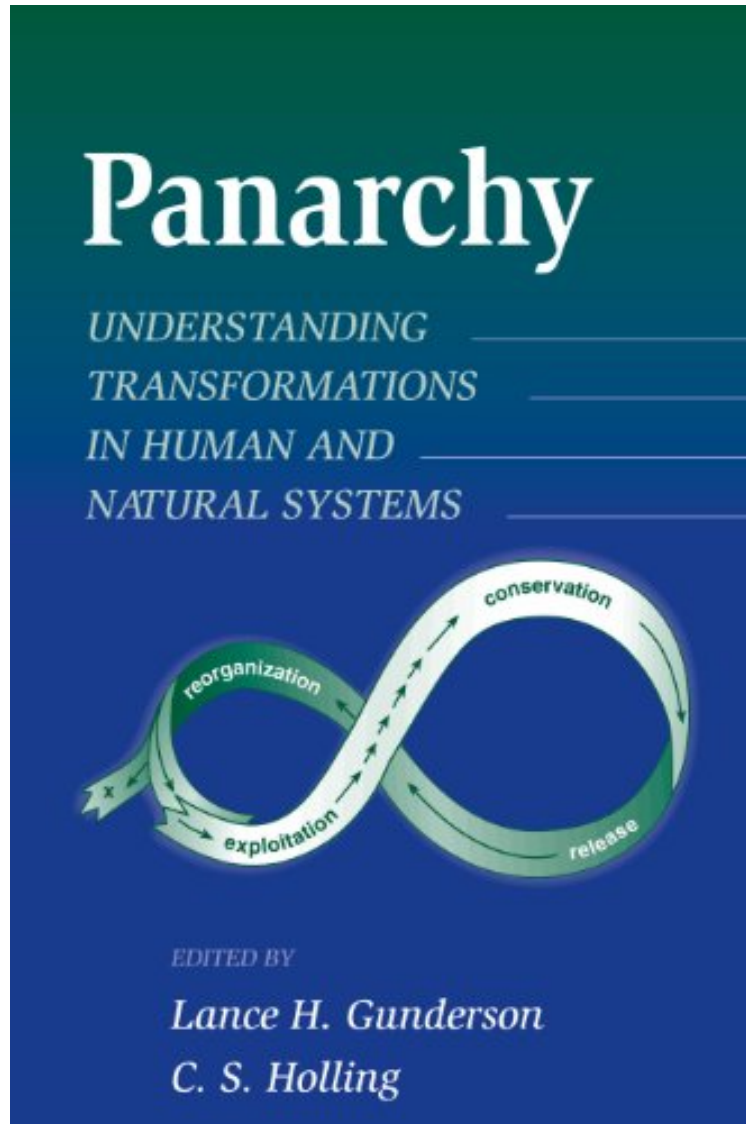


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# Panarchy: Understanding Transformations in Human and Natural Systems

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**From Island Press : Panarchy: Understanding Transformations in Human and Natural Systems** before purchasing it in order to gage whether or not it would be worth my time, and all praised Panarchy: Understanding Transformations in Human and Natural Systems:

4 of 4 people found the following review helpful. A Much-needed ExpositionBy DesertPete9In an era of uncertainty about climate change and its economic, political, and institutional consequences, this book is like a breath of fresh air. In a series of scientific studies, the text illustrates how unexpected behavior of large ecological and economic systems

leads to unanticipated results from man's attempts at manipulating them. As the back cover states, "Creating institutions to meet the challenge of sustainability is arguably the most important task confronting society." This book offers suggestions for doing just that, using methods from environmental systems analysis to illustrate the complexities involved in dealing with hierarchies of systems that range from biological subsystems through ecosystems and beyond, to social, political, and economic systems that transcend arbitrary boundaries set by those intent on maintaining outmoded fiefdoms. The logical conclusions are that we are a single people inhabiting a single planet, and the sooner we recognize that fact and modify our behavior accordingly, the sooner we will mitigate the many looming problems associated with natural resource exploitation; fossil fuel development, depletion, and pollution; industrialization of agriculture; and the increasing population that's driving it all. 1 of 1 people found the following review helpful. Fantastic book. Covers the concept of resilience and system ...By Customer Fantastic book. Covers the concept of resilience and system transformation from economic, social and ecological perspectives. I keep going back to it to get a deeper understanding of the concepts. 1 of 1 people found the following review helpful. Valuable source By Johann The work of Gunderson and Holling is groundbreaking and well worth reading. It sheds considerable light on the similarities between social and ecological systems.

Creating institutions to meet the challenge of sustainability is arguably the most important task confronting society; it is also dauntingly complex. Ecological, economic, and social elements all play a role, but despite ongoing efforts, researchers have yet to succeed in integrating the various disciplines in a way that gives adequate representation to the insights of each. Panarchy, a term devised to describe evolving hierarchical systems with multiple interrelated elements, offers an important new framework for understanding and resolving this dilemma. Panarchy is the structure in which systems, including those of nature (e.g., forests) and of humans (e.g., capitalism), as well as combined human-natural systems (e.g., institutions that govern natural resource use such as the Forest Service), are interlinked in continual adaptive cycles of growth, accumulation, restructuring, and renewal. These transformational cycles take place at scales ranging from a drop of water to the biosphere, over periods from days to geologic epochs. By understanding these cycles and their scales, researchers can identify the points at which a system is capable of accepting positive change, and can use those leverage points to foster resilience and sustainability within the system. This volume brings together leading thinkers on the subject -- including Fikret Berkes, Buz Brock, Steve Carpenter, Carl Folke, Lance Gunderson, C.S. Holling, Don Ludwig, Karl-Goran Maler, Charles Perrings, Marten Scheffer, Brian Walker, and Frances Westley -- to develop and examine the concept of panarchy and to consider how it can be applied to human, natural, and human-natural systems. Throughout, contributors seek to identify adaptive approaches to management that recognize uncertainty and encourage innovation while fostering resilience. The book is a fundamental new development in a widely acclaimed line of inquiry. It represents the first step in integrating disciplinary knowledge for the adaptive management of human-natural systems across widely divergent scales, and offers an important base of knowledge from which institutions for adaptive management can be developed. It will be an invaluable source of ideas and understanding for students, researchers, and professionals involved with ecology, conservation biology, ecological economics, environmental policy, or related fields.

"A wonderful and stimulating blend of theoretical and empirical perspectives on multiscale dynamic systems of humans and nature. This book brings together the diverse insights of some of the most creative and original thinkers on resilience and adaptive change in ecological and social systems, yet it is seamlessly integrated through coherent underlying principles. A triumph for Holling's seminal concepts, and for the Resilience Alliance."