathematical notions of dynamical system theory, making the book useful for students of science majors and graduate courses.

Book Information

Series: Springer Complexity

Hardcover: 397 pages

Publisher: Springer; 2008 edition (November 20, 2007)

Language: English

ISBN-10: 3540357777

ISBN-13: 978-3540357773

Product Dimensions: 9.2 x 0.9 x 6.1 inches

Shipping Weight: 1.6 pounds (View shipping rates and policies)

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Customer Reviews

I find myself agreeing with the reviewer who said that this book was an unedited manuscript that somehow got published. But that doesn't quite capture my reaction nor my slight agreement with the first two positive reviews. In fact the book has more positives and more negatives than any of the reviews indicate, in my opinion. On the positive side the book covers a lot of ground in a helpful and informative way. The title is meant to capture this goal in that the author says that he wants to write a big picture book of complexity similar to the way Dennett wrote about consciousness in Consciousness Explained. There are a lot of good sections with helpful math but not too much math. There are a lot of short, interesting biographical sketches - Warren McCulloch's sketch for example - that are delights The author clearly loves his material and loves the great personalities in

the tradition. And he himself seems like a wildly intelligent and interesting character himself. He does have an encyclopedic view of the world seen always, it seems, through the lens of complexity.But the negatives. There is too much thrown in, and it becomes just one darn complex thing after another to the point where it makes the complexity vantage point seem haphazard as much as a powerful new tradition. And yes, the lack of editing does get annoying. But what is more annoying is that the author evinces a certain disdain for non-scientists. Or maybe it's impatience. At least this is my memory of reading it even though I cannot confirm looking it over now for examples. I do see that he quotes Steven Pinker approvingly at the end to the effect that the world picks on scientists unfairly in a way that makes a good point (viz.