Contents

1

Overview

The natural climate creates one of the most important general conditions for our existence. For that reason, climate has been one of the most fundamental themes of human reflection for centuries. It has repeatedly been observed that climate not only is the foundation of human civilization, but also causes its particular forms, successes and failures.

Humans are therefore either at a disadvantage or favored, depending upon their climatic region. However, humankind is not merely if at all, and at all times, a creature determined by climate, and climate is not just an object of human contemplation. Climate is also partly the result of human activity, a condition recently increasingly confirmed by the scientific community.

The discussion of anthropogenic (caused by humans) global climate change has become more and more intensive in recent years, and claims that the scientific issues regarding such changes, perspectives and causes are "settled". And it is this connection that almost everyone today understands the concept of the "Greenhouse Effect". An American congressman has declared global warming "the greatest danger for our planet". Public surveys indicate that the public in industrialized countries ranks climate change first among environmental dangers. Scientists appear very alarmed; they address the public directly and warn of an imminent climate catastrophe.

In this book we will discuss these issues and try to embed them into a political, cultural, economic and historical context. Climate is not a novel issue and problem, and while it is broadly defined by scientific concepts, it is also a culturally and socially constructed issue.

In this introductory chapter, we offer a short overview of the important themes of this book, as well as an introduction to the subject "Climate and Society". Climate is, again, a theme discussed in many social institutions. This is true for everyday life and also for science, politics and economics. However, the term "climate" conveys different meanings in these various fields of human activity. On one side there is the scientific concept, believed by many to be the only relevant notion of climate; but there are also various representations of weather phenomena, climate conditions and climatic influences that have arisen over the centuries. The scientific understanding of climate has not annulled or extinguished these widely held and culturally constituted views. Today common sense ideas of climate continue to have an important function in the everyday life of society. Diverse ways of thinking coexist with, and create, social and political actions and reactions. This book tries to sort out and describe the different facets of the concept of "climate".

In the second chapter "A Historical Overview of Thinking about Climate", we describe how this concept has attained a social and political role. We also discuss the extent to which the idea of "climate" affects society and politics; and how it changes, or does not change, throughout history. Early on, people observed a close relationship between climate and society, particularly between climate and human well-being. We will document this relationship. Before the modern "scientification" of the notion of climate, it was rare in previous centuries to speak of climate where people had not, or could not have, settled. One could not, for example, have conceived of a climate of oceans, or of Mars. Early climatology was an auxiliary science of geography, in whose center stood the physiological and psychological effects of climate on people. Today a much more comprehensive concept of climate prevails in science. In the second chapter, we describe this changing understanding of climate over the course of time.

In Chapter 3 ("Climate as Limiting Condition and Resource"), we deal with climate as it manifests itself without human interference. Climate appears as a reliable factor of our environment, providing the conditions for the organization of activities and commerce of individuals and society. It confronts them with calculable risks. The individual can only experience climate as this stationary framework. Climate changes take place on time scales both comparable to and much longer than the human horizon of experience. In this sense, "climate" seems to be like a slot machine that reliably pours out various amounts of money according to fixed rules of probability. One can depend on the fact that seldom (but now and then), large winnings will pour out. Many players expect — irrationally — after a large win (a climate extreme) a long dry streak (climatically unremarkable times). Lengthy observations of winnings from playing (weather) allow for estimating the probabilities (for "normal conditions" and extremes), and rational strategies may be deduced based on expected wins and losses.

In Chapter 4 ("Climate as Risk and Hazard") we no longer consider climate as a "constant" phenomenon, but rather as something variable. Of course in this context the aspect of anthropogenic climate change has recently entered the picture; but we will see that it was almost always there.

In Chapter 5, we bring together the strands of the analysis into our "Zeppelin Manifesto",[1] which spells out in a series of hypotheses what we suggest is needed for the design of a balanced and efficient climate policy. Certainly, the issue of climate and its impact on society is too important to leave it only to natural scientists, who often fail to understand their own conditioning by cultural elements.

[1] The term "Zeppelin" refers to the institution *Zeppelin University*, where Nico Stehr holds a professorship.