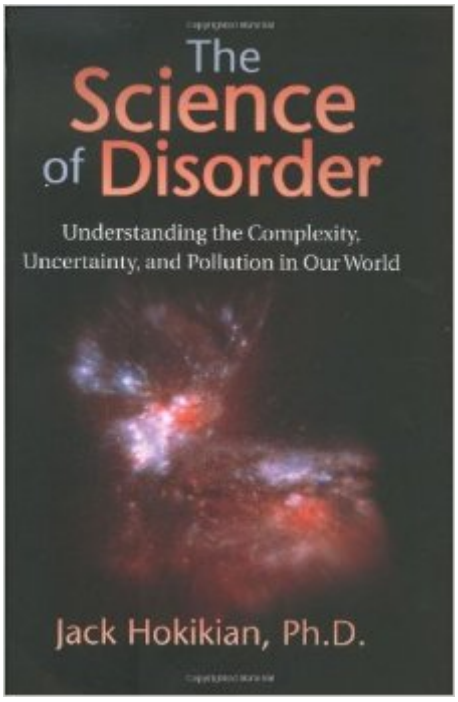
The Science Of Disorder: Understanding The Complexity, Uncertainty, And Pollution In Our World



Synopsis

Book by Hokikian, Jack

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Customer Reviews

The Science Of Disorder by Jack Hokikian is a thoughtful and thought-provoking examination of how increasing human population, globalization, and technological advances come with harmful side effects such as new diseases, electronic viruses, environmental degradation, and more. With an eye on how the Laws of Thermodynamics, Energy, and Entropy affect all the processes in the universe (including daily human life), The Science Of Disorder strives to make sense of a seeming disarray, while addressing a keen interest in the big picture and what it means for humanity's future. The Science Of Disorder is sometimes iconoclastic, inherently interesting, exceptionally well written, and a highly recommended addition to Environmental Studies, General Science, and Human Ecology Studies reading lists and reference collections.

When I picked up this book ("The Science of Disorder, Understanding the Complexity, Uncertainty, and Pollution in Our World") two thoughts crossed my mind, first I am not qualified to understand it, and second, this may be a book in the line of "Physics for Dummies". Much to my surprise, neither of these thoughts came to fruition, Dr. Hokikian finds a way to decompose the Laws of Thermodynamics in all its complexity and apply them to the reality of my day to day existence. This is a book for those interested in detailed study into Thermodynamics, as well as ones (like myself) interested in understanding the Physical Laws of nature and how they apply. This is not to say that

after I read this book I now comprehend Boltzmann’s Entropy Relation (I did not in college, and still struggle with it), but I now can appreciate it. Or better stated by "stealing" words from Dr. Hokikian, when I read these concepts I can understand them "from the simplicity of the equation [and] also from the agreement between its theoretical predictions and actual experimental observations."

This amazing book is a wonderful explanation of why so many disturbing and seemingly "chaotic" world events are occurring and what we could do to mitigate their effects. Jack Hokikian, a real scientist in the true meaning of the word, has taken a difficult yet critically important subject and created a "must-read" book for anyone who cares about our future on this increasingly crowded planet. Dr. Hokikian clearly describes the Laws of Thermodynamics and uses them to explain the accelerating "rush to disorder" which we are all experiencing in our daily lives. Far from being a dry dissertation about little-understood laws of Physics, Dr. Hokikian’s brilliant and entertaining book brings home with a loud bang the critical importance of understanding the impacts of our universe’s immutable physical laws and why we, and particularly our leaders, must be made to fully understand these impacts. He uses many rivetting examples from real life to clearly illustrate the chaos and disorder around us along with equally clearly explained causes and effects.This beautiful book, in clear everyday language, spells out exactly why we see such increasing chaos and disorder around us and how we got to this point and how, once we understand this, we can slow down and perhaps even reverse this frightening process.The author, Dr. Hokikian is no wild-eyed "mad scientist" nor is he a fanatical "tree-hugger". He is a University Physics Professor, a successful professional engineer and a highly-respected Database Systems designer.I fully recommend this book to all who want to understand our world better. Practising scientists and engineers as well as laypersons with genuinely "inquiring minds" will gain tremendous insight and knowledge from this book while being entertained by Dr. Hokikian’s lucid and elegant, non-patronizing writing style.

Once in a great while, an unknown author seems to come out of nowhere with a work destined to alter our thinking about everyday life and its problems. In "The Science of Disorder" we receive the key to understanding the chaos in our world. We also can discern a touch of optimism that by gaining understanding of the laws of physics, we can help alter the course of humankind for the better. It is sobering to learn that the immutable laws of physics that underlie our existence make it virtually impossible for technology to solve our problems on this crowded planet. The Second Law of Thermodynamics states that the entropy or disorder of the universe tends to increase. Hokikian points out that while we do not use the term entropy much outside of physics, synonyms in the

everyday lexicon include "waste, complexity, externalities, side effects, collateral effects, hidden costs, and unintended consequences." In a chapter entitled "Economics, the Environment, and the Laws of Thermodynamics", Hokikian discusses the economics of computers and technology. Rapid obsolescence reigns, creating high entropy. There are obvious and hidden costs to buying and maintaining the technology. The consequences are degradation rather than improvement in the quality of life, with pollution from the manufacture and disposal of the equipment, and the dissipation of capital and knowledge. (Well, there are exceptions, like .com!) But the book leaves us with the hope by learning about the First and Second Laws of Thermodynamics, we can improve our lives and slow the deterioration of our planet.

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