PREFACE to The Turning Point, by Fritjof Capra, Bantam Books 1982

"My main professional interest during the 1970s has been in the dramatic change of concepts and ideas that has occurred in physics during the first three decades of the century, and that is still being elaborated in our current theories of matter. The new concepts in physics have brought about a profound change in our world view; from the mecha nistic conception of Descartes and Newton to a holistic and ecological view, a view which I have found to be similar to the views of mystics of all ages and traditions.

"The new view of the physical universe was by no means easy for scientists at the beginning of the century to accept. The exploration of the atomic and subatomic world brought them in contact with a strange and unexpected reality that seemed to defy any coherent description. In their struggle to grasp this new reality, scientists became painfully aware that their basic concepts, their language, and their whole way of thinking were inadequate to describe atomic phenomena. Their problems were not merely intellectual but amounted to an intense emotional and, one could say, even existential crisis. It took them a long time to overcome this crisis, but in the end they were rewarded with deep insights into the nature of matter and its relation to the human mind.

"I have come to believe that today our society as a whole finds itself in a similar crisis. We can read about its numerous manifestations every day in the newspapers. We have high inflation and unemployment, we have an energy crisis, a crisis in health care, pollution and other environmental disasters, a rising wave of violence and crime, and so on. The basic thesis of this book is that these are all different facets of one and the same crisis, and that this crisis is essentially a crisis of perception. Like the crisis in physics in the 1920s, it derives from the fact that we are trying to apply the concepts of an outdated world view-the mechanistic world view of Cartesian-Newtonian science- to a reality that can no longer be understood in terms of these concepts. We live today in a globally interconnected world, in which bio- logical, psychological, social, and environmental phenomena are all interdependent. To describe this world appropriately we need an ecological perspective which the Cartesian world view does not offer.

"What we need, then, is a new "paradigm"-a new vision of reality; a fundamental change in our thoughts, perceptions, and values. The beginnings of this change, of the shift from the mechanistic to the ho-listic conception of reality, are already visible in all fields and are likely to dominate the present decade. The various manifestations and im-plications of this "paradigm shift" are the subject of this book. The sixties and seventies have generated a whole series of social movements that all seem to go in the same direction, emphasizing different aspects of the new vision of reality. So far, most of these movements still oper- ate separately and have not yet recognized how their intentions inter- relate. The purpose of this book is to provide a coherent conceptual framework that will help them recognize the communality of their aims. Once this happens, we can expect the various movements to flow together and form a powerful force for social change. The gravity and global extent of our current crisis indicate that this change is likely to result in a transformation of unprecedented dimensions, a turning point for the planet as a whole.

"My discussion of the paradigm shift falls into four parts. The first part introduces the main themes of the book. The second part de- scribes the historical development of the Cartesian world view and the dramatic shift of basic concepts that has occurred in modern physics. In the third part I discuss the profound influence of Cartesian-Newtonian thought on biology, medicine, psychology, and economics, and present my critique of the mechanistic paradigm in these disciplines. In doing so, I emphasize especially how the limitations of the Cartesian world view and of the value system which lies at its basis are now seriously affecting our individual and social health.

"This critique is followed, in the fourth part of the book, by a de-tailed discussion of the new vision of reality. This new vision includes the emerging systems view of life, mind, consciousness, and evolution; the corresponding holistic approach to health and healing; the integration of Western and Eastern approaches to psychology and psycho-therapy; a new conceptual framework for economics and technology; and an ecological and feminist perspective which is spiritual in its ultimate nature and will lead to profound changes in our social and political structures.

"The entire discussion covers a very broad range of ideas and phenomena, and I am well aware that my presentation of detailed developments in various fields is bound to be superficial, given the limitations of space and of my time and knowledge. However, as I wrote the book, I came to feel very strongly that the systems view I advocate in it also applies to the book itself. None of its elements is really original, and several of them may be represented in somewhat simplistic fashion. But the ways in which the various parts are integrated into the whole are more important than the parts themselves. The interconnections and interdependencies between the numerous concepts represent the essence of my own contribution. The resulting whole, I hope, will be more than the sum of its parts.

"This book is for the general reader. All technical terms are defined in footnotes on the pages where they first appear. However, I hope that it will also be of interest to professionals in the various fields I have dis- cussed. Although some may find my critique disturbing, I hope they will take none of it personally. My intent has never been to criticize particular professional groups as such, but rather to show how the dominant concepts and attitudes in various fields reflect the same un- balanced world view, a world view that is still shared by the majority of our culture but is now rapidly changing.

"Much of what I say in this book is a reflection of my personal development. My life was decisively influenced by the two revolutionary trends of the ig60s, one operating in the social sphere, the other in the spiritual domain. In my first book. The Too of Physics, I was able to make a connection between the spiritual revolution and my work as a physicist. At the same time, I believed that the conceptual shift in modern physics also had important social implications. Indeed, at the end of the book I wrote:

"I believe that the world-view implied by modern physics is inconsistent with our present society, which does not reflect the harmonious interrelatedness we observe in nature. To achieve such a state of dynamic balance, a radically different social and economic structure will be

needed: a cultural revolution in the true sense of the word. The survival of our whole civilization may depend on whether we can bring about such a change.

"Over the past six years, this statement evolved into the present book."

-Fritjof Capra

Berkeley April 1981