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Sommario/riassunto	The central theme of this book is the extent to which the structure of the free dynamical boundaries of a system controls the evolution of the system as a whole. Applying three orthogonal types of thinking - mathematical, constructivist and morphological, it illustrates these concepts using applications to selected problems from the social and life sciences, as well as economics. In a broader context, it introduces and reviews some modern mathematical approaches to the science of complex systems. Standard modeling approaches (based on non-linear differential equations, dynamic systems, graph theory, cellular

automata, stochastic processes, or information theory) are suitable for studying local problems. However they cannot simultaneously take into account all the different facets and phenomena of a complex system, and new approaches are required to solve the challenging problem of correlations between phenomena at different levels and hierarchies, their self-organization and memory-evolutive aspects, the growth of additional structures and are ultimately required to explain why and how such complex systems can display both robustness and flexibility. This graduate-level text also addresses a broader interdisciplinary audience, keeping the mathematical level essentially uniform throughout the book, and involving only basic elements from calculus, algebra, geometry and systems theory. .