

## **Preface**

*A philosopher who is not taking part in discussions is like a boxer who never goes into the ring.*

Ludwig Wittgenstein

*I wanted to write that my work consists of two parts: of the one which is here, and of everything which I have not written. And precisely this second part is the important one.*

Ludwig Wittgenstein

*Things are much more marvelous than the scientific method allows us to conceive.*

Barbara McClintock

## **The Conversation**

The book you are seeing on your screen may look like a normal book; it is not. It is a conversation in which you are a participant. The book does not offer pat answers to hard questions. In fact, it barely even gives definition to hard questions. Rather, this book presents that stage in which science is most challenging and, arguably, most interesting--the period of identifying just what the problems and issues are. That is why we solicit your help in writing this story---the story of extreme events in social systems.

The participants in this book-writing enterprise are independent thinkers who wish to understand the forces impinging on social systems and the systems' often dramatic and extreme responses to those forces. Extreme events, the sudden and discontinuous response of social systems to these forces, are what we for shorthand term X-Events. X-events We imagine the reader to be a person who wants to intelligently manage his or her actions and behaviors in the midst of an X-event---in short, to manage an organization in chaos. And not only manage, but be a beneficiary of that event. Explicitly, we understand that there are no simple answers to social questions. But but there is at least a *gestalt* that can help an individual anticipate and manage X-events. The program outlined here is to build the *gestalt* by total immersion in the topic---by examining the issues from many perspectives.

Here we look at X-events from the following points of view or frames of reference:

- case studies
- mythology
- academic sociology
- natural analogs
- English literature
- engineering risk management
- mathematical modeling

No one perspective is sufficient to capture the entire picture. But patterns begin to emerge when questions are asked from several points of view. What seems to be emerging is that X-events are a fundamental property of social systems, and that if human progress is to be made it depends intimately on X-events for propelling it forward.

## **Gray Boxes**

You will see that the book is divided into two formats: a normal black-on-white part and a part that is presented in gray boxes. As the spirit of the book is a conversation, different authors are responsible for each part. One of the authors (JC) is responsible for the initial introductions to the material, the black-on-white part. The other authors (RDJ and MP) then respond to JC's text with questions and different points of view. The reader who doesn't want to dig deeper can get gist of the book by reading JC's part. A reader who also wants to *participate* in the conversation will want to read and respond to the material in gray boxes.

The goal of the gray track is not to answer questions, but to identify that part that is not being said. As Wittgenstein noted, this is the important part. Content, exercises, and discussion questions populate the boxes. The authors have not worked out the exercises, nor do they have pat answers to the discussion questions. There are supplemental material and blog conversations on a companion blog site for the book. We hope this site will serve as a vehicle to explore the ideas presented here in deeper and more specific contexts. Go to <http://thex-press.com/confronting-complexity/> to locate the site.