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Understanding Complex Systems

Founding Editor: S. Kelso

Future scientific and technological developments in many fields will necessarily depend upon coming to grips with complex systems. Such systems are complex in both their composition – typically many different kinds of components interacting simultaneously and nonlinearly with each other and their environments on multiple levels – and in the rich diversity of behavior of which they are capable.

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SB: To Chaitali (Rupa) and Sudip, wish you a less Politics and no Chaos in life!

SSE: To my dearest Nihan Potas and Şuay Nilhan Açıkalın

AT: I dedicate my contribution to this book to many students that I have encountered over the years as a professor. Their support, challenges, and comments have been extremely valuable for my professional growth.

Preface

World history has always been full of catastrophic social and political events. From the industrial revolution to the First World War and the more recent Arab Spring, these events will be remembered as cornerstones of modern world history. Although the twenty-first century has not witnessed a world war, we have experienced new challenges, including ethnic conflicts and global warming. To meet these and other new challenges, humanity must learn new concepts and develop new approaches.

The last 50 years have witnessed a scientific revolution and critical accumulation of knowledge that have triggered a more multi-disciplinary approach towards research in order to address these new challenges. Often this multi-disciplinary approach is given the label of Chaos Theory, a term that first gained popularity in the disciplines of Mathematics and Physics. In fact, this could perhaps better be seen as a new term to define a very old concept. Our daily lives can be seen as being directly linked with the events in sociology, political science and the natural sciences. What was at first branded as a primarily numerical concept has in recent years been shown to part of the fabric of our social reality. Today, we recognize that our lives are affected on a daily basis by unexpected human behaviour. In such a world, there are always alternative ways to understand the social and political dynamics of our history.

This book attempts to frame chaos and its application within different subcategories of world politics. The reader will gain insights from Arab Spring to gender issues through the eyes of chaos theory. It is my hope that this book will inspire researchers, both present and future, to work in the dynamic field of chaos and politics.

I wish to thank the editors who invited me to write the preface for a book on our unique field of "chaos."

Ankara
November-2013

Şuay Nilhan Açıkalın

Contents